Amherst Town Board

Regular Meeting of the Town Board

Minutes

5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Monday, April 11, 2022 | **7:00 PM** | **Amherst Municipal Building**

I. IN MEMORY

Rose Mary Spoth

II. INVOCATION

Councilmember Bucki

III. PLEDGE OF ALLEGIANCE

IV. ROLL CALL:

7:00 PM Meeting called to order on April 11, 2022 at Amherst Municipal Building, 5583 Main Street, Williamsville, NY.

Attendee Name	Organization	Title	Status	Arrived
Brian J. Kulpa	Town of Amherst	Supervisor	Late	7:10 PM
Jacqualine Berger	Town of Amherst	Deputy Supervisor	Present	
Deborah Bruch Bucki	Town of Amherst	Councilmember	Present	
Shawn Lavin	Town of Amherst	Councilmember	Present	
Michael Szukala	Town of Amherst	Councilmember	Present	
Francina J. Spoth	Town of Amherst	Town Clerk	Present	
Timothy Koller	Town of Amherst	Deputy Town Clerk	Present	
Stanley J. Sliwa	Town of Amherst	Town Attorney	Present	
Jeffrey S. Burroughs	Town of Amherst	Town Engineer	Present	
Christopher P. Schregel	Town of Amherst	Traffic-Safety Coordinator	Present	
Daryl Bramer	Town of Amherst	Comptroller	Present	
Lynda Juul	Town of Amherst	Director of Finance	Present	
Dan Howard	Town of Amherst	Planning Director	Present	
Angela Rossi	Town of Amherst	Director of Economic Development	Present	

V. MINUTES APPROVAL

1. Monday, March 28, 2022

RESULT:	**ACCEPTED [UNANIMOUS]**
MOVER:	Jacqualine Berger, Deputy Supervisor
SECONDER:	Shawn Lavin, Councilmember
AYES:	Berger, Bucki, Lavin, Szukala
ABSENT:	Kulpa

VI. PROCLAMATIONS AND ANNOUNCEMENTS

VII. PUBLIC HEARINGS

Speakers will be limited to 3 minutes.

1. Resolution 2022-265

Local Law Amending Chapter 184 - Vehicles Abandoned

Public Hearing with respect to a Local Law Amending Chapter 184 - Vehicles Abandoned.

3/14/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 4-0.

3/28/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 5-0.

4/11/2022
A motion to open the public hearing was made by Deputy Supervisor Berger, seconded by Councilmember Bucki and unanimously approved 4-0. The public hearing was opened at 7:04 PM.

Stan Sliwa, Town Attorney, presented.

The following speaker addressed the Town Board:
Jane Cox, 4584 Harlem Rd. - Questioned the Building Department's role

There were no further speakers from the public, therefore Supervisor Kulpa moved to close the public hearing, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was closed at 7:13 PM.

A motion to approve was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-266

Local Law Amending Chapter 151 - Property Maintenance

Public Hearing with respect to a Local Law amending Chapter 151 - Property Maintenance.

3/14/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 4-0.

3/28/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 5-0.

4/11/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unaimously approved 5-0.

RESULT:	**ADJOURNED [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Jacqualine Berger, Deputy Supervisor	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

3. Resolution 2022-344

Plymouth Place Parking Adjustments

A public hearing to adjust the parking restrictions at the west end of Plymouth Place.

> "Parking is hereby restricted at the dead end of Plymouth Place for a total distance of 55 feet along the entire west end of Plymouth Place connecting to the existing parking restriction at the turnaround on the north side."
>
> and,
>
> "The parking restriction is hereby removed on the south side of Plymouth Place for a total distance of 47 feet east of the dead-end pavement edge."

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at 7:14 PM.

Christopher Schregel, Traffic Safety Coordinator, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the public hearing, seconded by Councilmember Bucki and unanimously approved 5-0. The public hearing was closed at 7:18 PM.

A motion to approve was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

4. Resolution 2022-345

Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Evergreen Landing Subdivision Streetlighting**
2022-2027 C.I.P. - Project No. H-16
TOA Job No. 2016.054A
Bond Resolution - $1,350,000

The above-referenced matter is scheduled for a Public Hearing on April 11, 2022 at 7:00 p.m. In this regard, kindly adopt a resolution (1) Adopting the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department and authorizing the Supervisor to sign the same **prior to the Public Hearing being deemed closed**; (2) Adopting the Certified Extract of Minutes **once the Public Hearing has been deemed closed**; (3) Adopting the Certified Public Interest Order **once the Public Hearing has been deemed closed**; and (4) Adopting the Certified Resolution and Order with attached Part 85 Application (draft) **once the Public Hearing has been deemed closed**.

For ease of reference and to provide detailed information regarding the bond action,

also attached is the Map Plan and Report for the project.

Thank you.
SJS:nmb
Attachment
c: Tim Koller, Deputy Town Clerk
(w/attachment, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Jeffrey S. Burroughs, PE, Town Engineer (*w/attachment*)
Christopher P. Schregel, Project Manager (*w/attachment*)

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at 7:19 PM.

Jeff Burroughs, Town Engineer, presented.

The following speaker addressed the Town Board:
Tom Weisbeck, 48 Drawbridge Ct. - cost of project to taxpayers

A motion to approve the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

As there were no further speakers, Supervisor Kulpa moved to close the public hearing, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was closed at 7:27 PM.

A motion to adopt the Certified Extract of Minutes was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

A motion to adopt the Certified Public Interest Order was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

A motion to adopt the Certified Resolution and Order was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

5. Resolution 2022-346

6621 Main Street & 20 Oakwood Drive Rezoning

Request to rezone 6621 Main Street from GB to OB and 20 Oakwood Drive from R-3 to OB.

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was opened at 7:29 PM.

Attorney Ari Goldberg, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the hearing and set a decision date for the April 25th Town Board meeting, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was closed at 7:33 PM.

RESULT:	**DECISION DATE [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Jacqualine Berger, Deputy Supervisor	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

6. Resolution 2022-347

7740 Transit Road Rezoning

Request to rezone 7740 Transit Road from GB to DC-5.

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at 7:33 PM.

Joshua Best, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the hearing and set a decision date for the April 25th Town Board meeting, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was closed at 7:40 PM.

RESULT:	**DECISION DATE [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Shawn Lavin, Councilmember	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

VIII. DEVELOPMENT REVIEW ACTIONS

IX. PERSONAL APPOINTMENTS TO BOARDS & COMMITTEES

Board Appointments - Amherst Conservation Advisory Council, Board of Ethics, Historic Preservation, IDA, Planning, Recreation, Recycling & Waste, Traffic Safety and the Zoning Board of Appeals.

NOTE - The number of vacancies is listed after the Committee name.

1. 9/11 Commemoration Committee

Membership is unlimited.

2. Amherst Committee on Disabilities (9)

3. Amherst Community Diversity Commission (7)

Councilmember Bucki appoints Zhen Liu to the Amherst Community Diversity Commission for their first term to conclude December 31, 2023.

Councilmember Bucki appoints Prachee Samant to the Amherst Community Diversity Commission for their first term to conclude December 31, 2023.

4. Amherst Conservation Advisory Council (5)

5. Amherst Industrial Development Agency

Membership is full.

6. Amherst Veterans Committee (3)

7. Arts & Culture in Public Places Board

8. Board of Assessment Review

Membership is full.

9. Board of Electrician Examiners

Membership is full.

10. Board of Ethics

Membership is full.

11. Board of Plumbing and Drainage Examiners

Membership is full.

12. Citizens Financial Advisory Committee (2)

13. Design Advisory Board

14. Employee Suggestion Program Merit Award Board

Membership is full.

15. Employee Suggestion Review Committee

16. Energy Conservation Citizens Advisory Committee (3)

17. Freedom of Information Law (FOIL) Board

18. Glen Park Joint Board (1)

Village vacancy

19. Government Study Committee (3)

20. Historic Preservation Commission

Membership is full.

21. Information Technology Advisory Committee (1)

22. Library Board of Trustees

Membership is full.

23. Minority / Woman Owned Business (4)

24. Open Government Advisory Board (4)

25. Planning Board

Membership is full.

26. Recreation Commission (1)

27. Recycling and Waste Committee (5)

28. Senior Services Advisory Board (2)

29. Traffic Safety Board

Membership is full.

30. Youth Board (4)

Adult vacancies (4), Youth vacancies (0)

31. Zoning Board of Appeals

X. PUBLIC EXPRESSION

This is an opportunity for residents to <u>comment</u> on matters involving Amherst

other than those pertinent to Public Hearings that day. Speakers will be limited to 3 minutes.

A motion to open Public Expression was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. Public Expression was opened at 7:41 PM.

The following speakers addressed the Town Board:
Tom Weisbeck, 48 Drawbridge - Youngs road extension
Tom Frank, 5403 Main - Resolution 2022-301
Geri DiCosmo, 378 Meyer - Benderson Development projects
Joe Voytovich, 35 Bucyrus - Costco project

There were no further speakers from the public, therefore Supervisor Kulpa moved to close Public Expression, seconded by Councilmember Bucki and unanimously approved 5-0. Public Expression was closed at 7:56 PM.

XI. CONSENT AGENDA

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

XII. COUNCILMEMBER RESOLUTIONS

A. SUPERVISOR KULPA:

B. DEPUTY SUPERVISOR BERGER:

1. Resolution 2022-348

Zoning Board of Appeals Appointment

WHEREAS, the Town of Amherst maintains a Zoning Board of Appeals (ZBA) authorized to grant relief from any provision of the Town of Amherst Zoning Ordinance or any decision of an administrative official charged with the enforcement of that ordinance; and

WHEREAS, the ZBA is empowered to grant special use permits in certain instances as spelled out in the Zoning Ordinance. Town Law specifies the grounds and criteria that the ZBA must use to grant a variance; and

WHEREAS, the ZBA consisting of five (5) members appointed by the Town Board, each for a term of five (5) years on a staggered basis; and

WHEREAS, the ZBA currently has a vacancy that Ellen Parker has expressed interest in filling.

NOW, THEREFORE, BE IT RESOLVED that the Amherst Town Board appoints Ellen Parker to her first term to conclude December 31, 2022.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Jacqualine Berger, Deputy Supervisor
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

C. COUNCILMEMBER BUCKI:

1. Resolution 2022-349

Amherst Community Diversity Commission Appointments

WHEREAS, the purpose of the Amherst Community Diversity Commission (ACDC) is to enhance and increase cooperation, understanding, and dialogue among residents of diverse cultural, religious, socio-economic and racial backgrounds, and to promote inclusion throughout the town; and

WHEREAS, the Commission will study the demographics of Amherst, promote town-wide events that foster cultural awareness, increase minority participation on governmental boards, committees and in the town's workplace, and to facilitate meetings designed to promote a better understanding of who Amherst is as a community; and

WHEREAS, the Amherst Community Diversity Commission generally meets on the second Tuesday of the month, with the exception of July, August and December; and

WHEREAS, the ACDC has a maximum roster of 15 members, with the Supervisor and each Councilmember personally appointing up to three individual members who shall serve a two year term; and

WHEREAS, the ACDC currently has a Board of nine members, who shall continue to serve until their term of appointment expires, as personal appointments reflected in the following list:

Dr. Mohan Devgun, Vice-Chair, with term that expires 12-31-2023; Councilmember Berger
Gul A. Rahman, Secretary, with a term that expires 12-31-2023; Supervisor Kulpa
Pam Kefi, Member, with a term that expires 12-31-2023; Councilmember Szukala
Dr. Mohammed Khan, Member, with a term that expires 12-31-2023; Supervisor Kulpa
Heidi Nicklaus Lefebvre, Member, with a term that expires 12-31-2023; Councilmember Lavin
Thomas Lucia, Member, with a term that expires 12-31-2023; Councilmember Szukala
Anne Rohrer, Member, with a term that expires 12-31-2023; Councilmember Berger
Dr. Joseph Sankoh, Member, with a term that expires 12-31-2023; Councilmember Bucki

Maria Rosario Cala, Member, with a term that expires 12-31-2023; Councilmember Lavin; and

WHEREAS, the Members of the Commission shall, by majority vote, elect a Chairperson from among the members and such officers as may be deemed necessary from time to time; and

WHEREAS, Zhen Liu and Prachee Samant have expressed interest in serving on the ACDC.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Councilmember Bucki appoints Zhen Liu and Prachee Samant to the Amherst Community Diversity Commission, for their first term, each to conclude on December 31, 2023.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Deborah Bruch Bucki, Councilmember
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

D. COUNCILMEMBER LAVIN:

E. COUNCILMEMBER SZUKALA:

1. Resolution 2022-350

Creation of the Merged Amherst Government Financial Advisory Board and the Appointments of Resident Volunteers

WHEREAS, the Town of Amherst has over 30 Boards and Committees; and

WHEREAS, in evaluating the Boards and Committees some of the duties responsibilities have been expired or now duplicated; and

WHEREAS, volunteers are limited when requesting residents to step into Board and Committee memberships; and

WHEREAS, the Government Study Committee and the Citizens' Financial Advisory Committee are two committees that could be merged to continue to serve the community's needs; and

WHEREAS, the conjoined committee name would now be the Amherst Government Financial Advisory Board; and

WHEREAS, the Amherst Government Financial Advisory Board would consist of five (5) members appointed by the Amherst Town Board majority to serve a two year term; and

WHEREAS, the Amherst Government Financial Advisory Board will meet once a quarter, or more, as needed; and

WHEREAS, the purpose and mission of the Board would be to review management letters from the Town auditors and to continue with each of the future management letter responses; and

WHEREAS, to investigate where the Comptroller's Department is not in compliance with the management letter and make recommendations to help ensure the compliance process; and

WHEREAS, to suggest improvements of the effectiveness or modification of the Town of Amherst government activities; and

WHEREAS, Jason Zaklikowski, John DiPasquale, Alexander Wyse, Kenneth Smith, and Gregory M. Dionne have expressed interest in serving on the Amherst Government Financial Advisory Board; and

WHEREAS, these volunteers have served on the Amherst Government Study Committee and/or Amherst Citizens' Financial Advisory Board and would like to continue serving on the newly merged Amherst Government Financial Advisory Board and the Town of Amherst.

NOW, THEREFORE, BE IT RESOLVED that the Amherst Town Board approves the merge of the Citizens Financial Advisory Committee and the Amherst Government Study Committee to be now named the Amherst Government Financial Advisory Board; and

BE IT FURTHER RESOLVED that the Amherst Town Board appoints Jason Zaklikowski, John DiPasquale, Alexander Wyse, Kenneth Smith, and Gregory M. Dionne to the Amherst Government Financial Board for a term to expire December 31, 2023.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Michael Szukala, Councilmember
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

XIII. DEPARTMENT HEAD RESOLUTIONS AND REPORTS

A. TOWN ATTORNEY:

1. Resolution 2022-351

Townwide Centralized Security (Bond Resolution - $100,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: April 6, 2022

RE: Townwide Centralized Security Improvements
2022-2027 C.I.P. - Project No. PO-05
Bond Resolution - $100,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $100,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Scott P. Chamberlin, Chief of Police *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved via Roll Call vote 5-0.

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-352

Town Facility Parking Lot Paving (Bond Resolution - $110,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Town Facility Parking Lot Maintenance**
2022-2027 C.I.P. - Project No. B-2
Bond Resolution - $110,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $110,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Daniel J. Rizzo, Director, Facilities Department *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved via Roll Call vote 5-0.

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

3. Resolution 2022-353

Town Facility Ashalt Sealing and Striping (Bond Resolution - $100,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Town Facility Asphalt Sealing and Striping**
2022-2027 C.I.P. - Project No. B-3
Bond Resolution - $100,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $100,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Daniel J. Rizzo, Director, Facilities Department *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved via Roll Call vote 5-0.

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

4. Resolution 2022-354

PILOT Agreement - Amherst Senior Housing LLC (CRS# 3270)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **PILOT Agreement:**
Amherst Senior Housing LLC and the Town of Amherst, et al.
(CRS# 3270)

Kindly adopt the following resolution with respect to the above matter:

WHEREAS, Amherst Senior Housing LLC has requested that the Town Board approve a PILOT Agreement with a term of fifteen (15) years for the Property; and

WHEREAS, the content and form of the proposed PILOT Agreement have been reviewed and approved by the Town Assessor's Office and the Town Attorney's Office and a copy of the approved form of the proposed PILOT Agreement is attached hereto; and

WHEREAS, the PILOT Agreement must be approved by Erie County and the Williamsville Central School District;

NOW, THEREFORE, BE IT RESOLVED, that the Town Board approves the requested PILOT Agreement for the Project subject to the three (3) conditions set forth below and the Supervisor of the Town of Amherst is hereby authorized to sign the PILOT Agreement between Amherst Senior Housing LLC and the Town of Amherst, Erie County, and the Williamsville Central School District upon satisfaction of the following three (3) conditions:

1. The PILOT Agreement is subject to review and approval by Erie County;

2. The PILOT Agreement is subject to review and approval by the Williamsville Central School District; and

3. Approval of the PILOT Agreement is subject to successful completion of the Town's contract routing system (CRS).

Please note that the Schedule A that is separately attached will replace the Schedule A that is a part of the originally submitted PILOT.

SAA:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment*, **Agenda Item - April 11, 2022**)
Emily Murphy, Town Assessor (*w/attachment*)

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

5. Resolution 2022-355

Sutton Place PILOT Agreement (CRS #3258)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **PILOT Agreement:**
Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership and the Town of Amherst, et al. (CRS# 3258)

Kindly adopt the following resolution with respect to the above matter:

WHEREAS, Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership have requested that the Town Board approve a PILOT Agreement with a term of fifteen (15) years for the Property; and

WHEREAS, the content and form of the proposed PILOT Agreement have been reviewed and approved by the Town Assessor's Office and the Town Attorney's Office and a copy of the approved form of the proposed PILOT Agreement is attached hereto; and

WHEREAS, the PILOT Agreement must be approved by Erie County and the Sweet Home Central School District;

NOW, THEREFORE, BE IT RESOLVED, that the Town Board approves the requested PILOT Agreement for the Project subject to the three (3) conditions set forth

below and the Supervisor of the Town of Amherst is hereby authorized to sign the PILOT Agreement between Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership and the Town of Amherst, Erie County, and the Sweet Home Central School District upon satisfaction of the following three (3) conditions:

1. The PILOT Agreement is subject to review and approval by Erie County;

2. The PILOT Agreement is subject to review and approval by the Sweet Home Central School District; and

3. Approval of the PILOT Agreement is subject to successful completion of the Town's contract routing system (CRS).

SAA:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment*, **Agenda Item - April 11, 2022**)
Emily Murphy, Town Assessor (*w/attachment*)

4/11/2022
A motion to approve was made by Supervisor Kulpa and seconded by Deputy Supervisor Berger. A motion to amend was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0. Amendment adds the updated attachment 'Schedule A - Sutton'. A motion to approve as amended was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

RESULT:	**ADOPTED AS AMENDED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

6. Resolution 2022-356

IMA - Sweet Home CSD & Town of Amherst (CRS #3263)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Inter-Municipal Agreement**
Sweet Home Central School District & Town of Amherst
Purchase of Fuel (Highway Department) (CRS# 3263)

Kindly adopt a resolution authorizing the Supervisor to execute the attached agreement pending successful completion of the CRS.

Thank you.

SAA:rms
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment,* **Agenda Item : April 11, 2022**)

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

7. Resolution 2022-357

Grant of Easement - Niagara Mohawk (National Grid) to Town of Amherst (550 Smith Road) (CRS#3259)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Nicole M. Burroughs, Senior Paralegal**

DATE: **April 6, 2022**

RE: **Grant of Permanent Easement (CRS #3259)**
Town of Amherst (550 Smith Road) To Niagara Mohawk Power Corporation (National Grid)

Kindly adopt a resolution authorizing the Supervisor to execute the attached Grant of Easement relative to the above project site pending successful completion of the CRS.

The attached agreement was reviewed and approved by the Engineering Department.

Thank you.

SJS:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment,* **Agenda Item - April 11, 2022**)
Christopher P. Schregel, Project Manager (*w/attachment)*

4/11/2022

A motion to approve was made by Supervisor Kulpa and seconded by Deputy Supervisor Berger. A motion to amend was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0. Amendment adds the updated attachment. A motion to approve as amended was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

RESULT:	**ADOPTED AS AMENDED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

8. Resolution 2022-358

2021 Firefighter Service Award Lists - Mandatory Posting Period - 30 Days

AGENDA ITEM : APRIL 11TH, 2021

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **2021 Service Award Program**
***East Amherst Fire Department**
***Ellicott Creek Fire Protection District**
***Getzville Fire Protection District**
***Main Transit Fire Protection District**
***North Amherst Fire Protection District**
***North Bailey Fire Protection District**
***Swormville Fire Company, Inc.**

Kindly adopt the following resolution with respect to the above matter:

RESOLVED, the Town Board approves the posting of the following fire company lists in their respective fire halls for the mandatory period of thirty (30) days:

East Amherst Fire Department
Ellicott Creek Fire Protection District
Getzville Fire Protection District
Main Transit Fire Protection District
North Amherst Fire Protection District
North Bailey Fire Protection District
Swormville Fire Company, Inc.

Thank you.

SJS:nmb
c: Tim Koller, Deputy Town Clerk (**Agenda Item : April 11th, 2022**)

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

9. Resolution 2022-359

License Agreement - 117 Canalview Terrace (Crance) (CRS# 3260)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Nicole M. Burroughs, Senior Paralegal**

DATE: **April 6, 2022**

RE: **Request for License Agreement (CRS #3260)**
Construction and Installation of Fence
Property Located At:
117 Canalview Terrace, Amherst, New York 14228

Kindly adopt a resolution authorizing the Supervisor to execute the attached License Agreement pending successful completion of the CRS.

The owners of the above-referenced property are seeking permission to construct and install a fence on their property that will encroach into an existing Town-owned easement, the details and stipulations of which are more fully described in the License Agreement.

This request was reviewed and approved by the Highway Department.

Thank you for your consideration.

NMB:hs
Attachment
c: Tim Koller, Deputy Town Clerk
(w/attachment, **Agenda Item: April 11, 2022**)
Tim Lucey, General Crew Chief (*w/attachment)*

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

10. Resolution 2022-360

Settlement of Article 7 Matter - Uniland Partnership of Delaware LP – 33 Dodge Road

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Uniland Partnership of Delaware LP - 33 Dodge Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

11. Resolution 2022-361

Settlement of Article 7 Matter - Uniland Partnership of Delaware LP – 115 Lawrence Bell Drive

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 5, 2022**

RE: **Settlement of Article 7 Matter**
Uniland Partnership of Delaware LP - 115 Lawrence Bell Drive

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

12. Resolution 2022-362

Settlement of Article 7 Matter - Twenty Flint Road LLC

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Twenty Flint Road LLC

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

13. Resolution 2022-363

Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 5, 2022**

RE: **Settlement of Article 7 Matter**
Flint Road LLC - 100-120 Flint

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

14. Resolution 2022-364

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290 Millersport Highway

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: Settlement of Article 7 Matter
Tim Donut US Limited Inc. - 2290 Millersport Highway

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

15. Resolution 2022-365

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520 Transit Road

AGENDA ITEM : APRIL 11TH, 2022

TO: Town Board

FROM: Samuel A. Alba, Esq., Senior Deputy Town Attorney

DATE: April 6, 2022

RE: Settlement of Article 7 Matter
Tim Donut US Limited Inc. - 11520 Transit Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and

Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

16. Resolution 2022-366

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950 Sweet Home Road

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 1950 Sweet Home Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

17. Resolution 2022-367

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1705 Niagara Falls Boulevard

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 1705 Niagara Falls Boulevard

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)

Emily Murphy, Town Assessor

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

B. TOWN CLERK:

1. Resolution 2022-368

New Firefighter for Main-Transit Fire Department

New firefighter for the Main-Transit Fire Department lives in the Town of Amherst and resides within the Main-Transit Fire District.

Kristin Haines
74 Fruitwood Terrace Apt 3
Williamsville, NY 14221

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

---

2. Resolution 2022-369

New Firefighter's for East Amherst Fire Department

New firefighter's for the East Amherst Fire Department. Richard Tate lives in the Town of Amherst and resides in the fire district and John Redenbach lives in the Town of Clarence and works in the fire district.

Richard Tate
645 Casey Road

E. Amherst, NY 14051

John Redenbach
7029 Transit Road, Apt 5
E. Amherst, NY 14051

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

C. ASSESSOR:

D. BUILDING/BUILDING MAINTENANCE:

E. CENTRAL ALARM:

F. COMPTROLLER:

1. Resolution 2022-370

Budget Transfers and Amendments

For April 11, 2022 Town Board Agenda

To: Town Board
From: Office of Town Comptroller
Date: 4/5/2022
Re: Various Department Budget Transfers / Amendments

I have received the following request(s) requiring budget transfers and / or amendments. Based on my review, I ask that the Town Board approve the following list;

BUDGET TRANSFERS - 2022

FROM:	***TO:***
A1440.1000 Personal Services $78,185.15	A1620.1000 Personal Services $78,185.15
A1440.8030 FICA $5,981.16	A1620.8030 FICA $5,981.16
A1440.8050 Health Insurance $8,215.80	A1620.8050 Health Insurance $8,215.80
A1440.8051 Dental $370.00	A1620.8051 Dental $370.00
A1440.8052 Vision $41.80	A1620.8052 Vision $41.80

To transfer funds from Engineering to Building Maintenance for transfer of employee.

A1620.1000 Personal Services $69,100.57	A7145.1000 Personal Services $69,100.57
A1620.8030 FICA $5,286.19	A7145.8030 FICA $5,286.19
A1620.8050 Health Insurance $8,215.80	A7145.8050 Health Insurance $8,215.80

A1620.8051 Dental $370.00 A7145.8051 Dental $370.00
A1620.8052 Vision $41.80 A7145.8052 Vision $41.80
To transfer funds from Building Maintenance to Recreation for transfer of employee.

A1110.4020 Town Justice - Postage $4,000.00 A1420.4020 Town Attorney - Postage $4,000.00

BUDGET AMENDMENTS - 2022

INCREASE: ***INCREASE:***

A3649.2150 ARPA- Fed Revenue $345.00 A3649.2150 ARPA- Bldg. Impr. & Equip $345.00
To increase the budget for APD Emergency Generator installation using American Rescue Plan Act funds for PO #22114370.

N2155.02785 Amherst HOME Rental- PI $1,895.40 N2155.4000 Contractual $1,895.40
N2154.02785 Amherst Admin- PI $210.60 N2154.4003 Admin $210.60
To recognize Community Development program income from 274 Stevenson, Amherst.

N1042.05002 Em'ee Health Ins. Contribution $1,902.96 N1042.8050 Health Insurance $1,902.96
To recognize Community Development 1st quarter employee health insurance contributions.

N2123.02785 CDBG & VG PI $8,272.00 N2123.4000 Admin $8,272.00
N2125.02785 CDBG & VG Admin $2,068.00 N2125.1000 Personal Services $1,921.04
N2125.8030 FICA $146.96
To recognize Community Development program income from 177 Buckeye, Amherst.

N2123.02785 CDBG & VG PI $26,088.00 N2123.4000 Admin $26,088.00
N2125.02785 CDBG & VG Admin $6,522.00 N2125.1000 Personal Services $6,058.52
N2125.8030 FICA $463.48
To recognize Community Development program income from 239 Hunters Lane, Amherst.

KP2116.02770 Knox Box - Other Revenue $5,382.50 KP2116.1000 Personal Services $5,000.00
KP2116.8030 FICA $382.50
To increase personal services and FICA for the Knox Box Project installation.

N2155.02785 Amherst HOME Rental- PI $4,500.00 N2155.4000 Contractual $4,500.00
N2154.02785 Amherst Admin- PI $500.00 N2154.4003 Admin $500.00
To recognize Community Development program income from 156 Delta, Amherst.

N2155.02785 Amherst HOME Rental- PI $6,184.00 N2155.4000 Contractual $6,184.00
To recognize Community Development program income from 66 B Foxberry, Amherst.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

G. CONTRACT COMPLIANCE:

1. Resolution 2022-371

Extension of Bid #2020015 - Town Wide Dumpster Service - CRS #3204 & #3240 (Original CRS #2003 & #1994)

WHEREAS, Bid #2020015 for Town Wide Dumpster Service was awarded to Waste Management for the small container portion and Modern Disposal for roll off containers on April 20, 2020 (Town Board Resolution 2020-420); and

WHEREAS, Waste Management and Modern Disposal Services have both agreed to extend their respective contract for the initial two-year extension period;

NOW, THEREFORE, BE IT RESOLVED, the Town Board approves the extension of the contracts with Waste Management and Modern Disposal for the period June 1, 2022 thru May 31, 2024; and

BE IT FURTHER RESOLVED, the Town Board authorizes the Supervisor to sign the two-year contract extensions with Waste Management and Modern Disposal.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-372

Award Bid #2022006 - Police Vehicles - CRS #3262

WHEREAS, the Contract Compliance and Administration Department received bids on March 3, 2022 for Bid #2022006 Police Vehicles; and

WHEREAS, the bid process resulted in responses from two (2) vendors, as per the attached bid tabulation form;

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award the bid to Van Bortel Ford; and

BE IT FURTHER RESOLVED, the Town Board authorizes a waiver of insurance as Van Bortel employees will not be on Town property; and

BE IT FURTHER RESOLVED, that the Town Board authorizes the transfer of $23,400 from A 3120.2200 into KP2209.2200. These funds will cover the remaining cost of one of the police cars purchased under the 2022 Police Vehicle bond; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Van Bortel Ford, pending successful completion of the contract routing process; and

BE IT FURTHER RESOLVED, the Police Department is requesting approval to trade in the following vehicles;

CAR #	YEAR	MAKE	MODEL	VIN#	MILEAGE
POLICE DEPARTMENT VEHICLES					
104	2020	FORD	SUV HYBRID	1FM5K8AW8LGD01978	66,735
108	2020	FORD	SUV HYBRID	1FM5K8AW9LGA71366	80,130
112	2020	FORD	SUV HYBRID	1FM5K8AWXLGA71361	75,062
113	2020	FORD	SUV HYBRID	1FM5K8AW1LGA71359	76,600
115	2018	FORD	TAURUS	1FAHP2MK0JG133894	75,500
118	2018	FORD	SUV	1FM5K8AR3JGC18756	85,200
119	2016	FORD	SUV	1FM5K8AR3GGC91697	102,600
161	2013	FORD	EXPLORER	1FM5K8AR9DGA09042	70,400
126	2014	FORD	TAURUS	1FAHP2MK4EG185535	88,350
128	2013	FORD	TAURUS	1FAHP2M85DG230291	63,000
185	1999	CHEV.	TAHOE	1GNEK13R8XR150273	132,800
EMERGENCY SERVICES VEHICLE					
301	2012	CHEV.	TAHOE	1GNSK2E0XCR171983	56,747

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

3. Resolution 2022-373

Award Bid #2022007 - Sludge Disposal & Transportation - CRS #3264

WHEREAS, the Contract Compliance and Administration Department received bids on March 31, 2022 for Bid #2022007 Sludge Disposal and Transportation; and

WHEREAS, the bid process resulted in responses from two (2) vendors, as per the attached bid tabulation form; and

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award a 3-year contract for Items 1 & 1A of this bid to Modern Disposal Services, Inc.; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Modern Disposal, Inc., pending successful completion of the contract routing process.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

4. Resolution 2022-374

Award Bid #2022005 - Organic Polymer Flocculant - CRS #3269

WHEREAS, the Contract Compliance and Administration Department received bids on March 10, 2022 for Bid #2022005 Organic Polymer Flocculant; and

WHEREAS, the bid process resulted in responses from three (3) vendors, as per the attached bid tabulation form;

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award this bid to Solenis LLC; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Solenis LLC, pending successful completion of the contract routing process.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

H. COURT:

I. ECONOMIC DEVELOPMENT:

J. EMERGENCY SERVICES:

1. Resolution 2022-375

Authorization to Adopt the 2022 Erie County, NY Hazard Mitigation Plan

WHEREAS, all jurisdictions within Erie County have exposure to hazards that increase the risk to life, property, environment, and the County and local economy; and

WHEREAS, pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS, a coalition of Erie County municipalities with like planning objectives has been formed to pool resources and create consistent mitigation strategies within Erie County; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising this strategy;

NOW, THEREFORE, BE IT RESOLVED that the Town of Amherst:

1) Adopts in its entirety, the 2022 Erie County Hazard Mitigation Plan (the "Plan") as the jurisdiction's Hazard Mitigation Plan, and resolves to execute the actions identified in the Plan that pertain to this jurisdiction.

2) Will use the adopted and approved portions of the Plan to guide pre- and post-disaster mitigation of the hazards identified.

3) Will coordinate the strategies identified in the Plan with other planning programs and mechanisms under its jurisdictional authority.

4) Will continue its support of the Planning Partnership as described within the Plan.

5) Will help to promote and support the mitigation successes of all participants in this Plan.

6) Will incorporate mitigation planning as an integral component of government and partner operations.

7) Will provide an update of the Plan in conjunction with the County no less than every five years.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

K. ENGINEERING:

1. Resolution 2022-376

Purchase of Wireless Rain Gauge

We are requesting Town Board approval to purchase a wireless rain gauge including installation from TecSmith, Inc. (quote attached). This gauge is used to monitor rainfall amounts for our monthly bypass reports. The total cost for the purchase of the rain gauge inclusive of installation will be $2,500.00.

Funding for this purchase is available from budget code G9000-2600 which requires Town Board approval.

Thank you for considering this request.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-377

Emergency Purchase Authorization - National Water Main CRS# 3271

The Engineering Department is requesting that the Town Board approve an emergency purchase made with National Water Main Cleaning for the rehabilitation of two (2) manholes at the Campbell Boulevard Sanitary Sewer collapse site. The manholes closest to the site were evaluated and the concrete within the manholes was found to be deteriorated, exposing rebar in multiple locations and compromising the integrity of the structures. The quote for this work is attached.

This request is pending successful completion of the contract review process.

The total amount quoted for this work is $18,000.00 and the funding source for this request is to-be-determined.

Thank you for considering this request.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

3. Resolution 2022-378

Award of Bid Alternatives - Gateway Park 2022-2027 CIP Project YR-1B

On February 17, 2022, bids were received for the above referenced project. At the March 14, 2022 Town Board meeting, Nova Site Co., 6 Lena Court, West Seneca, NY 14224, was awarded the Base Bid and Alternate Bid Item No. 4. in the amount of $327,200.

At this time and after further review of the project budget, we would like to recommend awarding Alternative No. 1, 2, and 5 for the negotiated amount of $196,352.00. Alternates 1, 2, and 5 include the shade canopy, concrete benches, and a new fence respectively. The total contract award for this project will be $523,552.00.

Funding for this contract shall be from project account KP2104.4972.

Thank you for considering this request.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

L. FINANCE:

M. HIGHWAY

1. Resolution 2022-379

Award of 2022 - 2023 Purchasing Maintenance Materials Bids (Sections 1 - 7)

The Highway Department respectfully requests that the Purchasing Maintenance Materials

Bids, Section 1 through 7 be awarded to the lowest bidders within specifications as follows:

SECTION 1: AGGREGATE MATERIAL, PLANT MIXED ASPHALT CONCRETE, PATCHING MATERIAL, HAULING AND LIQUID BITUMINOUS MATERIAL:

1-1 CRS # 3218 COUNTY LINE STONE COMPANY
1-2 CRS # 3219 LAFARGE NORTH AMERICA (LOCKPORT)
1-3 CRS # 3220 NEW ENTERPRISE STONE AND LIME COMPANY
1-4 CRS # 3221 CAMBRIA ASPHALT
1-5 CRS # 3222 SUIT KOTE CORPORATION

SECTION 2: PIPE, VARIOUS SIZES, INCLUDING CONCRETE, METAL, HDPE, PIPE LINER, FITTINGS, COUPLERS AND FLEXIBLE FERNCOS:

2-6 CRS # 3223 CHEMUNG SUPPLY COMPANY

SECTION 3: GEO-TEXTILE MATERIAL, SNOW FENCES AND ADA (DETECTABLE WARNING SURFACE TILE) AND GRASS PAVERS:

3-7 CRS # 3224 AIRTITE WINDOW AND DOOR COMPANY INC

SECTION 4: GRASS SEED, FERTILIZER (STARTER), TOPSOIL, SANDY LOAM, SOD, BALL DIAMOND MIXES AND FIELD MATERIALS, ENGINEERED WOOD FIBER (EWF) AND RUBBERIZED SAFETY MATERIALS (CHIPS) FOR PLAYGROUNDS:

4-8 CRS # 3225 LEO BRENON TOPSOIL
4-9 CRS # 3226 LAKESIDE SOD SUPPLY COMPANY
4-10 CRS # 3227 SITEONE LANDSCAPE SUPPLY LLC

SECTION 5: CONCRETE BUILDING MATERIALS:

NO BIDS AWARDED

SECTION 6: PRE-CAST CONCRETE MANHOLES, ROUND FRAMES/COVERS, PRE-CAST CATCH BASINS, RECTANGULAR FRAMES/GRATES AND MANHOLE RINGS (STEEL AND PLASTIC), FLAPGATES, PRE-CAST JERSEY BARRICADES:

6-11 CRS # 3228 KISTNER CONCRETE PRODUCTS INC
6-12 CRS # 3229 K & S CONTRACTORS SUPPLY INC
6-13 CRS # 3230 EJ USA INC
6-14 CRS # 3231 BIHR LANDSCAPE INC
6-15 CRS # 3232 NEW ENTERPRISE STONE AND LIME CO
6-16 CRS # 3233 F W WEBB COMPANY

SECTION 7: SIGN MATERIAL (ALUM, SHEETING), STOP SIGNS, SIGN POLES, 3M PRODUCTS, TRAFFIC CONTROL EQUIPMENT (ELECTRICAL SYSTEMS) AND TRAFFIC SAFETY SIGNS/CONE BARS:

7-17 CRS # 3234 EBERL IRON WORKS INC
7-18 CRS # 3235 VULCAN INC
7-19 CRS # 3236 NEWMAN SIGNS

Additional specifications and details are provided and attached per each section and bidder bid tab.

NOW THEREFORE BE IT RESOLVED, that the AMHERST TOWN BOARD authorizes the Amherst Town Supervisor to sign each contract listed above and approval of these contracts are contingent upon the successful completion of the contract routing system (CRS) and the Town Attorney approval.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-380

Award of 2022 - 2023 Construction Bids (Sections 8-15)

The Highway Department respectfully requests that the Construction Bids, Section 8 through Section 15, be awarded to the lowest bidders within specifications as follows:

SECTION 8: PLANE AND TEXTURIZE - SCARIFYING AND COLD MILLING EXISTING ROAD SURFACES:

8-1 CRS # 3241 HIGHWAY REHABILITATION CORPORATION
8-2 CRS # 3242 MUNICIPAL MILLING AND MAINTENANCE LLC
8-3 CRS # 3243 DONEGAL CONSTRUCTION

SECTION 9: CASUAL BLACK TOP REPAIR, NOVA CHIPS, MICRO-RESURFACING, CRACK FILL APPLIED, BLACKTOP SEALER APPLIED AND BITUMINOUS LIQUID MATERIAL APPLIED:

9-4 CRS # 3244 MIDLAND ASPHALT MATERIALS INC
9-5 CRS # 3245 SUIT KOTE CORPORATION
9-6 CRS # 3246 AMHERST SEALER INC

SECTION 10: ROAD RESURFACING:

10-7 CRS # 3247 MILHERST CONSTRUCTION INC

SECTION 11: BIKE PATH AND TRAILWAY REHABILITATION:

11-8 CRS # 3248 J & D'S SEAL TECH CORPORATION

SECTION 12: CATCH BASIN REPAIRS:

NO BIDS AWARDED

SECTION 13: CURBING, SIDEWALKS, DRIVEWAY APRONS, ADA HANDICAP RAMPS AND CONCRETE / CURB CUTTING:

13-9 CRS # 3249 CVF CONCRETE CONSTRUCTION COMPANY

SECTION 14: PLANT MIXED CONCRETE AND CONTROLLED LOW STRENGTH MATERIALS

14-10 CRS # 3250 LAFARGE NORTH AMERICA INC

SECTION 15: ROAD STRIPING, PAINT EPOXY APPLICATIONS:

15-11 CRS # 3251 ACCENT STRIPE INC

Additional specifications and details are provided and attached per each section and bidder bid tab.

NOW THEREFORE BE IT RESOLVED, that the AMHERST TOWN BOARD authorizes the Amherst Town Supervisor to sign each contract listed above and approval of these contracts are contingent upon the successful completion of the contract routing system (CRS) and the Town Attorney approval.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

N. HUMAN RESOURCES:

1. Resolution 2022-381

Recreation Attendant - PT/Youth & Recreation

Recreation Attendant - PT/Youth & Recreation, Effective April 12, 2022, Temporary, $15.50 ph, Step 1 for Trevor Tout.

Due to reduced availability of current part-time staff.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-382

Code Enforcement Officer/Building Department

Please appoint a Code Enforcement Officer to the Building Department. Permanent, from list, pending satisfactory completion of a probationary term as set forth in the Civil Service Rule XIII. Effective April 12, 2022 at an annual salary of $64,733, Grade 15, Step E for Sharon Napolski.

This is a promotion for an employee currently serving as Assistant Code Enforcement Officer.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

3. Resolution 2022-383

Detective/Police Department

Please appoint a Detective to the Police Department. Permanent, from list, pending satisfactory completion of a probationary term as set forth in the Civil Service Rule XIII. Effective April 12, 2022, at an annual salary of $95,467 for John McGarvey.

This is a promotion for an employee currently serving as Police Officer.
Replacing an employee who retired.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

4. Resolution 2022-384

Extended Sick Leave of Absence Without Pay/Highway Department

Please authorize an Extended Sick Leave of Absence Without Pay to Warren Wojtowicz, Heavy Motor Equipment Operator at the Highway Department. Effective May 1, 2022 through July 31, 2022.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

O. INFORMATION TECHNOLOGY:

P. PLANNING:

1. Resolution 2022-301

To Authorize a Substantial Amendment to the FY 2020 Annual Action Plan for Community Development to Establish the Northwest Amherst Community Center

WHEREAS, the Town has adopted the FY 2020 Annual Action Plan on behalf of the Towns of Amherst, Cheektowaga and Tonawanda (ACT) HOME Consortium which programs the expenditure of funds for the Community Development Block Grant (CDBG) and HOME Investment Partnership (HOME) Funding; and

WHEREAS, the Town is seeking to amend the FY 2020 Action Plan to reallocate $380,000 in Supplemental CDBG-COVID funds awarded by the CARES Act according to the following program/budget lines; and

Decrease/Remove:

Senior Foundation Community Center	$	300,000

Medical Director Position	$	24,000
Small Business Assistance - Amherst Chamber	$	20,000
CDBG Community Vaccine Logistics	$	30,000
YWCA of WNY, Inc.	$	6,000
Create/Increase:		
Northwest Amherst Community Center	$	380,000

WHEREAS, this amendment provides funds for the establishment of the Northwest Amherst Community Center, which meets the use criteria of the Supplemental CDBG-COVID funds awarded by the CARES Act to "prevent, prepare for, and respond to COVID" by providing critical community space to serve the Creekwoods Neighborhood with social and other supportive programming; now therefore

BE IT RESOLVED, the Town of Amherst Town Board hereby authorizes the above Substantial Amendment to the FY 2020 Annual Action Plan.

3/14/2022
A motion to adjourn to the April 11th Town Board meeting was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 4-0.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-385

Request to Schedule a Public Hearing

Please schedule a public hearing on the Proposed Local Law to Amend Chapter 5 of the Town of Amherst Code "The Design Advisory Board (DAB)" at the May 9, 2022 Town Board meeting.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Q. POLICE:

1. Resolution 2022-386

Travel & Training Request National Police Bloodhound Association Spring Training Seminar

TOWN BOARD AGENDA ITEM : APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Travel & Training Request**
National Police Bloodhound Association Spring Training Seminar

Kindly adopt a Resolution authorizing one (1) officer to attend the annual training seminar with regard to the above matter. This seminar is being held in McHenry, Maryland from April 22, 2022 through April 29, 2022. The officer will utilize a police car to travel to the seminar. The cost for this course is approximately $1,904.45.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Resolution 2022-387

Travel & Training Request Advanced Crisis Negotiation Course: Pilot Delivery

TOWN BOARD AGENDA ITEM : APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Travel & Training Request**
Advanced Crisis Negotiation Course: Pilot Delivery

Kindly adopt a Resolution authorizing three (3) officers to attend the above entitled training course. This seminar was held in Oriskany, New York from April 4, 2022 through April 6, 2022. The officers utilized a police car to travel to the course. The cost for this course is approximately $484.82.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

3. Resolution 2022-388

Sweet Home Central School District (CRS#3239) School District Student Resource Officer Program

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Sweet Home Central School District (CRS#3239)**
School District Student Resource Officer Program

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached agreement between the Town of Amherst (Police) and Sweet Home Central School District with regard to the above-entitled matter. This agreement will run from July 1, 2022 through June 30, 2023. This agreement has successfully completed the Contract Routing process.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

4. Resolution 2022-389

Amherst Central School District (CRS#3217) School District Student Resource Officer Program

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Amherst Central School District (CRS#3217)**
School District Student Resource Officer Program

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached agreement between the Town of Amherst (Police) and Amherst Central School District with regard to the above-entitled matter. This agreement will run from July 1, 2022 through June 30, 2023. This agreement has successfully completed the Contract Routing process.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

5. Resolution 2022-390

Memorandum of Understanding Use of Amherst Police Department Community Policing and Training Facility Buffalo Armory, LLC (CRS#3261)

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Memorandum of Understanding**
Use of Amherst Police Department Community Policing and Training Facility
Buffalo Armory, LLC (CRS#3261)

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached Memorandum of Understanding between the Town of Amherst (Police) and Buffalo Armory, LLC, with regard to the above-entitled matter. Approval of this MOU is contingent upon the successful completion the Contract Routing System.

Thank you.

SPC: msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

6. Resolution 2022-391

Digital Surveillance Solutions (DSS) (CRS#3190) NTC Cameral Installation Security Upgrades

Town Board Agenda Item: April 11, 2022

TO: Town Board

FROM: Scott P. Chamberlin, Chief of Police

RE: Digital Surveillance Solutions (DSS) (CRS#3190)
NTC Cameral Installation Security Upgrades

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached contract between the Town of Amherst (Police) and Digital Surveillance Solutions, Inc. (DSS), 485 Cayuga Road, Buffalo New York, 14225 with regard to the above-entitled matter. This contract has successfully completed the Contract Routing System.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

7. Resolution 2022-392

Digital Surveillance Solutions (DSS) (CRS#3211) Security Upgrades to APD Lab & Interview Room

Town Board Agenda Item: April 11, 2022

TO: Town Board

FROM: Scott P. Chamberlin, Chief of Police

RE: Digital Surveillance Solutions (DSS) (CRS#3211)
Security Upgrades to APD Lab & Interview Room

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached contract between the Town of Amherst (Police) and Digital Surveillance Solutions, Inc. (DSS), 485 Cayuga Road, Buffalo New York, 14225 with regard to the above-entitled matter. This contract has successfully completed the Contract Routing System.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

R. SENIOR SERVICES:

S. YOUTH AND RECREATION:

1. Resolution 2022-393

User Agreement - Fitness in the Parks CRS#3257

Authorize the Supervisor to sign an agreement between the Town of Amherst (Youth & Recreation Department) and the YMCA Buffalo Niagara to offer free fitness classes at Bassett Park for the summer of 2022.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

XIV. UNFINISHED BUSINESS

XV. COMMUNICATIONS

1. Communication 2022-31

Request for Public Hearing - 7078 Transit Road

Request from Jeffery Palumbo, Esq. for a public hearing with respect to Relief of Conditions of Zoning Approval for 7078 Transit Road.

This hearing has been scheduled for May 9.

4/11/2022
Consent

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

2. Communication 2022-32

Notice of Claim: Renee D. Sims Vs. Town of Amherst Et Al.

4/11/2022
Referred to Town Attorney.

RESULT:	**REFERRED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

XVI. PUBLIC IMPROVEMENT PERMITS

XVII. PUBLIC EXPRESSION #2

This is an opportunity for residents to <u>comment</u> on matters involving Amherst other than those pertinent to Public Hearings that day. <u>Speakers will be limited to 3 minutes.</u>

A motion to open Public Expression was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0. Public Expression was opened at 8:03 PM.

There were no speakers from the public, therefore Supervisor Kulpa moved to close Public Expression, seconded by Councilmember Bucki and unanimously approved 5-0. Public Expression was closed at 8:03 PM.

XVIII. ADJOURNMENT

There being no further business to come before the Town Board, Supervisor Kulpa moved to adjourn, seconded by Councilmember Bucki and unanimously approved 5-0. The Town Board meeting of April 11, 2022 was adjourned at 8:03 PM.

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25547 **RESOLUTION 2022-265** **ADOPTED**

Local Law Amending Chapter 184 - Vehicles Abandoned

Public Hearing with respect to a Local Law Amending Chapter 184 - Vehicles Abandoned.

3/14/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 4-0.

3/28/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 5-0.

4/11/2022
A motion to open the public hearing was made by Deputy Supervisor Berger, seconded by Councilmember Bucki and unanimously approved 4-0. The public hearing was opened at 7:04 PM.

Stan Sliwa, Town Attorney, presented.

The following speaker addressed the Town Board:
Jane Cox, 4584 Harlem Rd. - Questioned the Building Department's role

There were no further speakers from the public, therefore Supervisor Kulpa moved to close the public hearing, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was closed at 7:13 PM.

A motion to approve was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

LOCAL LAW NO.___ -2022

TOWN OF AMHERST

COUNTY OF ERIE, STATE OF NEW YORK

A Local Law Amending Chapter 184 of the Code of the Town of Amherst, Vehicles Abandoned

Be it enacted by the Town Board of the Town of Amherst as follows:

Section 1. Title.

This Local Law shall be referred to as, "A Local Law Amending Chapter 184 of The Code of The Town of Amherst, Vehicles Abandoned."

Section 2. Purpose

The purpose of this Local Law shall be to amend Section 184-5 of Chapter 184 of the Code of the Town of Amherst.

Section 3.

Section 184-5 of the Code of the Town of Amherst is amended as follows:

§ 184-5 **Removal of abandoned vehicles authorized.**

~~Any vehicle abandoned in violation of this chapter may be removed and stored by the Police Department or other agency authorized by the Town Board.~~ Any vehicle abandoned in violation of this chapter may be removed and stored by the police department, or all other agencies authorized by the Town of Amherst Code upon first having obtained a search warrant pursuant to Article 690 of the Criminal Procedure Law, which shall permit the seizure of any vehicle abandoned in violation of this chapter as authorized by CPL § 169.10. Application for search warrants should be made by the Building Commissioner, and/or his/her designee/employee and/or a member of the Amherst Police Department.

Section 4. Effective Date

This Local Law shall take effect immediately and be filed in the Office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law and published pursuant to Sections 130 and 133 of the Town Law and Chapter 28 of the Code of the Town of Amherst.

Francina J. Spoth, Town Clerk
Town of Amherst
County of Erie, New York

~~Strikethrough~~ = Deleted language; Underline = Added language

Attachment: LL - ch. 184 (RES-2022-265 : Local Law Amending Chapter 184 - Vehicles Abandoned)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25548 **RESOLUTION 2022-266** **ADJOURNED**

Local Law Amending Chapter 151 - Property Maintenance

Public Hearing with respect to a Local Law amending Chapter 151 - Property Maintenance.

3/14/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 4-0.

3/28/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Councilmember Bucki and unaimously approved 5-0.

4/11/2022
A motion to adjourn was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unaimously approved 5-0.

RESULT:	**ADJOURNED [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Jacqualine Berger, Deputy Supervisor	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

LOCAL LAW NO.___ -2022

TOWN OF AMHERST

COUNTY OF ERIE, STATE OF NEW YORK

A Local Law Amending Chapter 151 of the Code of the Town of Amherst, Property Maintenance

Be it enacted by the Town Board of the Town of Amherst as follows:

Section 1. Title.

This Local Law shall be referred to as, "A Local Law Amending Chapter 151 of The Code of The Town of Amherst, Property Maintenance."

Section 2. Purpose

The purpose of this Local Law shall be to amend various sections of Chapter 151 of the Code of the Town of Amherst.

Section 3.

Chapter 151-15 of the Code of the Town of Amherst is amended as follows:

§ 151-15 **Failure to comply.**

~~In the event that the order is not complied with within 10 days following personal service or 14 days following mailing of the order, the Building Commissioner shall cause the work therein required to be done or completed.~~ In the event that the order is not complied with within ten (10) days following personal service or fourteen (14) days following mailing of the order, the Building Commissioner shall request that a search warrant be sought pursuant to Article 690 of the Criminal Procedure Law upon application of an Amherst Police Officer which shall permit the Building Commissioner, or his/her designated delegate, to cause any work required to be done and completed and to enter upon the premises for purposes of doing so.

Section 4.

Chapter 151-50 of the Code of the Town of Amherst is amended by adding a new subparagraph, I, as follows:

~~Strikethrough~~ = Deleted language; Underline = Added language

Attachment: LL - ch. 151 (RES-2022-266 : Local Law Amending Chapter 151 - Property Maintenance)

§ 151-50 **Code official; powers and duties.**

I. The code enforcement officer shall have the ability to request, upon approval of the Building Commissioner and/or the Police Department to make an application for a search warrant under Article 690 of the Criminal Procedure Law and to authorize the seizure of materials or other property which constitutes evidence or tends to demonstrate that an offense or violation of the Code was committed, or there is a particular person participating in the commission of an offense.

Section 5.

Chapter 151-53 of the Code of the Town of Amherst is amended by adding a new subparagraph, F, as follows:

§ 151-53 **Notices and orders.**

F. Whenever a code enforcement officer determines that there has been a violation of this Article, or grounds to believe a violation has occurred, he/she shall have the ability to request the Police Department to make an application to Town Court for a search warrant pursuant to Article 690 of the Criminal Procedure Law, including requesting permission to seize materials in compliance with CPL § 690.10.

Section 6.

Chapter 151 of the Code of the Town of Amherst is amended by adding a new section, §151-57, as follows:

§ 151-57 ~~(Reserved)~~ The Building Commissioner and/or his/her designated representative shall have the ability to apply for a search warrant under Article 690 of the Criminal Procedure Law seeking to search the premises to determine if the violation of the code is in existence and to seize any property as permitted under CPL § 690.10.

Section 7.

Chapter 151-61(C) of the Code of the Town of Amherst is amended by adding a new subparagraph, C, as follows:

§ 151-61 **Exterior structure.**

C. ~~(Reserved)~~ The Building Commissioner and/or his/her designated representative shall the ability of applying for a search warrant under Article 690 of the Criminal Procedure Law seeking to search the premises to determine if the violation of the code is in existence and to seize any property as permitted under CPL § 690.10.

Section 8.

Chapter 151-62 of the Code of the Town of Amherst is amended by adding a new subparagraph, H, as follows:

~~Strikethrough~~ = Deleted language; Underline = Added language

Attachment: LL - ch. 151 (RES-2022-266 : Local Law Amending Chapter 151 - Property Maintenance)

§ 151-62 **Interior structure.**

H. The Building Commissioner and/or his/her designated representative shall the ability of applying for a search warrant under Article 690 of the Criminal Procedure Law seeking to search the premises to determine if the violation of the code is in existence and to seize any property as permitted under CPL § 690.10.

Section 9.

Chapter 151-84 of the Code of the Town of Amherst is amended by adding a new subparagraph, K, as follows:

§ 151-84 **Means of egress.**

K. ~~(Reserved)~~ The Building Commissioner and/or his/her designated representative shall the ability of applying for a search warrant under Article 690 of the Criminal Procedure Law seeking to search the premises to determine if the violation of the code is in existence and to seize any property as permitted under CPL § 690.10.

Section 10.

Chapter 151-85 of the Code of the Town of Amherst is amended by adding a new subparagraph, C, as follows:

§ 151-85 **Accumulations and storage**.

C. The Building Commissioner and/or his/her designated representative shall the ability of applying for a search warrant under Article 690 of the Criminal Procedure Law seeking to search the premises to determine if the violation of the code is in existence and to seize any property as permitted under CPL § 690.10.

Section 11.

Chapter 151 of the Code of the Town of Amherst is amended by adding a new section, §151-88, as follows

§ 151-88 **Reasonable Cause/Application For Search Warrant**.

Whenever the Building Commissioner and/or his/her designee has reasonable cause to believe a violation of the Building Code, the State Uniform Building and Fire Code or any other provision of Town Law is violated, he/she shall have the ability to make an application for a search warrant in compliance with the provisions of Article 690 of the Criminal Procedure Law.

~~Strikethrough~~ = Deleted language; Underline = Added language

Attachment: LL - ch. 151 (RES-2022-266 : Local Law Amending Chapter 151 - Property Maintenance)

Section 12. Effective Date

This Local Law shall take effect immediately and be filed in the Office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law and published pursuant to Sections 130 and 133 of the Town Law and Chapter 28 of the Code of the Town of Amherst.

Francina J. Spoth, Town Clerk
Town of Amherst
County of Erie, New York

Attachment: LL - ch. 151 (RES-2022-266 : Local Law Amending Chapter 151 - Property Maintenance)

~~Strikethrough~~ = Deleted language; Underline = Added language

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25559 **RESOLUTION 2022-344** **ADOPTED**

Plymouth Place Parking Adjustments

A public hearing to adjust the parking restrictions at the west end of Plymouth Place.

> "Parking is hereby restricted at the dead end of Plymouth Place for a total distance of 55 feet along the entire west end of Plymouth Place connecting to the existing parking restriction at the turnaround on the north side."
>
> and,
>
> "The parking restriction is hereby removed on the south side of Plymouth Place for a total distance of 47 feet east of the dead-end pavement edge."

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at 7:14 PM.

Christopher Schregel, Traffic Safety Coordinator, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the public hearing, seconded by Councilmember Bucki and unanimously approved 5-0. The public hearing was closed at 7:18 PM.

A motion to approve was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25630 **RESOLUTION 2022-345** **ROLL CALL VOTE (ADOPTED)**

Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Evergreen Landing Subdivision Streetlighting**
2022-2027 C.I.P. - Project No. H-16
TOA Job No. 2016.054A
Bond Resolution - $1,350,000

The above-referenced matter is scheduled for a Public Hearing on April 11, 2022 at 7:00 p.m. In this regard, kindly adopt a resolution (1) Adopting the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department and authorizing the Supervisor to sign the same **prior to the Public Hearing being deemed closed**; (2) Adopting the Certified Extract of Minutes **once the Public Hearing has been deemed closed**; (3) Adopting the Certified Public Interest Order **once the Public Hearing has been deemed closed**; and (4) Adopting the Certified Resolution and Order with attached Part 85 Application (draft) **once the Public Hearing has been deemed closed**.

For ease of reference and to provide detailed information regarding the bond action, also attached is the Map Plan and Report for the project.

Thank you.
SJS:nmb
Attachment
c: Tim Koller, Deputy Town Clerk
(w/attachment, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Jeffrey S. Burroughs, PE, Town Engineer (*w/attachment*)
Christopher P. Schregel, Project Manager (*w/attachment*)

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at

7:19 PM.

Jeff Burroughs, Town Engineer, presented.

The following speaker addressed the Town Board:
Tom Weisbeck, 48 Drawbridge Ct. - cost of project to taxpayers

A motion to approve the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

As there were no further speakers, Supervisor Kulpa moved to close the public hearing, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was closed at 7:27 PM.

A motion to adopt the Certified Extract of Minutes was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

A motion to adopt the Certified Public Interest Order was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

A motion to adopt the Certified Resolution and Order was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimoulsy approved via Roll Call vote 5-0.

FINANCIAL IMPACT:

Bond Resolution - $1.35M

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM September 16, 2020

TO: Christopher Schregel, Project Manager
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director/ZEO

RE: SEQR Determination – Evergreen Landing Subdivision – Street Lighting
2022-2027 C.I.P Project H-16, TOA Project # 2016.054A

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be an Unlisted action under the provisions of SEQR according to Part 617.6(a). A Negative Declaration is required to be issued by the Town Board prior to taking an affirmative vote on the bond for this project. Attached is a draft Negative Declaration for the Town Board's review and consideration.

Please contact our office if you have any questions.

DU/du
X:\Special_Projects\SEQR_Engineering & Other TOA\Type_I_Unlisted__Other_Actions (PJ-2015-001A)\Neg Dec_ Evergreen Landing Street Lighting_CIP_2022_2027_H16.docx
cc: Jeffrey Burroughs, PE, Town Engineer
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: SEQR.NEGDECEvergreenSubStreetlighting-04052022125120 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond

Attachment: SEQR.NEGDECEvergreenSubStreetlighting-04052022125120 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond

SEQR

NEGATIVE DECLARATION

NOTICE OF DETERMINATION OF NON-SIGNIFICANCE

Lead Agency: Town of Amherst
Town Board

Project: Evergreen Landing
Subdivision
Street Lighting
2022 - 2027 C.I.P.
Project H-16

Address: 5583 Main Street
Williamsville, NY 14221
(716) 631-7051

Date:

This notice is issued pursuant to Part 617 and Local Law #3-82, as amended, of the implementing regulations pertaining to Article 8 (State Environmental Quality Review) of the Environmental Conservation Law.

The Lead Agency has determined that the proposed action described below will not have a significant adverse effect on the environment.

Title of Action: Evergreen Landing Subdivision Street Lighting

SEQR Status: Unlisted action

Description of Action:

The project includes the installation of 173 light poles and LED luminaires on both sides of six (6) existing residential roadways, staggered, at an approximate spacing of 100 – 150 feet. The light system will consist of aluminum poles, post top luminaire heads, hand holes, electrical wiring, and electrical connections to existing pad-mount transformers. Additionally, each luminaire will be fitted with an Asset Management Control node.Restoration of the disturbed areas are also included within the project.

Location: Evergreen Landing Subdivision, Town of Amherst, Erie County, New York

Petitioner: Amherst Engineering Department

Reasons Supporting This Determination

Based on information submitted by the applicant, including a Map, Plan and Report, a preliminary staff analysis was undertaken. Compared to the criteria listed in Section 617.7, all indications are that the proposed project will not have a significant impact on the environment, as follows:

1. The project is not expected to cause a substantial adverse change in existing air quality, ground or surface water quality or quantity, or noise levels; a substantial increase in solid waste production; or a substantial increase in the potential for erosion, flooding, leaching or drainage problems. The project area does contain floodplain and contains protected wetland areas.

2. The project will not result in the removal or destruction of vegetation or fauna; or in significant adverse impacts to fish or wildlife species, habitats or other natural resources. All disturbances will occur within the developed street right of ways.

3. The project is not expected to create any material conflict with the Town Comprehensive Plan or the regulations of the Town Zoning Ordinance. The project is consistent with Section 9.0 Community Facilities and Services in the Comprehensive Plan which promotes an ongoing system to identify and prioritize community facility and service needs throughout the Town.

4. The project is within an area identified by the State as potentially containing significant cultural or archeological resources, however the project will occur within previously disturbed areas currently improved with roadways. The action will not impair the character or quality of important cultural resources.

5. The project will not impair the character or quality of important aesthetic resources or of existing community or neighborhood character. The improvements will provide street lighting for an existing developed residential subdivision.

6. The proposed project will cause a change in the use of electrical energy, since the current subdivision is not served with street lighting, however, the proposed lighting will be new LED energy efficient technology.

7. The proposed project will not create any hazard to human health.

8. The proposed project will not cause a change in land use.

9. The project will not increase the number of people using this site over its current level of use as a residential subdivision.

Attachment: SEQR.NEGDECEvergreenSubStreetlighting-04052022125120 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond

10. The project will not create a material demand for other actions resulting in a negative impact or consequence.

_____ _____

Signature & title of preparer date

_____ _____

Brian J. Kulpa, Supervisor date

cc: Amherst Engineering Department
Amherst Building Department
ECDEP

Attachment: SEQR.NEGDECEvergreenSubStreetlighting-04052022125120 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond

EXTRACT OF MINUTES

Meeting of the Town Board of the

Town of Amherst, in the County of Erie, New York

April 11, 2022

A regular meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, was held at the Town Hall, 5583 Main Street, Williamsville, New York, on April 11, 2022.

There were present: Hon. Brian J. Kulpa, Supervisor; and

Board Members:

There were absent:

Also present: Francina J. Spoth, Town Clerk

* * *

The Supervisor stated that a public hearing had been called for this meeting at the Town Hall, 5583 Main Street, Williamsville, New York, at 7 o'clock P.M. (Prevailing Time) to consider the extension of the Town's Consolidated Lighting District (the "District") to include the Evergreen Landing Subdivision (the "Extension") and to make improvements to the District in connection therewith, consisting of acquisition and installation of street lighting for Extension, at the estimated maximum cost of $1,350,000 (CIP Project No. H0-16), as described in the map, plan and report dated February, 2022 prepared by the Town Engineering Department; and to hear all persons interested in the subject thereof concerning the same and for such other action on the part of the Town Board with relation thereto as may be required by law. The Town Clerk presented affidavits showing that the Notice of said public hearing had been duly published and posted pursuant to the provisions of Article 12 of the Town Law.

Attachment: PubIntOrderCertExMins (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

The Supervisor stated that the hearing in the said matter was now open and asked if there were any interested persons present who desired to be heard. The following persons appeared in favor of such extension of said District and the improvements in connection therewith:

The following persons appeared in opposition to such extension and improvement:

The Supervisor inquired as to whether there were any other persons present who wished to be heard. No one appeared, whereupon the Supervisor declared the public hearing closed.

Attachment: PubIntOrderCertExMins (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed Extract of Minutes of a meeting of the Town Board of said Town of Amherst duly called and held on April 11, 2022, has been compared by me with the original minutes as officially recorded in my office as Town Clerk, and is a true, complete and correct copy thereof and of the whole of said original minutes.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this 11th day of April, 2022.

(SEAL)

Francina J. Spoth, Town Clerk
Town of Amherst

Attachment: PubIntOrderCertExMins (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

At a meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, held at the Town Hall, 5583 Main Street, Williamsville, New York, on the 11th day of April, 2022.

PRESENT:

Hon. Brian J. Kulpa, Supervisor
Jacqualine Berger, Councilwoman
Deborah Bruch Bucki, Councilwoman
Shawn Lavin, Councilman
Michael R. Szukala, Councilman

In the Matter

of the

Extension of the Town of Amherst Consolidated Lighting District to Evergreen Landing Subdivision and improvements in connection therewith

Offered by: _____

Seconded By: _____

PUBLIC INTEREST ORDER

WHEREAS, the Town Board of the Town of Amherst (herein called the "Town"), in the County of Erie, New York, on behalf of Consolidated Lighting District (herein referred to as the "District"), has caused the Town Engineering Department, engineers duly licensed by the State of New York (the "Engineer"), to prepare a map, plan and report dated February, 2022, to consider the extension of the Town's Consolidated Lighting District (the "District") to include the Evergreen Landing Subdivision and to make improvements to the District in connection therewith, consisting of the acquisition and installation of street lighting for the extension, at the estimated

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

maximum cost of $1,350,000 (CIP Project No. H0-16) required in connection therewith as described in said report (the "Extension"); and

WHEREAS, the Engineer has estimated that the cost of such Extension shall be $1,350,000 and said map, plan and report have been filed with the Town Board; and

WHEREAS, the Town Board adopted an Order Calling for a Public Hearing describing in general terms the proposed Extension, specifying the estimated cost thereof, and stating the Town Board would meet to hear all persons interested in said Extension on April 11, 2022 at 7 o'clock P.M. (Prevailing Time) at the Town Hall, 5583 Main Street, Williamsville, New York; and

WHEREAS, a Notice of such public hearing was duly published and posted pursuant to the provisions of Article 12-A of the Town Law, and a copy of which was sent to the Office of the State Comptroller; and

WHEREAS, such public hearing was duly held by the Town Board on the 11th day of April, 2022 at 7 o'clock P.M. (Prevailing Time) at the Town Hall, 5583 Main Street, Williamsville, New York, with considerable discussion on the matter having been had and all persons desiring to be heard having been heard, including those in favor of and those in opposition to said Extension; and

WHEREAS, the Town Board, as lead agency, has reviewed the Short Form Environmental Assessment Form and has determined that the project is an "unlisted action", will not have a significant effect on the environment and has issued a negative declaration in connection therewith pursuant to the State Environmental Quality Review Act (SEQRA), constituting Article 8 of the Environmental Conservation Law, and 6 N.Y.C.R.R., Regulations Part 617;

Now, therefore, be it

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

DETERMINED, that it is in the public interest to extend the District and make improvements in connection therewith as hereinabove described, at the estimated total cost of $1,350,000; and it is hereby

ORDERED, that the Extension shall be approved and that the Engineer shall prepare plans and specifications of the Extension and, with the assistance of the Town Attorney, shall prepare a proposed contract for the Extension, which plans and specifications and proposed contract shall be presented to the Town Board as soon as possible; and it is hereby

FURTHER ORDERED, that the expense of the Extension shall be financed by the issuance of $1,350,000 bonds of the Town, and the cost of the Extension, including payment of principal of and interest on said bonds, shall be paid by the assessment, levy and collection of assessments upon the several lots and parcels of land within the District, in the matter provided by law, but if not paid from such source, all the taxable real property in the Town shall be subject to the levy of ad valorem taxes, subject to certain applicable statutory limitations, sufficient to pay the principal of and interest on said bonds as the same shall become due; and it is hereby

FURTHER ORDERED, that this Public Interest Order is subject to permissive referendum; and it is hereby

FURTHER ORDERED, that the Town Clerk is directed to publish at least once in The Amherst Bee, a newspaper having a general circulation in the Town and hereby designated as the official newspaper of the Town for such publication, post on the Town's website at www.amherst.ny.us, on the front entrance door and rear doors of Town Hall, and post on the sign board of the Town maintained pursuant to subdivision 6 of section 30 of the Town Law, a copy of this Public Interest Order, certified by said Town Clerk, the first publication thereof and said posting to be not more than ten (10) days after the date of adoption of this Public Interest Order, and it is hereby

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

FURTHER ORDERED, that the Town Clerk send a certified copy of this Public Interest Order to the Office of the State Comptroller along with an application for approval for the Extension as required under Section 209-f of the Town Law within ten (10) days after adoption thereof.

DATED: April 11, 2022

(SEAL)

TOWN BOARD OF THE TOWN OF AMHERST

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

The adoption of the foregoing Public Interest Order was duly put to a vote on roll call, which resulted as follows:

Supervisor Brian J. Kulpa	voting _____
Councilwoman Jacqualine Berger	voting _____
Councilwoman Deborah Bruch Bucki	voting _____
Councilman Shawn Lavin	voting _____
Councilman Michael R. Szukala	voting _____

The Public Interest Order was declared adopted.

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed Public Interest Order of the Town Board of said Town adopted at a meeting duly called and held on April 11, 2022, has been compared by me with the original order as officially recorded in my office in the Minute Book of said Town Board and is a true, complete and correct copy thereof and of the whole of said order.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this 11th day of April, 2022.

(SEAL)

Francina J. Spoth, Town Clerk
Town of Amherst

Attachment: CertPubIntOrder (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

EXTRACT OF MINUTES

Meeting of the Town Board of the

Town of Amherst, in the County of Erie, New York

April 11, 2022

A regular meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, was held at the Town Hall, 5583 Main Street, Williamsville, New York, on April 11, 2022.

There were present: Hon. Brian J. Kulpa, Supervisor; and

Board Members:

There were absent:

Also present: Francina J. Spoth, Town Clerk

* * *

Attachment: CertResoAfterPHPart85 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed Extract of Minutes of a meeting of the Town Board of said Town of Amherst duly called and held on April 11, 2022, has been compared by me with the original minutes as officially recorded in my office as Town Clerk, and is a true, complete and correct copy thereof and of the whole of said original minutes.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this 11th day of April, 2022.

(SEAL)

Francina J. Spoth, Town Clerk
Town of Amherst

Attachment: CertResoAfterPHPart85 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

At a meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, held at the Town Hall, 5583 Main Street, Williamsville, New York, on the 11th day of April, 2022.

PRESENT:

Hon. Brian J. Kulpa, Supervisor
Jacqualine Berger, Councilwoman
Deborah Bruch Bucki, Councilwoman
Shawn Lavin, Councilman
Michael R. Szukala, Councilman

In the Matter

of the

Extension of the Town of Amherst Consolidated Lighting District to Evergreen Landing Subdivision and improvements in connection therewith

Offered by: _____

Seconded By: _____

RESOLUTION OF THE TOWN OF BOARD OF THE TOWN OF AMHERST PURSUANT TO PART 85 OF THE RULES AND REGULATIONS OF THE STATE COMPTROLLER REGARDING THE EXTENTION OF THE TOWN OF AMHERST'S CONSOLIDATED LIGHTING DISTRICT TO EVERGREEN LANDING SUBDIVISION AND IMPROVEMENTS IN CONNECTION THEREWITH

WHEREAS, the Town of Amherst, located in the County of Erie, New York (the "Town") passed a resolution on April 11, 2022 authorizing the extension of the Town's Consolidated Lighting District to Evergreen Landing Subdivision and improvements in connection therewith, consisting of the acquisition and installation of street lighting for the extension, and further authorized the filing of an application with the Office of the State Comptroller, and

WHEREAS, Section 85.3 of Part 85 of Title 2, Chapter 3 of the N.Y.C.R.R. requires an enabling resolution of the Town Board regarding the contents of such application and certain determinations made with respect to the application;

Attachment: CertResoAfterPHPart85 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

NOW THEREFORE,

BE IT RESOLVED, that the Town Board has reviewed the application prepared at the direction of the Town Board and believes the contents thereof to be accurate, and

BE IT FURTHER RESOLVED AND DETERMINED, that the Extension and the improvements for which permission of the State Comptroller is sought is in the public interest and will not constitute an undue burden on the property that will bear the cost thereof, and

BE IT FURTHER RESOLVED AND DETERMINED, that all real property to be assessed for such cost will be benefitted by the proposed extension and improvements, and

BE IT FURTHER RESOLVED, that the Town Supervisor be, and hereby is, authorized and directed to execute the application and submit the same in duplicate to the Comptroller of the State of New York.

The adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

Supervisor Brian J. Kulpa	voting _____
Councilwoman Jacqualine Berger	voting _____
Councilwoman Deborah Bruch Bucki	voting _____
Councilman Shawn Lavin	voting _____
Councilman Michael R. Szukala	voting _____

The Resolution was declared adopted.

Attachment: CertResoAfterPHPart85 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed Resolution of the Town Board of said Town adopted at a meeting duly called and held on April 11, 2022, has been compared by me with the original order as officially recorded in my office in the Minute Book of said Town Board and is a true, complete and correct copy thereof and of the whole of said order.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this 11th day of April, 2022.

(SEAL)

Francina J. Spoth, Town Clerk
Town of Amherst

Attachment: CertResoAfterPHPart85 (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution - $1.35M))

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Town of Amherst
Engineering Department

EVERGREEN LANDING SUBDIVISION STREET LIGHTING

2022 – 2027 Capital Improvement Project H-16
TOA Project # 2016.054A

MAP, PLAN & REPORT
FEBRUARY 2022

Contents:

- Background
- Location
- Project Description
- Project Purpose
- Anticipated Project Schedule
- Financial Summary
- Project Cost Estimate
- Taxation Summary
- SEQR Negative Declaration
- Certificate as to Useful Life of Project
    - Appendix A: Evergreen Subdivision Plat Map
    - Appendix B: Preliminary Design Plan

Prepared by:
Town of Amherst Engineering Department
1100 North Forest Rd., Williamsville, NY 14221
(716) 631 – 7154 / (716) 631 – 7222

Town of Amherst
Engineering Department
Evergreen Landing Subdivision Street Lighting

BACKGROUND:

Evergreen Landing Subdivision is a residential neighborhood consisting of 195 lots and six (6) local roadways. Residents are requesting that street lighting be installed throughout the subdivision.

LOCATION:

This project is located in Evergreen Landing Subdivision located in Amherst, New York. Evergreen Landing is located between Tonawanda Creek Road and Tonawanda Creek, just east of Niagara Falls Boulevard. The Subdivision Plat Map is found in Appendix A.

PROJECT DESCRIPTION:

In 2019, the Town of Amherst entered into a contract with an energy consultant to conduct a Comprehensive Energy Audit of the Town's existing street lighting systems. This Energy Audit identified that the Town would benefit from the procurement of the utility-owned/maintained street light system and an LED conversion project. During this time, new subdivision street lighting installations by the utility company were put on hold until the energy audit was complete. These utility-owned street lights would have had to be purchased at a higher cost if installed by the utility company in new subdivisions. After acquisition, a new non-LED luminaire would have been replaced with an LED luminaire. As such, there are subdivisions constructed in the Town of Amherst during the period of the energy audit that are in need of street lighting.

The residents of Evergreen Landing Subdivision have emphatically requested that the street lights be installed throughout its neighborhood. Evergreen Landing Subdivision was made a priority by the Amherst Town Board and the Town is moving forward with a design-bid-build project. The project includes the installation of 73+/- light poles and LED luminaires on both sides of roadways, staggered, at an approximate spacing of 100 – 150 feet. The light system will consist of aluminum poles, post-top luminaire heads, hand holes, electrical wiring, and electrical connections to existing pad-mount transformers. Additionally, each luminaire will be fitted with an Asset Management Control node. Restoration of the disturbed areas are also included within the project. Preliminary design plans are attached as Appendix 'B'.

PROJECT PURPOSE:

The purpose of residential street lighting has a number of benefits. Street lights have been found to deter crime while increasing quality of life. Street lighting has also been shown to improve safety for drivers, bicyclists, and pedestrians.

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Town of Amherst
Engineering Department
Evergreen Landing Subdivision Street Lighting

STREET LIGHT DISTRICT EXTENSION:

The consolidated street light district must be extended to include the Evergreen Landing Subdivision as filed in the Erie County Clerk's Office under map cover number 3533, dated 11/30/12 in its entirety. A subdivision plat map is located in Appendix 'A' which is representative of the boundary for the lighting district extension.

OTHER LIGHTING:

Any remaining funds may be used to design and/or install other new lighting in the existing Lighting District, or within areas where the Town of Amherst extends the lighting district.

ANTICIPATED PROJECT SCHEDULE:

- Call for Public Hearing: March 14, 2022
- Public Hearing April 11, 2022
- Bond Action: April 11, 2022
- Design Completion: June 2022
- Construction: August – December 2022

FINANCIAL SUMMARY:

At the February 7, 2022 Town Board meeting, the 2022-2027 Capital Improvement Program was amended by Resolution 2022-156 allocating additional funding towards H-16, "Adding LED streetlights in various neighborhoods in Town and along Sweet Home Road" to account for the Evergreen Landing street lighting project.

The funding is identified as a Lighting District Bond. This project has a minimum useful life of 30 years.

PROJECT COST ESTIMATE:

○ Design & Construction Administration	$ 43,000
○ Construction	$ 1,215,000
○ Contingency	$ 85,000
○ Legal / Administrative / Interest	$ 7,000
Total Amount to be bonded	**$ 1,350,000**

TAXATION SUMMARY:

- ○ Current Bond Request: $ 1,350,000
- ○ Bond Term: 20 years (Lighting District Bond)
- ○ Annual Tax Impacts:
  - ▪ Lighting District: $0.0183 per year, per $1,000 AV
- ○ Typical Property Taxation Impacts:
  - ▪ Lighting District: $3.65 per year, per $200,000 property

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM February 3, 2022

TO: Christopher Schregel, Project Manager
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director/ZEO

RE: SEQR Determination – Evergreen Landing Subdivision – Street Lighting
2022-2027 C.I.P Project H-16, TOA Project # 2016.054A

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be an Unlisted action under the provisions of SEQR according to Part 617.6(a). A Negative Declaration is required to be issued by the Town Board prior to taking an affirmative vote on the bond for this project. Attached is a draft Negative Declaration for the Town Board's review and consideration.

Please contact our office if you have any questions.

DU/du
X:\Special_Projects\SEQR_Engineering & Other TOA\Type_I_Unlisted__Other_Actions (PJ-2015-001A)\Neg Dec_ Evergreen Landing Street Lighting_CIP_2022_2027_H16.docx
cc: Jeffrey Burroughs, PE, Town Engineer
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

SEQR

NEGATIVE DECLARATION

NOTICE OF DETERMINATION OF NON-SIGNIFICANCE

Lead Agency: Town of Amherst
Town Board

Project: Evergreen Landing
Subdivision
Street Lighting
2022 - 2027 C.I.P.
Project H-16

Address: 5583 Main Street
Williamsville, NY 14221
(716) 631-7051

Date:

This notice is issued pursuant to Part 617 and Local Law #3-82, as amended, of the implementing regulations pertaining to Article 8 (State Environmental Quality Review) of the Environmental Conservation Law.

The Lead Agency has determined that the proposed action described below will not have a significant adverse effect on the environment.

Title of Action: Evergreen Landing Subdivision Street Lighting

SEQR Status: Unlisted action

Description of Action:

The project includes the installation of 173 light poles and LED luminaires on both sides of six (6) existing residential roadways, staggered, at an approximate spacing of 100 – 150 feet. The light system will consist of aluminum poles, post top luminaire heads, hand holes, electrical wiring, and electrical connections to existing pad-mount transformers. Additionally, each luminaire will be fitted with an Asset Management Control node.Restoration of the disturbed areas are also included within the project.

Location: Evergreen Landing Subdivision, Town of Amherst, Erie County, New York

Petitioner: Amherst Engineering Department

Reasons Supporting This Determination

Based on information submitted by the applicant, including a Map, Plan and Report, a preliminary staff analysis was undertaken. Compared to the criteria listed in Section 617.7, all indications are that the proposed project will not have a significant impact on the environment, as follows:

1. The project is not expected to cause a substantial adverse change in existing air quality, ground or surface water quality or quantity, or noise levels; a substantial increase in solid waste production; or a substantial increase in the potential for erosion, flooding, leaching or drainage problems. The project area does contain floodplain and contains protected wetland areas.

2. The project will not result in the removal or destruction of vegetation or fauna; or in significant adverse impacts to fish or wildlife species, habitats or other natural resources. All disturbances will occur within the developed street right of ways.

3. The project is not expected to create any material conflict with the Town Comprehensive Plan or the regulations of the Town Zoning Ordinance. The project is consistent with Section 9.0 Community Facilities and Services in the Comprehensive Plan which promotes an ongoing system to identify and prioritize community facility and service needs throughout the Town.

4. The project is within an area identified by the State as potentially containing significant cultural or archeological resources, however the project will occur within previously disturbed areas currently improved with roadways. The action will not impair the character or quality of important cultural resources.

5. The project will not impair the character or quality of important aesthetic resources or of existing community or neighborhood character. The improvements will provide street lighting for an existing developed residential subdivision.

6. The proposed project will cause a change in the use of electrical energy, since the current subdivision is not served with street lighting, however, the proposed lighting will be new LED energy efficient technology.

7. The proposed project will not create any hazard to human health.

8. The proposed project will not cause a change in land use.

9. The project will not increase the number of people using this site over its current level of use as a residential subdivision.

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

10. The project will not create a material demand for other actions resulting in a negative impact or consequence.

_____ _____
Signature & title of preparer date

_____ _____
Brian J. Kulpa, Supervisor date

cc: Amherst Engineering Department
Amherst Building Department
ECDEP

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

CERTIFICATE AS TO USEFUL LIFE OF PROJECT

I, the undersigned, HEREBY CERTIFY as follows:

That I am the Town Engineer [Engineer] and I am familiar with the Town of Amherst Street Light Acquisition & Upgrades project, as described in the map, plan and report dated January 2022, prepared by the Town Engineering Department (2022-2027 CIP Project H-15)(Project #2016.054).

That said project is classified as a capital asset under generally accepted accounting principles for municipalities and that the useful life thereof is at least thirty (30) years.

That this certification is being delivered pursuant to the Local Finance Law Section 11.00 a. 35, constituting Chapter 33-a of the Consolidated Laws of the State of New York, in connection with the issuance of bonds or notes of the Town to finance such project, for the purpose of determining the maximum maturity of such bonds or notes.

IN WITNESS WHEREOF, I have hereunto set my hand this 10th day of January, 2022.

(Name)

Town Engineer
(Title/Position)

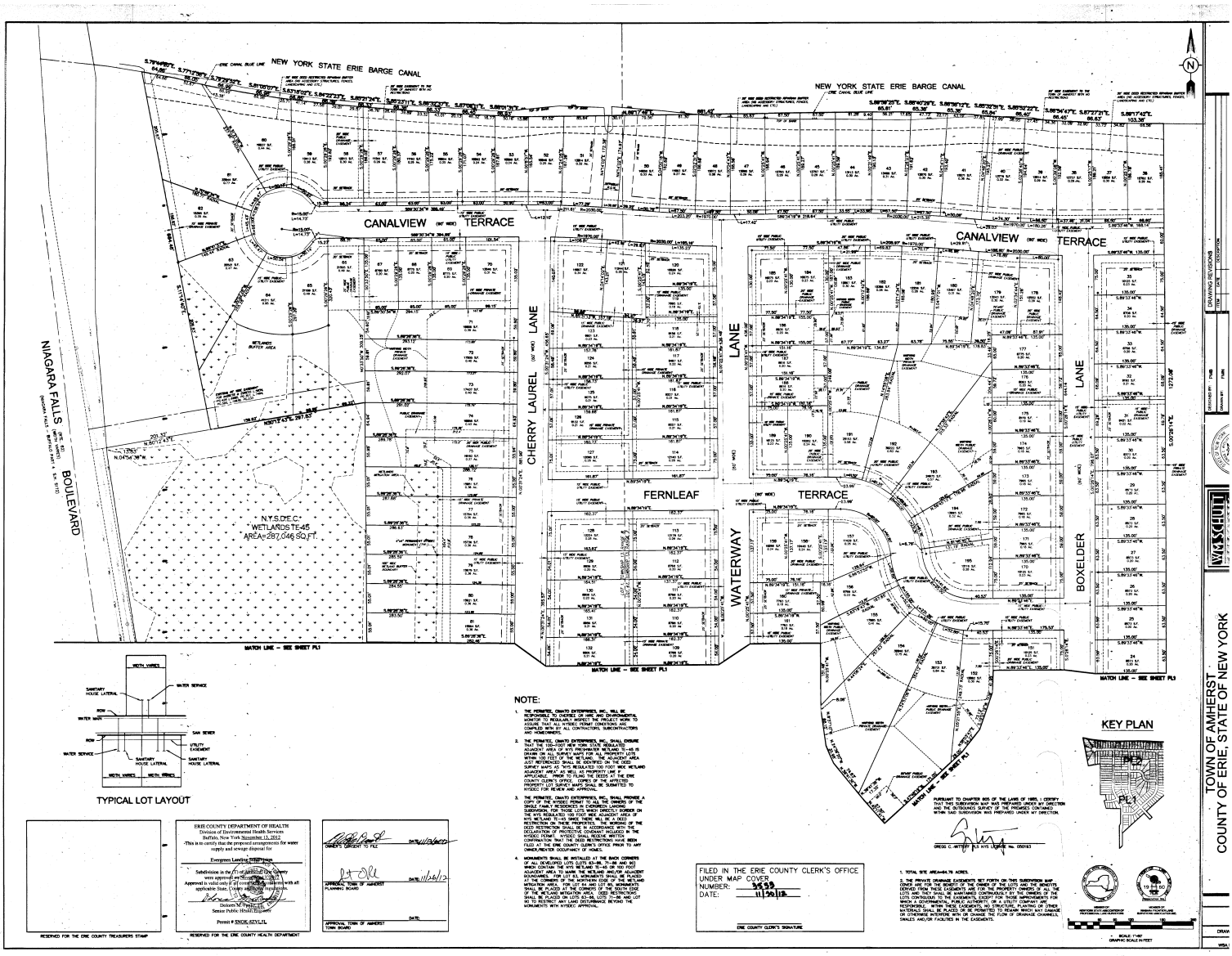
560386.1 001098 FILE

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

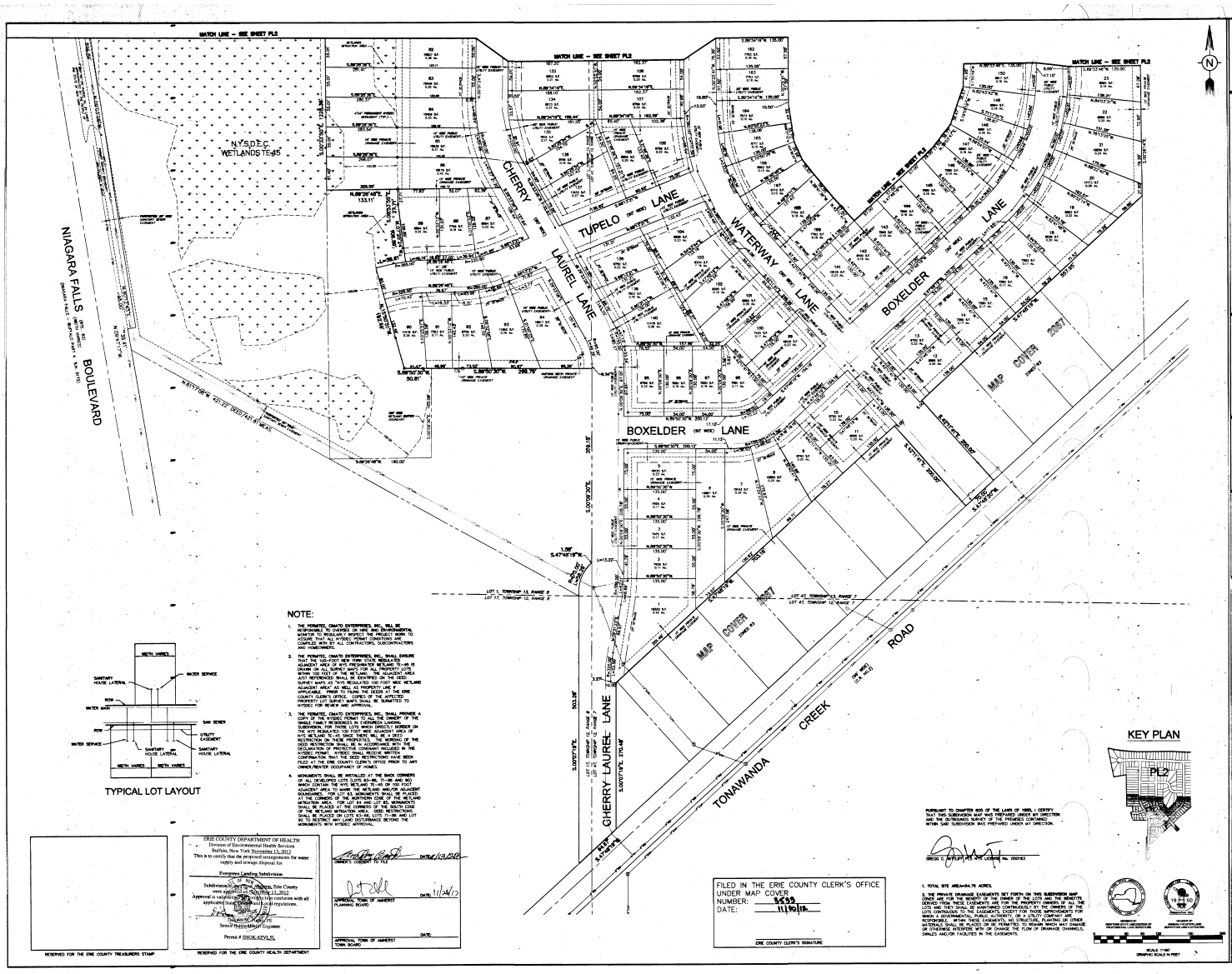
Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Appendix A

Evergreen Landing Subdivision Plat Map



Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

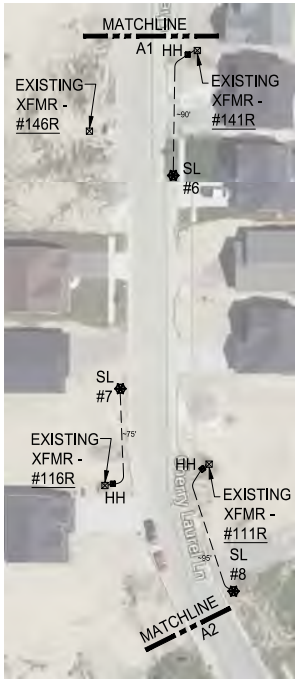


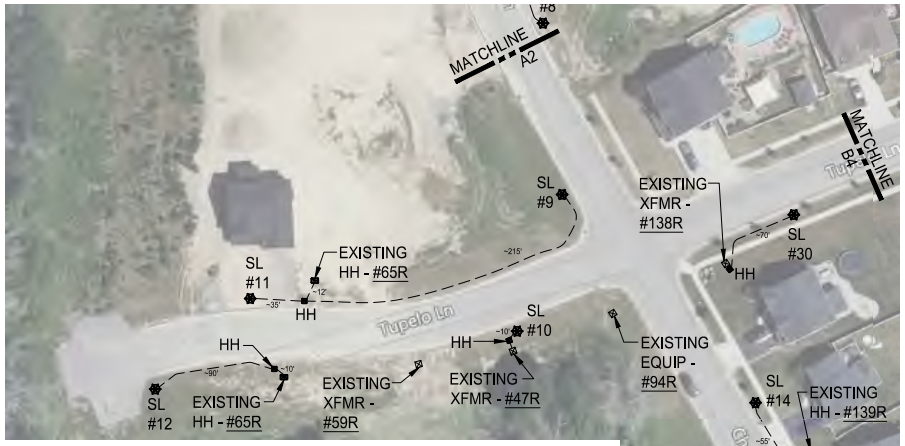
Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

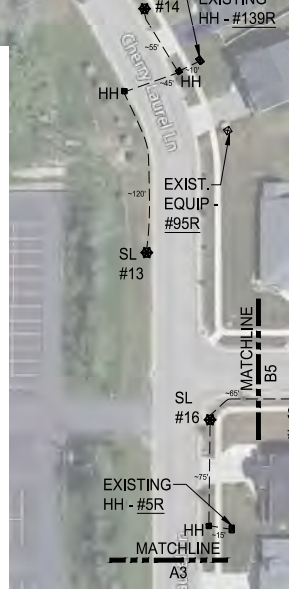
Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

Appendix B

Preliminary Design Plan

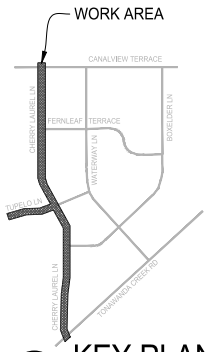






LEGEND:

- EXISTING PAD MOUNTED TRANSFORMER (TO REMAIN)
- DECORATIVE POST TOP LUMINAIRE
  - SIGNIFY TOWNVIEW (TVPR-S3-S-16-G1-7-3W-740-A-N-R7-N-SP1-N-N-N-BKS)
  - POLE: 16FT, HAPCO (RTA16B5) DIRECT BURIED
- HH HANDHOLE (POLYMER, OPEN BOTTOM, PE20HDH) PER NATIONAL GRID REQUIREMENTS
- WIRING (2)#8 & #8GND IN 1" SCH.40 RACEWAY (UNDERGROUND)



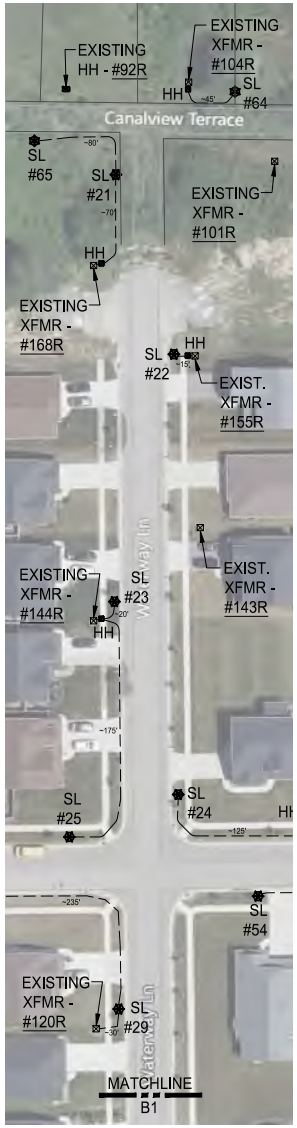
KEY PLAN
SCALE: NO SCALE

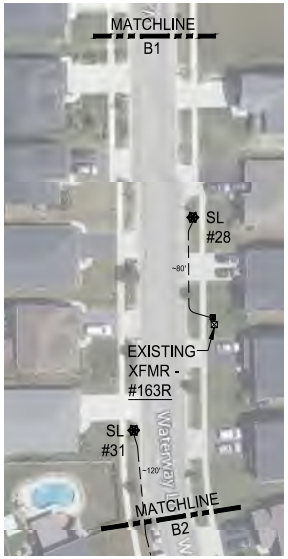
wendel
www.wendelccompanies.com

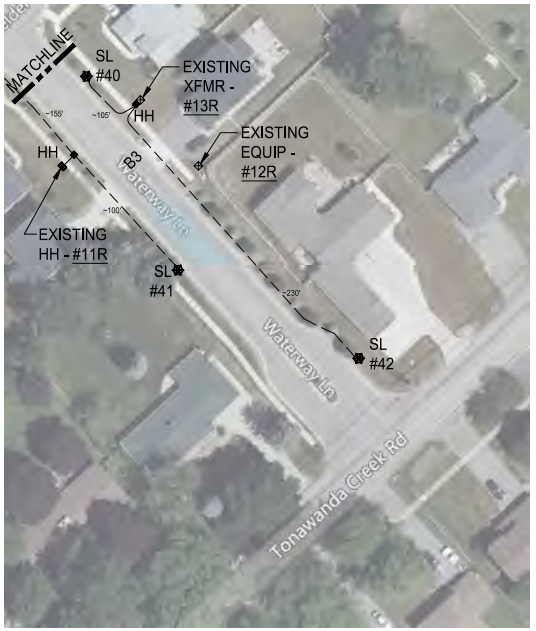
TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

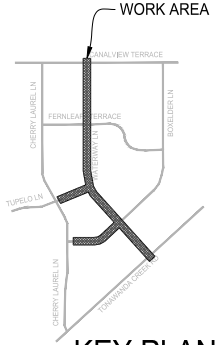
Proj. No.	261343
Date	06/18/21
Dwg.	E-1

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision









KEY PLAN
SCALE: NO SCALE

LEGEND:

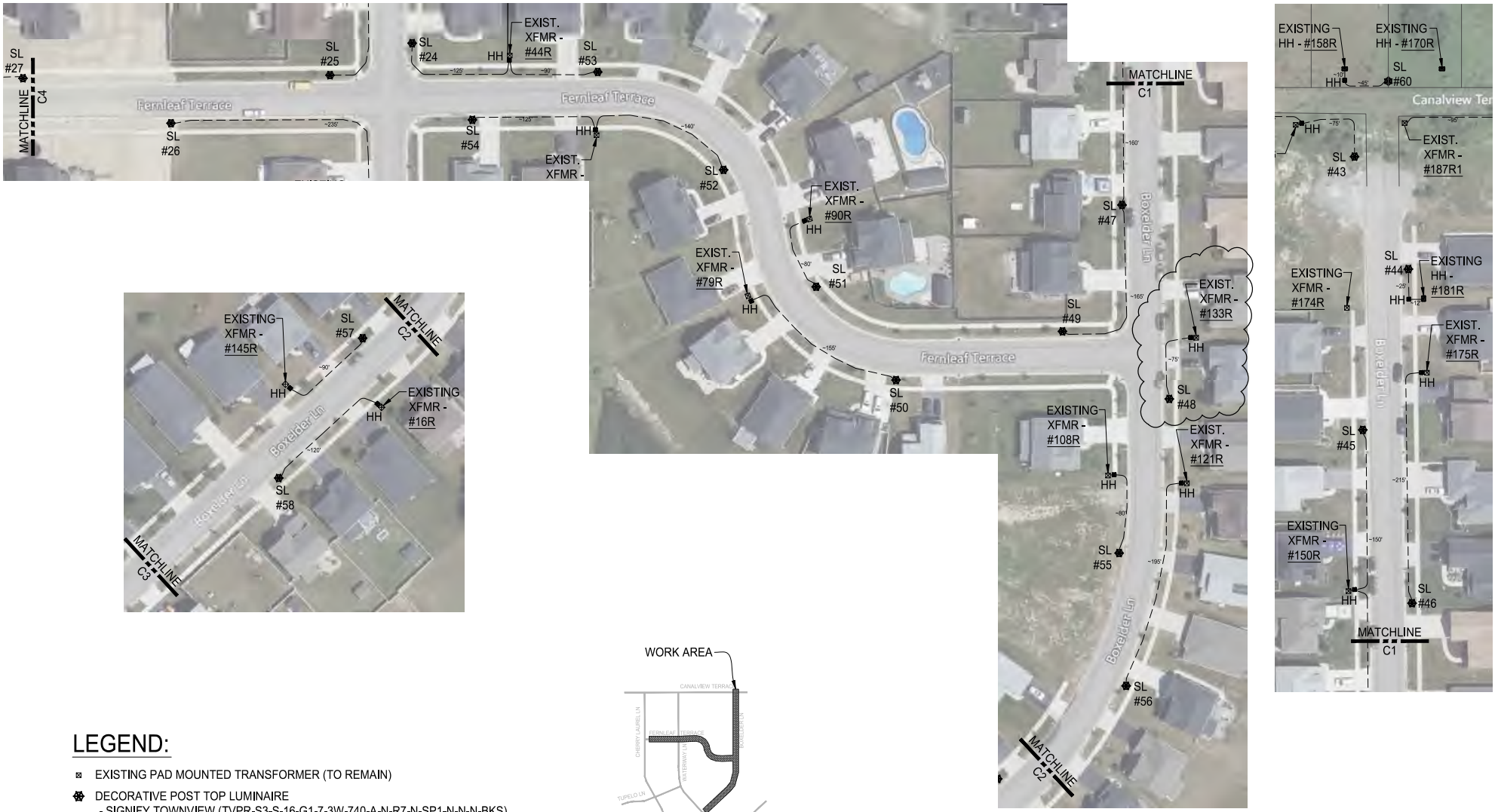
- ⊠ EXISTING PAD MOUNTED TRANSFORMER (TO REMAIN)
- DECORATIVE POST TOP LUMINAIRE
  - SIGNIFY TOWNVIEW (TVPR-S3-S-16-G1-7-3W-740-A-N-R7-N-SP1-N-N-N-BKS)
  - POLE: 16FT, HAPCO (RTA16B5) DIRECT BURIED
- HH ■ HANDHOLE (POLYMER, OPEN BOTTOM, PE20HDH) PER NATIONAL GRID REQUIREMENTS
- – – – WIRING (2)#8 & #8GND IN 1" SCH.40 RACEWAY (UNDERGROUND)

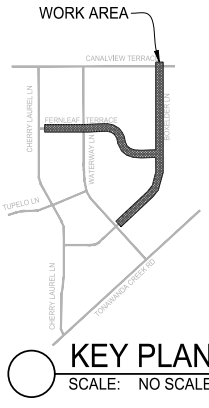
wendel
www.wendelcompanies.com

TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No.	261343
Date	06/18/21
Dwg.	E-2

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision





KEY PLAN
SCALE: NO SCALE

LEGEND:

- ⊠ EXISTING PAD MOUNTED TRANSFORMER (TO REMAIN)
- ✱ DECORATIVE POST TOP LUMINAIRE
  - SIGNIFY TOWNVIEW (TVPR-S3-S-16-G1-7-3W-740-A-N-R7-N-SP1-N-N-N-BKS)
  - POLE: 16FT, HAPCO (RTA16B5) DIRECT BURIED
- HH ▪ HANDHOLE (POLYMER, OPEN BOTTOM, PE20HDH) PER NATIONAL GRID REQUIREMENTS
- – – – WIRING (2)#8 & #8GND IN 1" SCH.40 RACEWAY (UNDERGROUND)

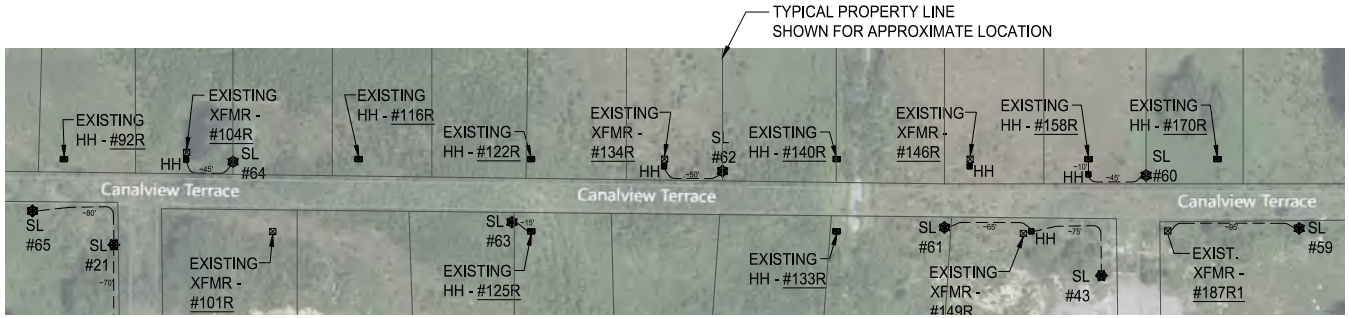
wendel
www.wendelcompanies.com

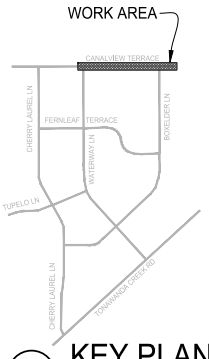
TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No.	261343
Date	06/18/21
Dwg.	E-3

GENERAL NOTES:

ALL POST TOP LUMINAIRES AND SERVICE POINTS ON THIS PLAN ARE CURRENTLY IN AN AREA THAT IS UNDER CONSTRUCTION. FINAL POST TOP LUMINAIRES LOCATION AND SERVICE POINTS SHALL BE VERIFIED IN THE FIELD PRIOR TO INSTALLATION.





KEY PLAN
SCALE: NO SCALE

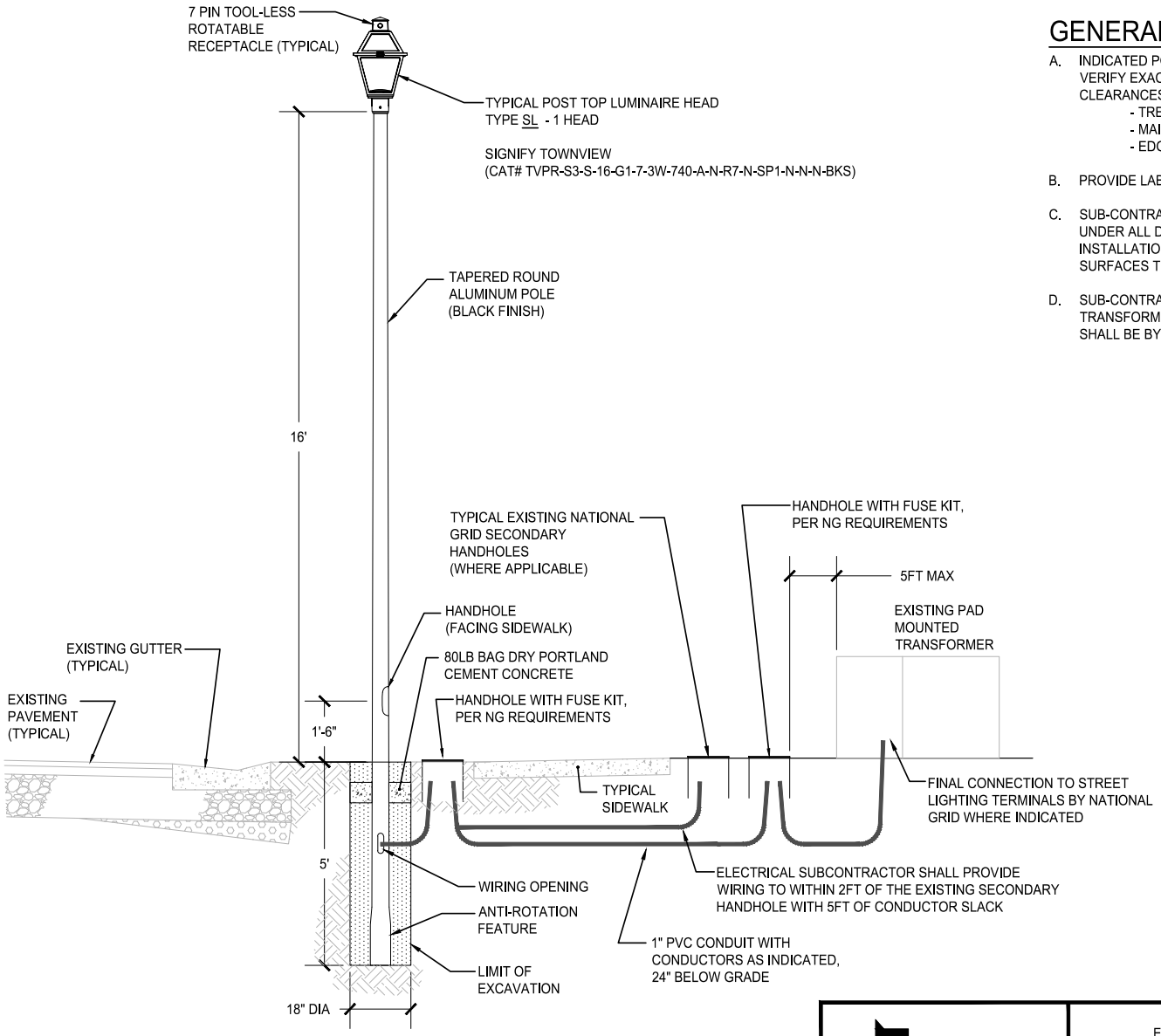
LEGEND:

- EXISTING PAD MOUNTED TRANSFORMER (TO REMAIN)
- DECORATIVE POST TOP LUMINAIRE
  - SIGNIFY TOWNVIEW (TVPR-S3-S-16-G1-7-3W-740-A-N-R7-N-SP1-N-N-N-BKS)
  - POLE: 16FT, HAPCO (RTA16B5) DIRECT BURIED
- HH HANDHOLE (POLYMER, OPEN BOTTOM, PE20HDH) PER NATIONAL GRID REQUIREMENTS
- WIRING (2)#8 & #8GND IN 1" SCH.40 RACEWAY (UNDERGROUND)

wendel
www.wendelcompanies.com

TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No.	261343
Date	06/18/21
Dwg.	E-4



GENERAL NOTES:

A. INDICATED POLE LOCATIONS ARE APPROXIMATE, ELECTRICAL SUB-CONTRACTOR SHALL VERIFY EXACT LOCATION IN THE FIELD. MAINTAIN THE FOLLOWING MINIMUM CLEARANCES WHEN LOCATING POLES:
   - TREES - 5FT
   - MAIL BOXES - 5FT
   - EDGE OF DRIVEWAYS - 3FT

B. PROVIDE LABELS PER NATIONAL GRID REQUIREMENTS & DETAILS ON E-7.

C. SUB-CONTRACTOR SHALL UTILIZE DIRECTIONAL BORING FOR INSTALLATION OF WIRING UNDER ALL DRIVEWAYS AND SIDEWALKS. PROVIDE ALL TRENCHING AS REQUIRED FOR INSTALLATION OF NEW STREET LIGHTING WIRING. RESTORE ALL LAWN & CONCRETE SURFACES TO MATCH EXISTING SURROUNDINGS.

D. SUB-CONTRACTOR SHALL PROVIDE SLACK OF WIRING FROM THE HANDHOLE NEAR TRANSFORMER, FINAL INSTALLATION & WIRING TERMINATION IN THE TRANSFORMER SHALL BE BY NATIONAL GRID.

1 TYPICAL POST TOP LUMINAIRE POLE INSTALLATION DETAIL

SCALE: NO SCALE

wendel
www.wendelcompanies.com

TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No.	261343
Date	06/18/21
Dwg.	E-5

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

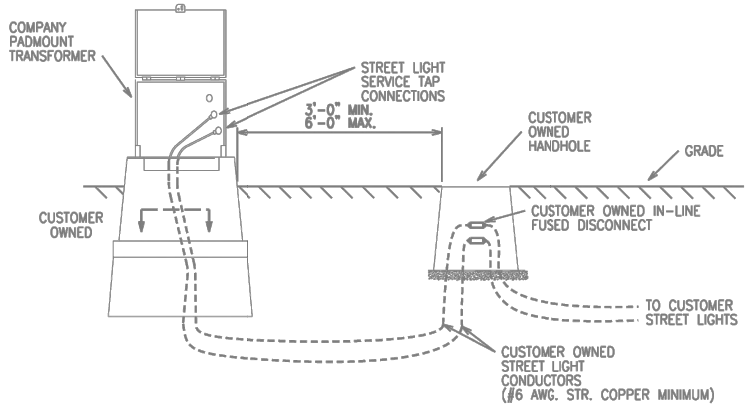


Figure 67 – Connection of Underground Supplied Street Light to National Grid Padmount Transformer

1. Install customer owned handhole as shown in Figure 67. Customer owned handhole shall house the in-line fused disconnect. See page 46-817 for details on the in-line fused disconnect.
2. Underground supply conductors shall be #6 AWG 7-strand copper (minimum) with RHH/RHW/USE-2 insulation. Conductors shall be color coded BLACK = Hot lead, WHITE = Neutral.
3. In cases where a new customer conduit is to be installed into a National Grid padmount transformer, National Grid shall determine the conduit entrance location at the padmount transformer foundation. The customer shall install the conduit to just outside this location. National Grid shall then create the opening in the padmount foundation and extend the customer conduit into the padmount foundation.
4. All electrical connections or disconnections to the secondary supply shall be performed by National Grid personnel and/or their designee.
5. In all cases where customer access to National Grid equipment is necessary, National Grid personnel shall be present to provide safety supervision and to unlock and relock the padmount transformer.

1 UNDERGROUND STREET LIGHITNG WIRING CONNECTION

SCALE: NO SCALE

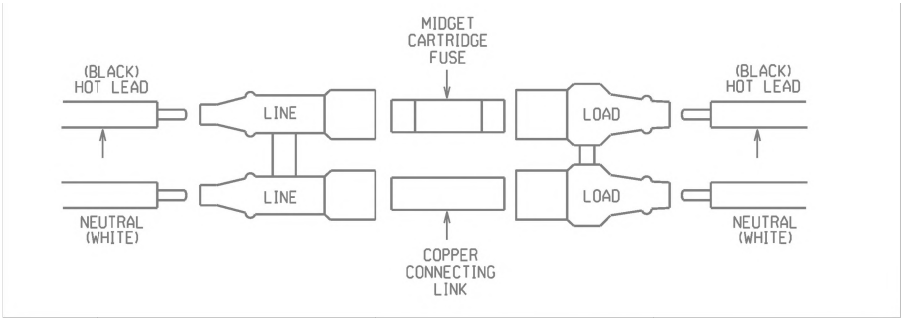


Figure 12 – In-Line Fused Disconnect Details

1. All customer owned outdoor lighting equipment shall be fused using a dual pole, watertight, in-line fuse holder and cartridge style fuse. This fuse, in addition to providing electrical protection, shall serve as a disconnection point for the customer owned outdoor lighting equipment.
2. Fuse Holder
   The fuse holder shall be a watertight device suitable for use in an outdoor environment.

   The fuse holder shall be totally insulated, thus having no exposed energized parts.

   The fuse holder shall accept #14 AWG - #6 AWG stranded copper conductors on both ends.

   The fuse holder shall be a dual pole device allowing simultaneous disconnection of both the 120 VAC hot lead (black wire) and the neutral conductor (white wire).

   The fuse holder shall be designed such that, when separated, the midget cartridge fuse and copper connecting link shall be held captive in the load end of the fuse holder.

   The fuse holder shall be polarized to prevent accidental reversal of the live leg and neutral connections.
3. Cartridge Fuse
   The fuse shall be a non-glass type, midget style cartridge fuse. Fuse dimensions shall be 13/32" diameter x 1½" length.
4. Neutral Connection
   The neutral conductor shall not be fused. Install a 13/32" diameter x 1½" length copper connecting link in place of a cartridge fuse.
5. Always provide sufficient slack in wiring to facilitate fuse replacement.

2 FUSE KIT

SCALE: NO SCALE

wendel
www.wendelcompanies.com

TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No. 261343
Date 06/18/21
Dwg. E-6

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

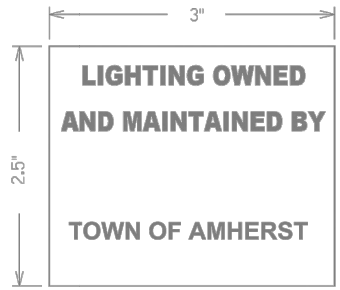


Figure 1 – Ownership Identification Label for Customer Owned Outdoor Luminaires

1. All customer owned outdoor light luminaires shall be identified with a label to clearly define ownership and maintenance responsibilities.
2. Ownership identification labels shall be reflective white with black lettering. See Figure 1.

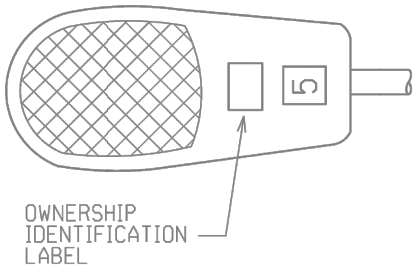


Figure 2 – Installation of Ownership Identification Label

1. Ownership identification label shall be installed on the lower door of a horizontal roadway luminaire such that it is clearly visible from the ground. See Figure 2.
2. For post top, floodlight, and other luminaires, the ownership identification label shall be installed on the luminaire housing in a location such that it is clearly visible from the ground.

1 LUMINAIRE LABELING
SCALE: NO SCALE

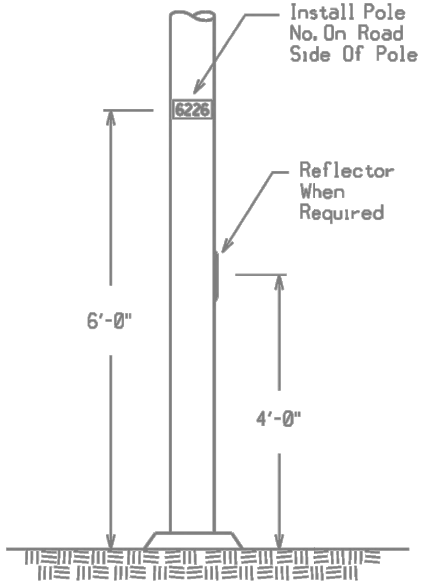


Figure 70 – Pole Numbering - Underground Supplied Customer Owned Lighting

1. Every underground supplied customer lighting pole shall be numbered in accordance with Figure 70.
2. Always use 1-3/4-inch x 3-inch, high intensity white reflective pole number decals.
3. Pole number decals shall be installed horizontal to each other as shown in Figure 70 – not vertical.

2 POLE LABELING
SCALE: NO SCALE

wendel
www.wendelcompanies.com

TOWN OF AMHERST
EVERGREEN LANDING STREET LIGHTING

Proj. No. 261343
Date 06/18/21
Dwg. E-7

Attachment: MPR H-16 Evergreen Landing Subdivision Street Lighting - Final - Reduced (RES-2022-345 : Evergreen Landing Subdivision

In the Matter

of the

Extension of the Town of Amherst Consolidated Lighting District to Evergreen Landing Subdivision and improvements in connection therewith

PART 85 APPLICATION

Sirs/Madams:

The following is a petition of the Town Board of the Town of Amherst, New York (the "Town"), for permission for the extension of the Town's Consolidated Lighting District (the "District") to include the Evergreen Landing Subdivision (the "Extension") and to make improvements to the District in connection therewith.

Pursuant to Article 12 of the Town Law of the State of New York, NYCRR, title 2, Part 85 respectfully shows:

85.3(b)(1) a. This petition is made pursuant to the resolution of the Town Board of the Town of Amherst (the "Board"), adopted at a meeting thereof held in said Town on April 11, 2022, a certified copy of which is hereto annexed as Exhibit A and made part hereof, wherein your petitioner was duly authorized and directed to make this application for permission to extend said District in compliance with the statues in such cases made and provided.

b. The Board believes the contents of this application to be accurate.

c. The Board has determined in the attached resolution adopted at a regular meeting thereof held in said Town on April 11, 2022, a certified copy of which is hereto annexed as Exhibit B and made a part hereof, that:

1.) The Extension, for which the permission is sought, is in the public interest and will not constitute an undue burden on the property which will bear the cost thereof.

2.) The cost of the proposed improvements is to be assessed in whole or in part against the benefited area, that all real property to be so assessed will be benefited by the proposed improvements, and that no benefited property has been excluded.

85.3(b)(2) The legal opinion in accordance with Section 85.5 is attached hereto as Exhibit C.

85.4(a) The documents and information required by the provisions of the Town Law pursuant to which this application is being made are as follows:

DRAFT

Attachment: Part 85 Application - Draft for TB Agenda (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution -

Exhibit D. Map, Plan and Report, dated February, 2022.

Exhibit E. Order of the Town Board Calling a Public Hearing dated March 14, 2022.

Exhibit F. Affidavit of Publication from the Amherst Bee verifying the publication of the Order Calling a Public Hearing in that official newspaper of the Town of Amherst.

Exhibit G. Affidavit of Posting of the said Order of the Town Board Calling a Public Hearing.

Exhibit H. Minutes of the Public Hearing held on the April 11, 2022, pursuant to said Order.

Exhibit I. Resolution of the Town Board following the Public Hearing on the April 11, 2022, for the extension of the Consolidated Lighting District and improvements in connection therewith.

Exhibit J. Resolution, dated April 11, 2022, of the Town Board declaring itself as Lead Agency to conduct proceedings pursuant to the State Environmental Quality Review Act (Article 8 of the Environmental Conservation Law) and finding no significant environmental impact and issuing a Negative Declaration; with a copy of the Short Environmental Assessment Form with Determination of Significance.

Exhibit K. Resolution of Town Board pursuant to NYCRR Part 85 Section 85.3(b)(1) dated April 11, 2022.

85.4(b) The proposed improvements consists of:

The installation of 73 light poles and LED luminaires on both sides of six (6) existing residential roadways, staggered, at an approximate spacing of 100-150 feet. The lighting system will consist of aluminum poles, post top luminaire heads, hand holes, electrical wiring, and electrical connections to existing pad-mount transformers. Additionally, each luminaire will be fitted with an Asset Management Control note. Restoration of disturbed areas is also included within the project.

85.4(c) The total estimated maximum cost is One Million Three Hundred Fifty-Thousand Dollars ($1,350,000).

85.4(d) The Town Board, as the governing board of the applicant, considered the following factors in making its determination that the proposed improvements are in the public interest: 1) That the extension of the Consolidated Lighting District into the Evergreen Subdivision would in likelihood maintain, if not improve, the value of the real property owned by the residents. 2) All non-exempt vacant parcels will be assessed a portion of the debt service.

85.4(e) The proposed manner of financing the cost of the improvements will be through the issuance of bonds and/or bond anticipation notes issued on behalf of the Town through a competitive or private sale.

DRAFT

Attachment: Part 85 Application - Draft for TB Agenda (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution -

85.4(f) The estimated cost of operating and maintaining the proposed improvements is $3,005.41 annually. The estimate is based on an annual cost of $19.17 per street light for energy (cost from National Grid), and $22.00 per street light for maintenance (cost from NY Power Authority maintenance contract);

85.4(g) The town will raise the costs of debt service, operation and maintenance by raising taxes based on the assessed value of each property within the Consolidated Lighting District.

85.4(h) The aggregated assessed valuation of all taxable real property in the Consolidated Lighting District is estimated to be $5,436,561,064. This is based on the existing Consolidated Lighting District assessed valuation of $5,367,369,978, plus an estimated value of $69,191,086 for the Evergreen Landing subdivision once all homes are built. It is anticipated that the subdivision will be fully built out prior to additional taxes being raised for the purpose of the project.

85.4(i) This is not an application under section 54 or 209-q of the Town Law or to increase the maximum amount to be expended.

85.4(j) This is not an application pursuant to the County Law.

85.4(k) The average full valuation of the taxable real property in the Town of Amherst computed pursuant to subdivision 7-a of section 2.00 of the Local Finance Law is $11,193,197,428.

85.4(l) The outstanding indebtedness as of the date hereof of the Town of Amherst is $127,986,023, as per the Schedule of Indebtedness. (See Exhibit L). The Town has $36,771,700 in authorized, but unissued debt. This includes $31,000,000 authorized for the purchase of the town-wide streetlight asset from National Grid, and its conversion to LED.

85.4(m)

1) A total of $11,556,345.85 is appropriated in the 2022 Town budget for repayment of debt principal. This includes $8,121,500.00 for bond principal and $3,434,845.85 for BANs principal

2) There is no State or Federal aid available for the payment of debt principal on any debt.

3) The amount of debt excludable for computing the Town's debt limit under Article VIII of the New York State Constitution is $27,571,655, bringing the Town's Net Indebtedness to $100,414,368.

85.4(n) Not applicable.

85.4(o) The current tax rates and assessments application to the taxable real property which will bear the cost of the proposed improvement per $1,000 assessment are as follows:

County	N/A
Town, including highway	$0.641759 per $1000 AV; total AV $5,367,369,978_____
School,	N/A

DRAFT

Attachment: Part 85 Application - Draft for TB Agenda (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution -

Fire	N/A
Other	N/A

85.4(p) The assessed value of a typical residential property in the Town of Amherst is $220,000 and in the extended Consolidated Lighting District is $235,000.

85.4(q) It is estimated that the owner of a typical property in the Consolidated Lighting District will be required to pay an additional $4.4238 in the first year following approval of the application, if granted. This includes $4.2939 for bond payments related to the improvements, $0.0605 for the annual street light energy charge, and $0.0694 for the estimated annual maintenance charge. The estimated cost for the energy charge was obtained from National Grid, and the estimated cost for the maintenance was obtained from the New York Power Authority.

85.4(r) The maximum amount any real property owner will be required to pay in the first year following approval of an application, if granted, for debt service, operation and maintenance and other charges related to the proposed improvements, is anticipated to be $4.4238, as outlined in 85.4(q) above.

85.4(s) No state lands are included in the area which will bear the cost of the improvements.

85.4(t) a statement whether the area which will bear the cost of the proposed improvements is wholly or partially within an existing or proposed agricultural district, and if so, how the assessment base for the proposed improvement will be affected thereby;

85.4(u) a statement of the population of the area which will bear the cost of the improvements, the number of one- and two-family homes located in the area, the assessed value of the typical one- or two-family home, and a description of any nonresidential areas, including the total assessed value thereof; (v) if the proposed;

85.4(v) The proposed extension and improvement will not benefit vacant land. The only potential vacant land being affected are lots that are currently vacant, but in the process of development. Once the development is fully built out, no vacant land will be affected.

85.4(w) None.

85.4(x) There is no order of any court or agency, State or Federal relating to the proposed District and no pending or threatened judicial or administrative proceedings which relate to the improvements.

85.4(y) The Town has published notice of a public hearing, to be held on April 11, 2022, in the official newspaper of record (the Amherst Bee). All public hearing notices are published in the same location.

85.4(z) No written objection expressing opposition to the undertaking of the improvements has been received by the Town from any of the owners of real property that will bear the burden of the costs of the proposed improvement.

DRAFT

Attachment: Part 85 Application - Draft for TB Agenda (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution -

WHEREFORE, the Town Board of the Town of Amherst, County of Erie, New York, through its Supervisor respectfully prays and requests permission to extend said "Consolidated Lighting District" of the Town of Amherst, Erie County, New York.

TOWN OF AMHERST

By: _____
Brian J. Kulpa, Supervisor

DRAFT

Attachment: Part 85 Application - Draft for TB Agenda (RES-2022-345 : Evergreen Landing Subdivision Streetlighting (Bond Resolution -

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25607 **RESOLUTION 2022-346** **DECISION DATE**

6621 Main Street & 20 Oakwood Drive Rezoning

Request to rezone 6621 Main Street from GB to OB and 20 Oakwood Drive from R-3 to OB.

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was opened at 7:29 PM.

Attorney Ari Goldberg, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the hearing and set a decision date for the April 25th Town Board meeting, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was closed at 7:33 PM.

RESULT:	**DECISION DATE [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Jacqualine Berger, Deputy Supervisor	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, A
Planning Director

Daniel J. Ulatowski, A
Assistant Planning Dire

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Town Board Agenda of April 11, 2022

March 29, 2022

The Honorable Town Board
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Subject: Request to rezone 0.85 ± acres of land from GB and R-3 to OB, Z-2021-11; property located at 6621 Main Street and 20 Oakwood Drive, Valdemar Blaszak, Petitioner.

Honorable Members:

The subject properties total 0.85 ± acres and are comprised of 2 separate parcels located at the southeast corner of Main Street and Oakwood Drive approximately 0.5 ± miles west of the intersection of Transit Road.

The Main Street site is currently occupied by a vacant restaurant and associated parking lot. At the site located on Oakwood Drive there is a sand volleyball court surrounded by grass and existing vegetation.

Main Street is a New York State highway designated as a major arterial and Oakwood Drive is a local street in the Town of Amherst Bicentennial Comprehensive Plan.

For information on the surrounding zoning and land use, please refer to the attached sketch.

The purpose of this request is to allow for the future development of a dental office/laboratory. The concept plan illustrates the construction of a two-story building and has a footprint of approximately 4,900 square feet. The concept plan also shows parking that fronts on Main Street as well as parking located adjacent to the single-family home to the south of the subject site. Landscaping is included at the east, west, and south property lines and a masonry wall is shown at the corner of Main Street and Oakwood Drive.

On May 15, 2000, the Town Board approved a rezoning request (Z-2000-06) for the property at 6621 Main Street from R-3 to GB to bring the zoning into conformance with the existing land use. There are no previous rezoning applications for the parcel located at 20 Oakwood Drive.

Honorable Town Board

Rezone land from R-3 and GB to OB;
property located at 6621 Main Street
and 20 Oakwood Drive
Agenda of April 11, 2022

The Planning Board offers the following findings consistent with Section 8-3 of the Zoning Ordinance.

INTENT AND OBJECTIVES OF THE COMPREHENSIVE PLAN

Figure 6 of the Bicentennial Comprehensive Plan depicts the subject properties as a 'Commercial-Office' land use. As described in the Comprehensive Plan this land use designation is used for complimentary and appropriately scaled professional offices. Individual office developments like the subject request are separate from traditional business parks and do not require large plots of land, which in turn makes them a good fit as a component of a larger mixed-use corridor. Commercial offices, according to the Comprehensive Plan, should meet certain principles. The concept plan provided seeks to meet the principles such as: location on a corner lot along an existing commercial arterial (Main Street) in close proximity to similar land uses; and access to the site proposed in the concept plan includes a curbcut on both Main Street and Oakwood Drive which will provide circulation through the site without creating conflict with the adjacent properties. The concept plan also includes a vegetative buffer on the east, west, and south property boundaries in an attempt to limit the impact to adjacent properties. The concept plan is consistent with the 'Commercial-Office' land use designation as described in §3.3.4 of the Bicentennial Comprehensive Plan.

INTENT AND OBJECTIVES OF THE ZONING ORDINANCE

The proposed rezoning is consistent with Section 1-2-2K of the Zoning Ordinance which seeks to guide future development of the Town to bring about the gradual conformity of land and building uses in accordance with the objectives of the Comprehensive Plan. A full technical review for compliance with the Zoning Ordinance will take place at site plan review.

CONSISTENCY/COMPATIBILITY WITH SURROUNDING DEVELOPMENT/ZONING

The properties to the north, east and west of the subject rezoning are zoned Office Business (OB) and the properties to the south of the subject site are zoned Residential District 3 (R-3). A rezoning of the subject parcels to OB would further advance a goal of the Zoning Ordinance to bring gradual conformity of land uses to be consistent with the Bicentennial Comprehensive Plan. With adequate buffering and screening to adjacent single-family homes, the proposed land use will be compatible and consistent with the surrounding development.

ADEQUATE SERVICES AND UTILITIES

All services and utilities necessary for the proposed rezoning are available and adequate at the subject location. This is an Unlisted Action, and an environmental assessment consistent with SEQR has been prepared for the subject proposal. Pursuant to Local Law #3-82, as amended, the requirements of SEQR are complete and the proposal is not expected to have a significant adverse effect on the environment.

RECOMMENDATION

The Planning Board at their meeting of February 17, 2022 recommended that the Town Board find that the requirements of SEQR are complete and that the subject request will not have a significant adverse effect on the environment. The Planning Board also recommended that the subject rezoning request be approved.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Honorable Town Board

Rezone land from R-3 and GB to OB;
property located at 6621 Main Street
and 20 Oakwood Drive
Agenda of April 11, 2022

The Planning Department requests that if the Town Board desires to act on the rezoning request, that a decision date be established after the public hearing so that the Planning Department can prepare a determination of environmental significance pursuant to SEQR, and prepare a resolution for the Town Board's consideration.

Very truly yours,

DANIEL C. HOWARD, AICP
Planning Director

DH/TV/ac
Att.
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_TBletter 041122.docx
cc: Stanley Sliwa, Town Attorney

Planning Board Approval February 17, 2022
Ayes 6, Noes 0, Absent 1 (Gill)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

TOWN OF AMHERST
PLANNING BOARD
ZONING RESOLUTION
Z-2021-11

FEB24'22 PM 4:51 RCVD

PETITIONER

Valdemar Blaszak
c/o Jeff Palumbo, Esq.
Barclay Damon LLP
9276 Main Street, Suite 3
Clarence, NY 14031

PROPERTY LOCATION

6621 Main Street & 20 Oakwood Drive

WHEREAS the Town of Amherst Planning Board on Thursday, February 17, 2022 held a public hearing on the proposed rezoning of land from General Business District (GB) and Residential District Three (R-3) to Office Building District (OB), and

WHEREAS the Planning Board has reviewed plans and other materials regarding the rezoning proposal, and

WHEREAS the materials and plans have been referred to the Town's various review agencies, and

WHEREAS in accordance with Section 8-3-5 of the Zoning Ordinance the Planning Board finds that:

A. The proposed zoning and development plan is generally consistent with the policies of the Comprehensive Plan and the Zoning Ordinance.

B. There are adequate services and utilities available or proposed to be made available in the construction of the development.

C. The proposal is compatible with the present zoning and conforming uses of nearby property and with the character of the neighborhood.

D. The subject property is suitable for uses permitted by the current versus the proposed district.

E. The proposed change does tend to improve the balance of uses, and does not meet a specific demand in the Town.

F. Review by the US Army Corps of Engineers under Section 404 of the Clean Water Act may be waived because the parcel is developed.

WHEREAS pursuant to Local Law #3-82, as amended, the Planning Board recommends that the Town Board determine that the requirements of SEQR are complete and that the subject proposal is not expected to have a significant adverse effect on the environment.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

TOWN OF AMHERST
PLANNING BOARD
ZONING RESOLUTION
Z-2021-11

FEB24'22 PM 4:51 RCVD

PETITIONER

Valdemar Blaszak

PROPERTY LOCATION

6621 Main Street & 20 Oakwood Drive

NOW THEREFORE BE IT RESOLVED that the Planning Board recommends to the Town Board in accordance with Section 8-3-4 of the Zoning Ordinance, that the rezoning request be approved.

The foregoing resolution was adopted by the Town of Amherst Planning Board, February 17, 2022; moved by - Giuliani; seconded by - Kahn; ayes 6, noes 0; absent - Gill.

Robert J. Gilmour, Chair

2-24-22
Date

TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_resolution_021722.doc
cc: Town Clerk
Commissioner of Building
Highway Superintendent
Town Engineer
Traffic/Safety Coordinator
Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

BARCLAY DAMON LLP

Jeffery D. Palumbo
Partner

January 31, 2022

VIA HAND DELIVERY
VIA ELECTRONIC MAIL

Town of Amherst
Town Board
c/o Town of Amherst Planning Department
5583 Main Street
Williamsville, NY 14221
dulatowski@amherst.ny.us

RECEIVED
FEB 01 2022
TOWN OF AMHERST
PLANNING DEPT.

Re: 6621 Main Street and 20 Oakwood Drive
Petition for Rezoning – First Revised Submission

Dear Honorable Members of the Town Board:

Barclay Damon LLP represents Valdemar Blaszak and VBW Properties LLC ("Petitioner"), owner of 6621 Main Street, SBL 81.08-4-1 and 20 Oakwood Drive, SBL 81.08-4-2.1 ("Properties") in the Town. Petitioner, through an affiliated company, owns the adjacent property at 6599 Main Street where he operates a dental lab. The Properties contain a former vacant bar, volleyball court associated with the bar operation, and unpaved parking. Petitioner is proposing a redevelopment of the Properties into an 8,000 – 9,000 SF, two-story dental office with associated parking to complement the existing dental lab at 6599 Main Street. Petitioner will separately file its site plan application subsequent to this petition.

Petitioner first submitted its Petition on November 15, 2021, seeking to solely rezone 20 Oakwood. After further discussion with the Town Planning Department, Petitioner has revised its request, and Petitioner respectfully requests a Local Law amending Chapter 203 of the Town of Amherst Code to rezone the 6621 Main Street from GB to OB and 20 Oakwood from R-3 to OB and to Amend the Zoning Map, Map D12, accordingly.

Enclosed, please find the following:

1. Petition for Rezoning/Town Application Form
2. Town Zoning Code and Comprehensive Plan Analysis
3. Infill Redevelopment Concept Plan
4. Existing Boundary Survey
5. Legal Description of Proposed Rezone Area
6. Legal Description in the Form of Draft Local Law

9276 Main Street - Suite 3 - Clarence, New York 14031 barclaydamon.com
JPalumbo@barclaydamon.com Direct: (716) 858-3728 Fax: (716) 768-2728

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

7. Environmental Assessment Form
8. Town Environmental Assessment Form Addendum

We look forward to introducing this Petition to the Town Boards and Departments. Thank you for your consideration. Please contact me should you require anything additional.

Very truly yours,

Jeffery D. Palumbo

JDP:amg
Enclosures

Cc: Lee Talley, Long Talley Engineering, P.C. (via e-mail)
Valdemar Blaszak (via e-mail)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Petition for Rezoning/Town Application Form

TOWN OF AMHERST PLANNING DEPARTMENT

Application for Rezoning

For Official Use

File #: Z-2021-11 **Acreage** .85± **Fee $** 1265.00

Address Verified by Assessor's Office _____ VERIFIED BY DATE

Application Received by Planning Department TV 2/1/22 ACCEPTED BY DATE

Materials Checked by Zoning Enforcement Officer _____ CHECKED BY DATE

Materials & Fee Paid to Town Clerk _____ ACCEPTED BY DATE

		Fill In Applicable Fees
2 ACRES OR LESS	**$1,250.**	X
2 – 20 ACRES **$1,250 + $250/acre or fraction thereof over 2 acres** (fractions of an acre to be counted as 1 acre)		_____
21 – 30 ACRES **$5,700 + $150/acre or fraction thereof over 21 acres** (fractions of an acre to be counted as 1 acre)		_____
OVER 30 ACRES **$6,900 +$75/acre or fraction thereof over 30 acres** (fractions of an acre to be counted as 1 acre)		_____
Request for Relief of / Change to Conditions of Zoning Approval	**$1,200.**	_____
AFFIDAVIT FEE FOR PUBLIC HEARING	**$15.**	X
TOTAL FEE:		**$** 1265

Fee previously paid November 15, 2021.

Application modifications do not alter size of rezoning request, so fee remains the same.

See subsequent application cover page and filing receipt

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Town of Amherst Planning Department 5583 Main Street Williamsville New York 14221
(716) 631-7051 Fax (716) 631-7153 Web www.amherst.ny.us

TOWN OF AMHERST PLANNING DEPARTMENT

Application for Rezoning

For Official Use

File #: Z-2021-11 Acreage 0.34± Fee $ 1265.00

Address Verified by Assessor's Office _____ VERIFIED BY DATE

Application Received by Planning Department TV 11/15/21 ACCEPTED BY / DATE

Materials Checked by Zoning Enforcement Officer _____ CHECKED BY DATE

Materials & Fee Paid to Town Clerk _____ ACCEPTED BY DATE

		Fill In Applicable Fees
2 ACRES OR LESS	$1,250.	X
2 – 20 ACRES $1,250 + $250/acre or fraction thereof over 2 acres (fractions of an acre to be counted as 1 acre)		
21 – 30 ACRES $5,700 + $150/acre or fraction thereof over 21 acres (fractions of an acre to be counted as 1 acre)		
OVER 30 ACRES $6,900 +$75/acre or fraction thereof over 30 acres (fractions of an acre to be counted as 1 acre)		
Request for Relief of / Change to Conditions of Zoning Approval	$1,200.	
AFFIDAVIT FEE FOR PUBLIC HEARING	$15.	X

Francene J Spotts

TOTAL FEE: $ 1265

Town of Amherst Planning Department 5583 Main Street Williamsville New York 14221
(716) 631-7051 Fax (716) 631-7153 Web www.amherst.ny.us

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Town of Amherst
5583 Main St.
Williamsville, NY 14221

* * * RECEIPT * * *

Date: 11/15/21 **Receipt#:** 227251

Quantity	Transactions	Reference	Subtotal
1	Site Plans	SP-2021-11	$1,265.00
		Total Paid:	$1,265.00

Notes:

Payment Type	Amount	Paid By
CK #1295	$1,265.00	Blaszak development Group LLC

Name: Blaszak development Group LLC
6599 Main Street
Williamsville, NY 14221

Clerk ID: CT2

Internal ID: SP-2021-11

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

TO BE COMPLETED BY APPLICANT

1. **Petitioner:**

Name: Valdemar Blaszak/VBW Properties LLC by Barclay Damon LLP as agent/attorney

Address: 9276 Main Street, Suite 3, Clarence NY 14031

Clarence	NY	14031
City	State	Zip Code

Phone: (716) 858-3728 Fax

E Mail: jpalumbo@barclaydamon.com

2. **The undersigned hereby petitions the Honorable Town Board to rezone the following described property:**

From: R3 (20 Oakwood) and GB (6621 Main) District

To: OB District

3. **Street address of land to be rezoned:** (must be verified by Town Assessor's Office)

20 Oakwood Drive and 6621 Main Street

SBL #: 81.08-4-2.1 and 81.08-4-1

4. **Area of land to be rezoned** (in acres): 0.850

5. **Owner of Land**:

Name: 6621 Main St. Inc.

Address: 6621 Main St.

Williamsville	NY	14221
City	State	Zip Code

Phone:

6. **Representative** (Architect, Engineer, Landscape Architect, Surveyor or Attorney):

Name: Jeffery D. Palumbo, Barclay Damon LLP

Address: 9276 Main Street, Suite 3

Clarence	NY	14031
City	State	Zip Code

Phone: (716) 858-3728 Fax

E Mail: jpalumbo@barclaydamon.com

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

7. Petitioner's interest in property

X Option to purchase
_____ Owner
_____ Other (explain) _____

8. The following are all others having an interest in this application and join herein with the petitioner named above: (describe extent of interest; attach sheets as needed)

9. Attach Survey and Legal description of land to be rezoned. The Survey must be prepared by a New York State Licensed Land Surveyor.

10. Said property has the following deed restrictions or covenants: (attach copy)

Liber _____ Page _____

11. Information on proposed project:

A. Description of the character of the proposed development:
Rezone 20 Oakwood Drive from R-3 to OB and 6621 Main Street from GB to OB in anticipation of dental office redevelopment on parcel to the north.

B. Rationale for rezoning request:

1. Why was this site chosen?
Proximity to related dental lab and opportunity to reactivate vacant property.

2. Why cannot land be used with the existing zoning?
GB Zoning and R3 zoning do not alight with adjacent OB zoned parcel.

3. How will this rezoning impact surrounding properties?
None. Low-impact medical office use conforming to other office uses nearby. Development will have substantial landscape buffer and dark sky compatible, downward facing lighting.

4. How will this rezoning impact the school system?
Increased tax revenue; no students.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

12. Quantitative Data:

A. Total # of dwelling units n/a

B. Distribution of dwelling units by type n/a

C. Gross Residential Density per acre n/a

D. Total amount of Open Space approximately 1/4 to 1/3 of property acreage

E. Proposed Non-Residential Floor Area 8,000 - 9,000 SF

13. Development Schedule:

Start upon receipt of building permit

Finish 9-12 months

Stages (# of) 1

14. If any portion of the proposed development is planned to be sold or leased, please describe:

Petitioner is contract purchaser of 20 Oakwood and 6621 Main Street.

15. Open Space ownership and maintenance provisions (if applicable):

Reciprocal Easement or property merger.

16. Basis for Findings (Sec. 8-3-5 of the Town Zoning Code) (Attach sheets and supplemental materials as necessary.)

A. The proposed zoning and development plan must be generally consistent with the policies of the Comprehensive Plan and the Town Zoning Ordinance.

1. State in detail why the proposed zoning is consistent with the adopted Town of Amherst Bicentennial Comprehensive Plan. Cite specific sections, maps, and/or figures in the Plan that support the proposed zoning at this location (The Comprehensive Plan document is available at the Planning Department, Town Clerk's Office, Amherst libraries, or at www.amherst.ny.us). Add sheets as needed.

see attached analysis.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

2. Pursuant to NYS Town Law Section 272a(11), "All Town land use regulations must be in accordance with a comprehensive plan adopted pursuant to this Section." The Amherst Town Board adopted the Bicentennial Comprehensive Plan pursuant to NYS Town Law 272 on January 2, 2007. If the rezoning is approved, the Town Board may require the Plan to be amended, as applicable.

   Cite all text, maps, or figures that must be amended to support the proposed zoning at this location (attach pages as necessary) and provide detailed suggested amendments.
   see attached analysis.

3. State why the proposed zoning is consistent with intent and objectives (Sec. 1-2-2) of the Zoning Ordinance:
   see attached analysis.

B. Adequate Services and Utilities are available or are proposed to be made available with the construction of the development:

1. Sanitary Sewer existing Town Sanitary Sewer District
2. Storm Sewer/Drainage Amherst Sewer District # 16
3. Water Erie County Water Authority Lease Managed Area
4. Other n/a

C. Compatibility with the present zoning and conforming uses of nearby property and with the character of the neighborhood:
see attached analysis.

D. Suitability of the subject property for uses permitted by the current versus the proposed district:
see attached analysis.

E. Whether the proposed change tends to improve the balance of uses, or meets a specific demand in the Town:
see attached analysis

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

17. The petitioner encloses herewith the sum of $1265 to pay the fee, and consents to the placement of a sign(s) at the described location identifying this request for a period of time to be determined by the Town Clerk. Paid with initial application submission made November 15, 2021

18. The undersigned certifies that all information required to be disclosed pursuant to Section 809 of the General Municipal Law (see below) is as follows:

The undersigned swears or affirms that all statements made herein are true, that all drawings submitted correctly show the situation involved in this petition.

_____
Signature of Petitioner

Subscribed and sworn to before me this _____ *day of* _____, *20*_____

Notary Public, Erie County, New York _____

N.Y.S. General Municipal Law - Section 809 Disclosure in certain applications:

1. Every application, petition or request submitted for a variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provision of any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state office or any office or employee of such municipality or of a municipality of which such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

2. For the purpose of this section an officer or employee shall be deemed to have an interest in the applicant when he, his spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them

(a) is the applicant, or
(b) is an officer, director, partner or employee of the applicant, or
(c) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
(d) is a party to an agreement with such an applicant, express or implied, whereby he may receive any payment or other benefit, whether or not for services rendered, dependent or contingent upon the favorable approval of such applicant, petition or request.

3. In the county of Nassau the provisions of subdivisions one and two of this section shall also apply to a party officer. "Party Officer" shall mean any person holding any position or office, whether by election, appointment or otherwise, in any party as defined by subdivision four or section two of the election law.

4. Ownership of less than five per cent of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

5. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Town Zoning Code and Comprehensive Plan Analysis

Town Zoning Code and Comprehensive Plan Analysis
6621 Main Street and 20 Oakwood Drive

Pursuant to § 203-8-3-5 of the Town of Amherst Zoning Code, Petitioner submits the following in support of its Application to rezone 6621 Main Street (SBL 81.08-4.1) from General Business (GB) to Office Building (OB) and 20 Oakwood Drive (SBL 81.08-4-2.1) from Residential District Three (R-3) to Office Building (OB) (collectively "Properties").

A. The proposed zoning and development plan is generally consistent with the policies of the Comprehensive Plan and this Ordinance.

1. State in detail why the proposed zoning is consistent with the adopted Town of Amherst Bicentennial Comprehensive Plan.

The requested rezoning is one step towards a comprehensive infill redevelopment of Properties located along the well-trafficked Main Street Corridor that is characterized by infill office development. Comprehensive Plan at 3.3.4. And, the Comprehensive Plan actively promotes infill development. Comprehensive Plan at 11.2, Priority Action Program #2 – "Provide expanded incentives for reinvestment and revitalization."

However, Comprehensive Plan also sets forth specific sets of considerations for infill office development along the Main Street Corridor and in Southeast Amherst given the close proximity of office uses to residential uses. Comprehensive Plan at 3.3.4 and 3.3.9. Consequently, "close attention must be paid to site/design criteria pertaining to buffering and access management to avoid conflicts with established neighborhoods and commercial corridors," as well as "transitions and buffers/landscaping between residential and nonresidential uses." Comprehensive Plan at 3.3.4 and 3.3.9. Petitioner's rezoning request and subsequent infill redevelopment strikes a balance between the Comprehensive Plan's goals to both actively promote infill development *and* balance the transition between infill office development and established residential neighborhoods.

Petitioner has strategically conceived of the resulting infill redevelopment to avoid impact to the neighboring parcels south of the Properties. A dental office will front along Main Street with the accessory parking lot in the rear. The dental office will match the existing dental lab immediately to the west and other offices and medical offices uses in close proximity. The Petitioner will also include a substantial vegetative buffer and dark sky compatible, downward facing lighting, all to minimize intrusion into the neighboring residential parcels to the south. The result is a balanced infill redevelopment consistent with the Comprehensive Plan.

2. Pursuant to New York State Town Law § 272a(11) . . . . cite all text, map, and/or figures that must be amended to support the proposed zoning at this location.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

The proposed zoning will require a Local Law amending Chapter 203 of the Town of Amherst Code to rezone the Properties to OB and to amend the Zoning Map accordingly.

3. **State why the proposed zoning is consistent with intent and objections of § 203-1-2-2 of the Zoning Code.**

   The rezoning request is the catalyst to reactivate a vacant former bar with an infill redevelopment that "protects the character and values of residential [and] commercial uses and to insure their orderly and beneficial development." Town Zoning Code § 1-2-2.A. The dental office is a low impact commercial use that holds regular business hours and results in minimal traffic. Petitioner's infill redevelopment will further mitigate these low impacts with a substantial vegetative buffer between the employee and patient parking lot and neighboring residential parcel to the south. Moreover, the resulting dental office will match the neighboring dental lab and other medical and office uses along the Main Street Corridor. Town Zoning Code § 1-2-2.D. Additionally, as mentioned above, the rezoning request and subsequent infill redevelopment is consistent with the Comprehensive Plan. Town Zoning Code § 1-2-2.E, K.

B. Adequate services and utilities available or proposed to be made available in the construction of the development.

The rezoning will not result in any change to structures or utility consumption currently servicing the Property, which includes:

1. **Sanitary Sewer** – existing Town Sanitary Sewer District
2. **Storm Sewer/Drainage** – Amherst Sewer District # 16
3. **Water** – Erie County Water Authority Lease Managed area.

C. Compatibility with the present zoning and conforming uses of nearby property and with the character of the neighborhood.

Rezoning of Properties will eliminate GB zone in the area and match existing OB zone to the west. Rezoning promotes infill development per Comprehensive Plan goals. Further, the resulting infill redevelopment offer low-impact and office use with substantial buffering to residential parcel to the south.

D. Suitability of the subject property for uses permitted by the current versus the proposed district.

OB is a more restrictive non-residential zone with less permitted uses than GB. Consequently, the OB zone is less impactful to adjoining residential areas.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

E. Whether the proposed change tends to improve the balance of uses, or meets a specific demand in the Town.

The rezoning actively promotes infill development, meeting a specific demand of the Comprehensive Plan. The rezoning jumpstarts an infill redevelopment that replaces a vacant use with a productive use, improving the balance of uses. Lastly, the rezoning and resulting infill redevelopment improves the balance and meets a demand for uses that both activate development in a way that balances and respects neighboring residential parcels.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Infill Redevelopment Concept Plan

PARCEL/LOT INFORMATION:

ADDRESS:	6621 MAIN STREET & 20 OAKWOOD DRIVE, AMHERST, NY 14221
TAX MAP ID:	83.08-4-1 83.08-4-2
ZONING DISTRICT:	GB - GENERAL BUSINESS R-5 - RESIDENTIAL DISTRICT 5
OVERLAY DISTRICT:	N/A
DIMENSIONS (FT):	250.52' X 152.50'
PARCEL AREA (ACRE):	0.84

SETBACKS

	MAXIMUM	EXISTING (APPROXIMATE)	PROPOSED (APPROXIMATE)
FRONT	115' BUILDING / 80' VEHICLE USE*	84' / 0'	116' / 6'
REAR	30' BUILDING / 10' VEHICLE USE R/E.*	130'±	93' / 10'
SIDE	10' BUILDING / 5' VEHICLE USE R. R/E.*	33'/ 9'	37' / 10'

* ENTIRE AREA TO BE LANDSCAPED
1. ZONING VARIANCE REQUIRED

LOT COVER

	MAXIMUM	EXISTING	PROPOSED
MAXIMUM	NONE	-	-

PARKING

	MIN REQ'D	ACTUAL
1 PER 150 SF	32	44
1 PER 200 SF [1]	19	
PARKING SPACE WIDTH	9	9
PARKING SPACE LENGTH	18	19
AISLE WIDTH (ONE WAY)	13	16
AISLE WIDTH (TWO WAY)	24	24

1. 80% OF GROSS FLOOR AREA FOR MULTI STORY/MULTI TENANT
2. 4,800 SF FIRST FLOOR, 4,200 SF SECOND FLOOR ASSUMED

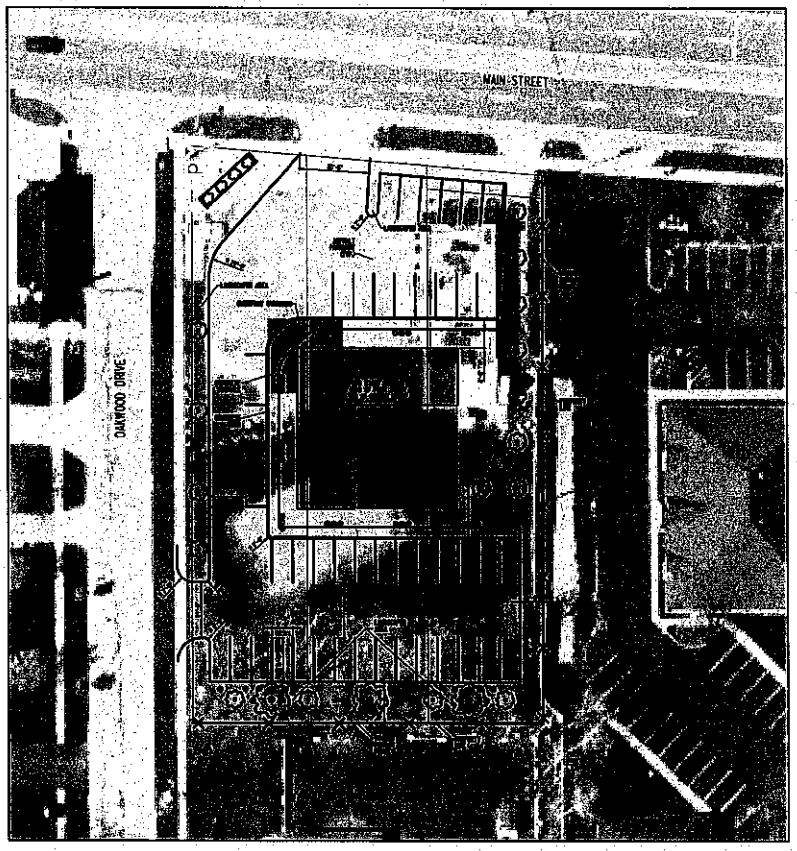
STRUCTURES

BUILDING	BUILDING AREA	HEIGHT	TYPE
RESTAURANT (EXISTING)	3600		
OFFICE BUILDING (PROPOSED)	9000 SF	35' FOR FLAT ROOF OR 10 ST YEARS & 11 ROOF ALLOWABLE	TBD DURING FINAL DESIGN

1. NET AREA IS AREA ACCESSIBLE TO THE PUBLIC

SITE PLAN NOTES:

1. PROPERTY LINES SHOWN FOR REFERENCE AND ARE BASED ON SURVEY PERFORMED BY ID-TOPS ARCHITECTURE, ENGINEERING & SURVEY, DPC ON 12/5/2018.
2. THESE PLANS ARE CONCEPTUAL IN NATURE AND SHALL BE UNDERSTOOD AS SUCH. FINAL LAYOUT AND FINISHES TO BE DETERMINED DURING FINAL DESIGN.
3. STORMWATER, INSTALLATION AND DESIGN TO BE PERFORMED DURING FINAL DESIGN.
4. THE WORK PERFORMED SHALL BE IN COMPLIANCE WITH ALL APPLICABLE LOCAL BUILDING CODES AND WITH NEW YORK'S LATEST ADOPTION OF THE 2020 INTERNATIONAL BUILDING CODE.
5. DETAILS LABELED AS NOT TO SCALE ARE INTERIOR/ARE NOT DRAWN TO SCALE.
6. LOCATION AND QUANTITY OF HANDICAP ACCESSIBLE PARKING SPACES TO BE DETERMINED DURING FINAL DESIGN.



DENTAL

Long Talley

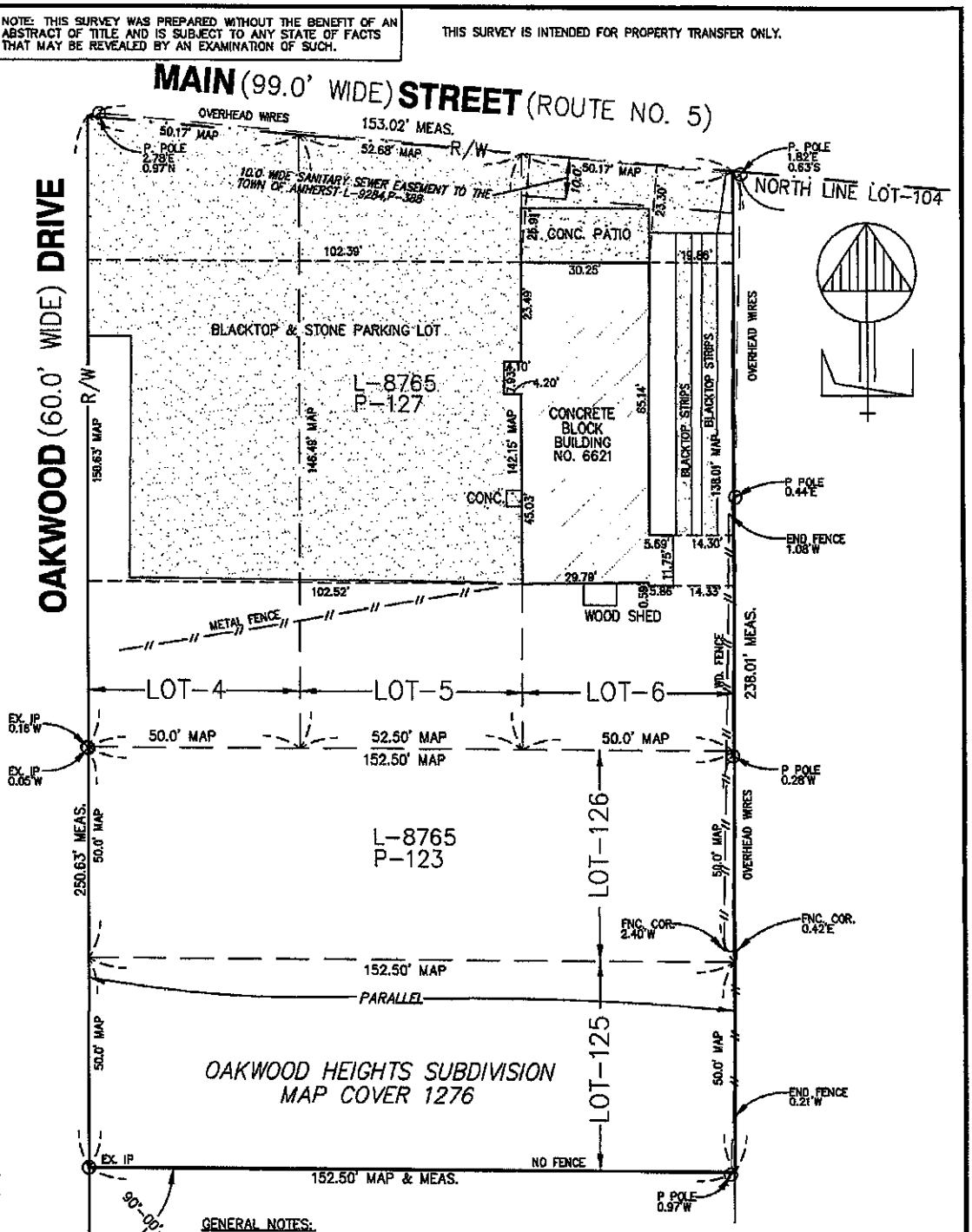
Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Existing Boundary Survey

NOTE: THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.

THIS SURVEY IS INTENDED FOR PROPERTY TRANSFER ONLY.



GENERAL NOTES:

1. THIS SURVEY IS SUBJECT TO EASEMENTS AND RIGHTS OF WAY OF RECORD
2. THIS SURVEY IS VOID UNLESS SEALED BY SURVEYOR OF RECORD
3. ○ = SET IRON PIPE OR REBAR
   □ = SET WOOD STAKE
   UNLESS OTHERWISE NOTED

LANDESIGN
SURVEYORS & PLANNERS P.C.
A JOINT VENTURE

NOTE: SNOW CONDITIONS

PART OF L 104 S ____ T 12 R 7 OF THE HOLLAND LAND COMPANY'S SURVEY

VILLAGE OF ____; ~~CITY~~/TOWN OF AMHERST ; COUNTY OF ERIE ; STATE OF NEW YORK

NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, DRAWING, DESIGN SPECIFICATION PLAN OR REPORT IS A VIOLATION OF SECTION 7209 PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

REVISION	
DATE	DESCRIPTION

KHEOPS
ARCHITECTURE, ENGINEERING & SURVEY, DPC

300 Pearl Street, Suite 500
Buffalo, New York 14202
P. 716.849.8739
F. 716.856.0981
WWW.KHEOPSDPC.COM

DRAWN BY RCR SCALE 1"= 30' JOB NO. 19NY018.72
CHECKED BY DRH FIELD DATE 12-12-19
CAD FILE 6621 MAIN-64423 OFFICE DATE 12-13-19

SBL No. 81.08-4-4 81.08-4-2.1

BOOK 423 PAGE 23 MAP 64423

File: N:\2019_Residential Surveys\19NY018.73 6621Main & 20 Oakwood Map #64423\4 - Technical Data\CADD Drawings\Autocad\6621 MAIN-64423.dwg

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Legal Description of Property to be Rezoned

LEGAL DESCRIPTION

20 Oakwood Drive

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Amherst, County of Erie and State of New York, being part of Lot Number 104, Township 12, Range 7 of the Holland Land Company's Survey and further distinguished as Subdivision Lots Number 125 and 126 as shown on map filed in the Erie County Clerk's Office under Cover No. 1276.

6621 Main Street

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Amherst, County of Erie and State of New York, being part of Lot No. 104, Township 12, Range 7 of the Holland Land Company's Survey and according to map filed in Erie County Clerk's Office under Cover No. 1276 is known as subdivision lots number four (4), five (5) and six (6), situate on the south side of Main Street, east corner of Oakwood Drive.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Draft Local Law

[word version sent electronically]

LOCAL LAW NO. _____-2022_

TOWN OF AMHERST
COUNTY OF ERIE, STATE OF NEW YORK

A LOCAL LAW AMENDING CHAPTER 203 OF THE TOWN OF AMHERST CODE, KNOWN AS THE ZONING ORDINANCE, TO REZONE 6621 MAIN STREET FROM GB TO OB AND 20 OAKWOOD DRIVE FROM R-3 TO OB AND TO AMEND THE ZONING MAP ACCORDINGLY

Be it enacted by the Town Board of the Town of Amherst as follows:

Section 1. Title.

This Local Law shall be referred to as, "A Local Law Amending the Zoning of 6621 Main Street and 20 Oakwood Drive."

Section 2. Legislative Findings and Intent.

The Town Board of the Town of Amherst finds that an application to rezone 6621 Main Street from GB General Business to OB Office Building and 20 Oakwood Drive from R-3 Residential District Three to OB Office Building zoning has been filed and is in proper order. The Town Board further finds that the rezoning is consistent with the Comprehensive Plan.

Section 3. Amherst Zoning Map.

The Town Board hereby amends its zoning map which is incorporated by reference in the Town zoning code by amending from GB General Business to OB Office Building the zoning of 6621 Main Street, **subject to any conditions imposed by the authorizing resolution**; legally described as follows:

> ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Amherst, County of Erie and State of New York, being part of Lot No. 104, Township 12, Range 7 of the Holland Land

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Company's Survey and according to map filed in Erie County Clerk's Office under Cover No. 1276 is known as subdivision lots number four (4), five (5) and six (6), situate on the south side of Main Street, east corner of Oakwood Drive; and

The Town Board hereby amends its zoning map which is incorporated by reference in the Town zoning code by amending from R-3 Residential District Three to GB General Business the zoning of 20 Oakwood Drive, **subject to any conditions imposed by the authorizing resolution**; legally described as follows:

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Amherst, County of Erie and State of New York, being part of Lot Number 104, Township 12, Range 7 of the Holland Land Company's Survey and further distinguished as Subdivision Lots Number 125 and 126 as shown on map filed in the Erie County Clerk's Office under Cover No. 1276.

Section 4. Validity.

This Local Law is adopted under the authority granted to the Town Board of the Town of Amherst pursuant to §§10(1)(ii)(a)(12), 20 and 27 of the Municipal Home Rule Law and §265 of the Town Law of the State of New York.

The invalidity of any provision of this Local Law shall not affect the validity of any other provision of this Local Law that can be given effect without such invalid provision.

Section 5. Effective Date.

This Local Law shall take effect immediately when it is filed in the Office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law and published pursuant to Sections 130 & 133 of the Town Law and Chapter 28 of the Code of the Town of Amherst.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Francina J. Spoth
Town Clerk
Town of Amherst
County of Erie, State of New York

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Environmental Assessment Form

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:
6621 Main Street and 20 Oakwood Rezoning

Project Location (describe, and attach a location map):
20 Oakwood Drive, SBL 81.08-4-2.1

Brief Description of Proposed Action:
Rezone 6621 Main Street from GB to OB and 20 Oakwood Drive from R-3 to OB in anticipation of dental office redevelopment on percels.

Name of Applicant or Sponsor:	Telephone: (716) 858-3728
Valdemar Blazak/VBW Properties LLC by Barclay Damon LLP, Jeff Palumbo, as agent/attorney	E-Mail: jpalumbo@barclaydamon.com

Address:
9276 Main Street, Suite 3

City/PO:	State:	Zip Code:
Clarence	NY	14031

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Site Plan approval - Town Planning Board	☐	☑

3. a. Total acreage of the site of the proposed action? +/- 0.85 acres
   b. Total acreage to be physically disturbed? +/- 0.00 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? +/- 0.85 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☑ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other(Specify): religious
   ☐ Parkland

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☑	☐	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____	☐	☑

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? * see note below	☐	☑

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☑	☐
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		

* If the proposed action is within an area designated as containing "sensitive archaeological resources," the EAF Mapper will automatically check "yes" on the PDF of the EAI Sensitivity for archaeological sites usually covers large areas. Proposed action is within the "Intensive Level Historic Resources Survey of Selected [Building] Resources in th of Amherst," Survey No. 17SR0080, which surveyed the entire Town of Amherst and Village of Williamsville, approximately 35,000 acres.

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☐ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Subsequent site development will include design features to tie-in to existing discharge system along public roadways.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?	☑	☐
If Yes, explain the purpose and size of the impoundment:		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	☑	☐
If Yes, describe:		
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?	☑	☐
If Yes, describe:		

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: Valdemar Blaszak as contract purchaser by Barclay Damon LLP Date: January 27, 2022

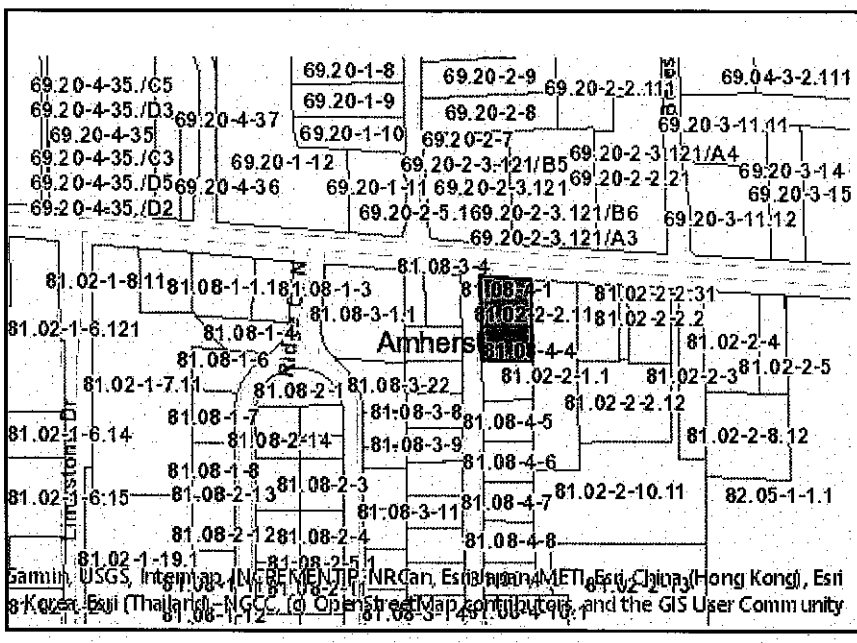
Signature: /s/ Jeffery D. Palumbo Title: agent/attorney

PRINT FORM

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

EAF Mapper Summary Report

Thursday, January 27, 2022 5:05 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Town Environmental Assessment Form Addendum

TOWN OF AMHERST
State Environmental Quality Review
ENVIRONMENTAL ASSESSMENT FORM
-- ADDENDUM --

1. For each applicable category of proposed <u>new</u> structures, including additions to existing structures, provide the following information for all soil types on the project site (*according to Soil Survey of Erie County, NY; Table 11, Building Site Development, pp 294-305):*

Soil Name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
Wassaic Silt Loam, 0-3% slopes	very limited	somewhat limited	very limited	somewhat limited	somewhat limited

2. If the Soil survey indicates either "severe" or "moderate" suitability for the proposed types of construction, a geotechnical and hydrological analysis based on one test per 3.5 acres of project area must be provided (per Town Board resolution, 3/17/03, amended 6/16/03).

   _____ Geotechnical report attached X Not applicable

3. Is your property located: On Youngs Road between Dodge and Klein Roads? ☐ Yes ☑ No
   On Wehrle Dr. between Spindrift Dr. and Oakwood Rd? ☐ Yes ☑ No

   If so, the property may be within an area of the Town that is affected by a moratorium on connections to the sanitary sewer system.

4. Are there alternative locations on the site for this project? ☐ Yes ☑ No

5. Location and size of real property owned by petitioner within one (1) mile of subject proposal:
   6599 Main Street, 0.396 acres; 6621 Main Street, 0.499 acres

6. Are you aware of current or future plans or intentions by others in the Town of Amherst to develop property within 1000± ft. of the present project request: ☐ Yes ☑ No

   Describe_____

   (Potential environmental impacts from adjacent or nearby projects undergoing the approval process will receive a coordinated environmental review to determine cumulative effects on common receivers (e.g. traffic and drainage corridors) and other relevant environmental concerns.)

7. Maximum number of vehicular trips to be generated per peak hour upon completion of project_____
   Source: _____

   Cannot estimate this stag of desig

8. Will blasting occur during construction? ☐ Yes ☑ No

9. Does the project propose to connect and be tributary to the public sanitary sewer system? ☑ Yes ☐ No

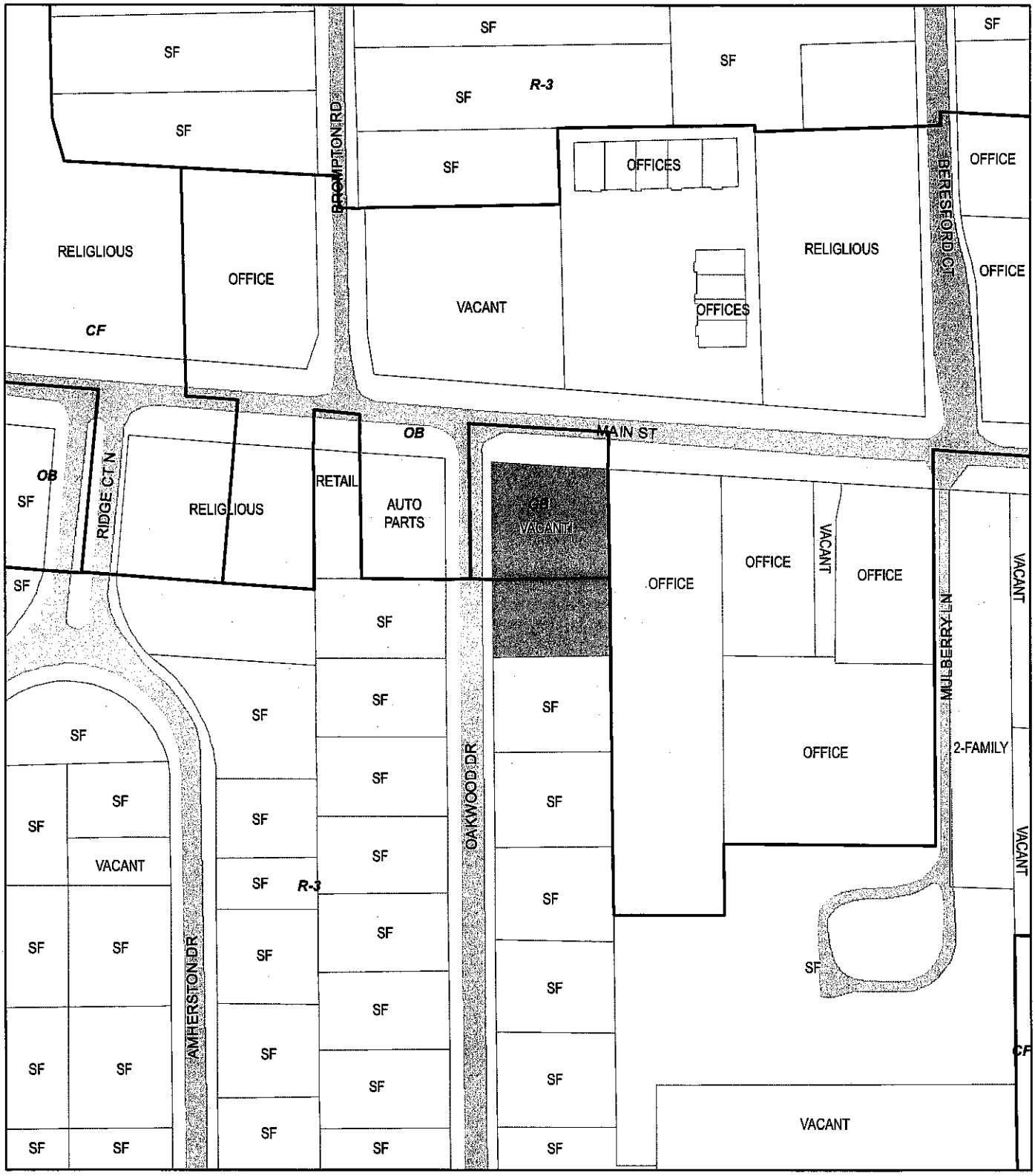
10. Proposed net additional gallons per day (gpd) of sanitary sewer discharge upon completion of project:
    _____ average flow _____ peak flow.

    Cannot estimate at this stage of design

    (Average flows of 2,500 gpd or greater will require an Engineer's Report that includes a detailed downstream sewer capacity analysis and the identification of and commitment to required I/I offset work during peak wastewater flow conditions.)

11. Based on the Town's *2011 Reconnaissance Level Survey of Historic Resources,* is your property 'blue-rated' for historic significance? ☐ Yes ☑ No

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)


SF
SF
SF
SF
R-3
SF
SF
SF
OFFICES
OFFICE
RELIGLIOUS
OFFICE
CF
VACANT
OFFICES
RELIGLIOUS
OFFICE
PROMPTON RD
BERESFORD CT
MAIN ST
OB
OB
SF
RIDGE CT N
RELIGLIOUS
RETAIL
AUTO PARTS
GB
VACANT
OFFICE
OFFICE
VACANT
OFFICE
MULBERRY LN
VACANT
SF
SF
SF

CONCEPT PLAN

Z-2021-11
20 Oakwood Drive
Received: 12/01/21

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Z-2021-11

Request to Rezone 0.34± acres of Land from R-3 to GB
Property Located at 20 Oakwood Drive

Valdemar Blaszak, Petitioner

February 17, 2022

20 Oakwood Drive

Prepared by the Town of Amherst Planning Department

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

RECEIVED
FEB 09 2022
TOWN OF AMHERST
PLANNING DEPT.

FROM: Scott Marshall, Principal Planner TV

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11**; PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? yes

If you do not, briefly state why: _____

General comments relative to your agency interests: If rezone is to build single family homes with cor do status, assessors office does not approve

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: E. Murphy **Date:** 2/8/22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

RECEIVED
FEB 08 2022
TOWN OF AMHERST
PLANNING DEPT.

TOWN OF AMHERST
ENGINEERING
DEPARTMENT
JAN 33 P 12: 26

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

FROM: Scott Marshall, Principal Planner SM

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? YES

If you do not, briefly state why: _____

General comments relative to your agency interests: NONE

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date:** 2/3/22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

February 07, 2022

Jeffrey D. Palumbo, Esq.
Barclay Damon, LLC
9276 Main Street, Suite 3
Clarence, New York 14031

SUBJECT:	Rezoning Application Review	**Z-2021-11**
	Proposed:	Rezoning from R-3 & GB to OB
	Property located at:	**6621 Main Street & 20 Oakwood Drive**
	Amended Application received:	February 1, 2022
	Representative:	Barclay Damon LLP

Dear Mr. Palumbo,

Please consider the following comments:

1. The following items on the Environmental Assessment Form should be corrected or completed:
   - Part 1, #1 Correct response is yes
   - Part 1, #13b Check the appropriate box.

2. The following items on the Town of Amherst Environmental Assessment Form Addendum need to be corrected or completed:
   - #1. Correctly answer the question with responses found in Table 11 from the *Soil Survey of Erie County NY.*
   - #2 Geotechnical report is required. Will need to be provided prior to the Town making a SEQR determination on the subject request.
   - #7 Provide an answer, suggest using ITE rates based upon the concept plan.
   - #10 Provide an answer, base sewer loading upon the concept plan

3. Please note that any other SEQR-related issues raised during the review process for this rezoning must be addressed prior to action by the Planning Board. The subject action is an unlisted action, not an exempt action as stated in your submittal.

4. The subject site is located within an archaeologically sensitive area. An archaeological assessment will be required prior to the Planning Board making a SEQR determination.

This is a review only and does not constitute approval of the Rezoning Request. Should you have questions regarding this correspondence, please contact Scott A. Marshall, Principal Planner at smarshall@amherst.ny.us

Very truly yours,

Daniel C. Howard, AICP
Planning Director

DH/SM/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Plan_Review_Ltr_02072022.doc

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst
Town of Amherst Planning Department

RECEIVED
FEB 02 2022
TOWN OF AMHERST
BUILDING DEPT

Erie County, New York

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM

February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

RECEIVED
FEB 07 2022
TOWN OF AMHERST
PLANNING DEPT.

FROM: Scott Marshall, Principal Planner SM

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? Yes

If you do not, briefly state why: _____

General comments relative to your agency interests: no Accessible parking shown on Concept plan

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: Doug Gesel **Date:** 2-7-22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

FROM: Scott Marshall, Principal Planner TV

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? YES.

If you do not, briefly state why: _____

General comments relative to your agency interests: THE PROPOSED OB ZONING IS LESS INTENSIVE. THE RESIDENTIAL USES TO THE SOUTH & WEST SHOULD BE PROVIDED WITH TRANSITIONAL BUFFERS.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

DIMENSIONAL SETBACK RELIEF SHOULD BE SUPPORTED TO PULL PROPOSED BUILDING TO THE NORTH & WEST.

Please call the Planning Department if additional information is required (631-7051).

Signature: D. Ulatowski **Date:** 2/3/2022

SM/TV/ac DANIEL J. ULATOWSKI, ZEO

X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc

cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

TOWN OF AMHERST
ENGINEERING
DEPARTMENT
2022 JAN 33 P 12: 26

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

RECEIVED
FEB 03 2022
TOWN OF AMHERST
PLANNING DEPT.

FROM: Scott Marshall, Principal Planner TV

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? YES.

If you do not, briefly state why: _____

General comments relative to your agency interests: CURB CUT LOCATIONS AND THE NUMBER OF CURB CUTS WILL BE REVIEWED MORE THOUROUGHLY AT SITE PLAN.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: C. SCHREGEL **Date:** 2/2/22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

RECEIVED
FEB 03 2022
TOWN OF AMHERST
PLANNING DEPT.

RECEIVED
FEB 02 2022
TOWN ATTORNEY

FROM: Scott Marshall, Principal Planner

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? Yes.

If you do not, briefly state why: _____

General comments relative to your agency interests: None at this time.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date:** 2/2/22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

RECEIVED
FEB 02 2022
TOWN OF AMHERST
PLANNING DEPT.

MEMORANDUM February 1, 2022

TO: Daniel Ulatowski, Principal Planner
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Patrick Lucey, Superintendent of Hwys/Mark Gortzig Gen. Crew Chief
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT

RECEIVED
FEB 02 2022
TOWN ATTORNEY

FROM: Scott Marshall, Principal Planner TV

SUBJECT: REQUEST TO REZONE 0.83± ACRES OF LAND FROM **R-3 & GB** TO **OB, Z-2021-11;** PROPERTY LOCATED AT **6621 MAIN STREET AND 20 OAKWOOD DRIVE**. VALDEMAR BLASZAK, PETITIONER.

AMENDED APPLICATION:
Received February 1, 2022

Please Note: request now includes 6621 Main Street

REVIEW:

Do you agree with all statements made? Agree with all statements made.

If you do not, briefly state why: N/A

General comments relative to your agency interests: N/A

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.) N/A

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date:** 2/2/22

SM/TV/ac
X:\Current_Planning\Files\Rezonings\2021\Z-2021-11_(6621_Main_St_&_20_Oakwood_Dr)_2021\Z-2021-11_Rev_Transmittal_020122.doc
cc: Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3, Clarence, NY 14031

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

RECEIVED
DEC 17 2021
TOWN OF AMHERST
PLANNING DEPT.

Carrato, Amy

From: Ulatowski, Daniel
Sent: Friday, December 17, 2021 1:16 PM
To: Voigt, Thomas J.
Cc: Carrato, Amy; Marshall, Scott; Fadel, Bryan
Subject: 20 Oakwood Drive rezoning - Z-2021-11
Attachments: 2021-SP276 T. Amherst 20 Oakwood Dr. cover letter.pdf; 2021-SP276 T. Amherst 20 Oakwood Dr. site plan.pdf

FYI
NYSDOT Review

From: Hayes, Ron (DOT) <Ron.Hayes@dot.ny.gov>
Sent: Friday, December 17, 2021 12:58 PM
To: Ulatowski, Daniel <dulatowski@amherst.ny.us>
Subject: 2021-SP276 T. Amherst 20 Oakwood Drive rezoning

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Dan,

New York State Department of Transportation (NYSDOT) Reviewed the site plan information submitted for the subject project and has the following comments:

- The proposed project will not have a significant impact to traffic on the State Highway System.
- The two (2) existing Main Street driveways on the site plan should be reduced to one(1).
    - Remove and do not replace the east-most existing access point, elevate curb.
- A NYSDOT Highway Work Permit will be required for the work that is located within the State Highway Right-of-Way. More detailed plans will be required for the Highway Work Permit application. Additional site engineering review will be performed as part of the Highway Work Permit process. This correspondence does not constitute approval for the purpose of a Highway Work Permit. The applicant should direct the Highway Work Permit application and/or questions to:

Nickolas Kinderman, North Erie Resident Engineer
New York State Department of Transportation
111 Indian Road, Depew, New York 14043
(716) 683-3476

If you have any questions, Please do not hesitate to contact me either by email or phone.

Sincerely,

Ron

Ronald J. Hayes
Planning and Program Management

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

AMHERST HIGHWAY DEPARTMENT

1042 North Forest Road Williamsville, New York 14221

Patrick Lucey
Superintendent of Highways
plucey@amherst.ny.us

PHONE (716) 631-7117

FAX (716) 631-7265

www.amherst.ny.us

RECEIVED
DEC 03 2021
TOWN OF AMHERST
PLANNING DEPT.

November 30, 2021

To: Scott Marshall, Principal Planner

From: Patrick Lucey, Superintendent of Highways PL

Re: REQUEST TO REZONE 0.34± ACRES OF LAND FROM **R-3** TO **GB;**
PROPERTY LOCATED AT **20 OAKWOOD DRIVE.**
VALDEMAR BLASZAK, PETITIONER. **Z-2021-11.**

After review relative to Highway Department concerns, the plan is approved as submitted.

Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, Principal Planner
Douglas Gesel, Supervising Code Enforcement Officer
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Bryan Parnell, Fire Chief's Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, ROW Agent
Brian Barnes, Senior GIS Analyst, (Eng) (letter only)
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Jeff Palumbo, Barclay Damon LLP, 9276 Main Street, Suite 3
Clarence, NY 14031

PL/EB/TL/ke

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

RECEIVED
DEC 03 2021
TOWN OF AMHERST
PLANNING DEPT.

SITE PLAN OR ZONING REFERRAL TO COUNTY OF ERIE, NY AND REPLY TO MUNICIPALITY

Note: Please complete in triplicate. Send original and one copy (with attachments) to Erie County Division of Planning, Room 1053, 95 Franklin Street, Buffalo, N.Y. 14202. Retain last copy for your files.

DO NOT WRITE IN THIS SPACE
Case No.: ZR-21-698
Received: 11/18/21

The proposed action described herein is referred in accordance with the provisions of the General Municipal Law, which provides that if no reply is received in 30 days after receipt of full information including a SEQR EAF if applicable, the municipal agency may take final action without considering such reply. If, however, reply is received at any time prior to municipal Action, such reply must be considered.

Description of Proposed Action

1. Name of Municipality: Town of Amherst

2. Hearing Schedule: Date 1/20/22 Time 6:30pm Location 5583 Main Street, Williamsville

3. Action is before: ☐ Legislative Body ☐ Board of Appeals ☒ Planning Board

4. Action consists of: ☐ New Ordinance ☒ Rezone/Map Change ☐ Ordinance Amendment

☐ Site Plan ☐ Variance ☐ Special Use Permit ☐ Other

5. Location of Property: ☐ Entire Municipality ☒ Specific as follows 20 Oakwood Drive

6. Referral required as Site is within 500' of: ☐ State or County Property/Institution ☐ Municipal Boundary ☐ Farm Operation located in an Agricultural District

☐ Expressway ☐ County Road ☒ State Highway ☐ Proposed State or County Road, Property, Building/ Institution, Drainageway

7. Proposed change or use: (be specific) Request to rezone 0.34± acres from R-3 to GB

8. Other remarks: (ID#, SBL#, etc.) Z-2021-11

9. Submitted by: Thomas Voigt, Assistant Planner November 15, 2021

Town of Amherst, 5583 Main St., Williamsville, NY 14221

Reply to Municipality by Erie County Division of Planning

Receipt of the above-described proposed action is acknowledged on 11/18/21. The Division herewith submits its review and reply under the provisions of applicable state and local law, based on the information submitted with this referral.

1. ☐ **The proposed action is not subject to review under the law.**
2. ☐ **Form ZR-3, Comment on Proposed Action is attached hereto.**
3. ☐ **The proposed action is subject to review; the Division makes the recommendation shown on Form ZR-4, Recommendation on Proposed Action, which is attached hereto.**
4. ☒ **No recommendation; proposed action has been reviewed and determined to be of local concern**

By the Division of Planning: Date: 11/29/21

Attachment: Z-2021-11 TB letter packet 041122 (RES-2022-346 : 6621 Main Street & 20 Oakwood Drive Rezoning)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25610 **RESOLUTION 2022-347** **DECISION DATE**

7740 Transit Road Rezoning

Request to rezone 7740 Transit Road from GB to DC-5.

4/11/2022
A motion to open the public hearing was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. The public hearing was opened at 7:33 PM.

Joshua Best, presented.

There were no speakers from the public, therefore Supervisor Kulpa moved to close the hearing and set a decision date for the April 25th Town Board meeting, seconded by Councilmember Lavin and unanimously approved 5-0. The public hearing was closed at 7:40 PM.

RESULT:	**DECISION DATE [UNANIMOUS]**	**Next: 4/25/2022 7:00 PM**
MOVER:	Brian J. Kulpa, Supervisor	
SECONDER:	Shawn Lavin, Councilmember	
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala	

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, A
Planning Director

Daniel J. Ulatowski, A
Assistant Planning Dir

Town Board Agenda of April 11, 2022

March 29, 2022

The Honorable Town Board
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Subject: Request to rezone 1.5± acres of land from GB to DC-5, Z-2022-01; property located at 7740 Transit Road, 7740 Transit Road, Inc., Petitioner.

Honorable Members:

The subject property is a 1.5± acre L-shaped parcel located on the northwest corner of the intersection of Transit Road and Sheridan Drive. The site has 101± ft. of frontage on Transit Road and a maximum depth of 375± ft. and abuts the Sheridan Drive access ramp from Transit Road.

The property is presently occupied by an existing vacant 1-story brick structure (former restaurant) with associated parking.

Transit Road and Sheridan Drive are New York State highways designated as major arterials on Figure 9 in the Town of Amherst Bicentennial Comprehensive Plan.

For information on the surrounding zoning and land use, please refer to the attached sketch.

The purpose of this request is to revise the zoning for this property to permit the future development of a 40-unit multi-family dwelling. The concept plan shows a four-story and five-story building with associated parking and landscaping.

The property was zoned General Business (GB) with adoption of the Town-wide zoning maps and ordinance on January 19, 1976.

There are five previous site plan applications for the subject parcel as follows:

SP-1983-41 Original site plan for restaurant addition (to 3,665 s.f. total and 48 parking spaces) was approved November 17, 1983 with conditions related to:
- signage not included.
- lighting controlled as not to create nuisance to nearby properties.
- recommendations of Fire Chiefs Association be given consideration.
- a plan projecting future improvements to abandoned golf course be provided.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

SP-1983-41_B Site plan amendment for restaurant and banquet facility addition was approved by the Planning Board on September 24, 1997.
SP-1983-41_C Minor modification to a site plan for relocation of banquet hall from a stand-alone to an attached structure was approved on August 17, 1999.
SP-1983-41_D Minor modification to a site plan for addition of canopies to banquet hall was approved April 26, 2000.
SP-1983-41_E Minor site plan for removal of sidewalk & landscaping at the northeast corner of the building to install an outdoor patio was approved August 13, 2010.

The Planning Board offers the following findings consistent with Section 8-3 of the Zoning Ordinance.

INTENT AND OBJECTIVES OF THE COMPREHENSIVE PLAN

The Town of Amherst Bicentennial Comprehensive Plan's Figure 6 - Conceptual Land Use Plan calls for Commercial Mixed-Use in the subject area. Figure 6-A - Commercial and Mixed-Use Designations, adopted in December 2020, further designates that future development should follow the Mixed-Use standards, making the proposed Deep Corridor-5 District (DC-5) zoning request consistent with the Comprehensive Plan.

INTENT AND OBJECTIVES OF THE ZONING ORDINANCE

The proposed rezoning is consistent with Section 1-2-2.K of the Zoning Ordinance which seeks to guide future development of the Town to bring about the gradual conformity of land and building uses in accordance with the objectives of the Comprehensive Plan. The rezoning is also consistent with Section 1-2-2.L of the Zoning Ordinance that seeks to accomplish the specific intent and goal set forth in its respective sections. The stated intent of the DC-5 District is for deep corridor parcels (over 200' deep) that are appropriate for 5-story buildings. Shared access drives connect to a continuous high-quality internal active and walkable streetscape fronting buildings and help eliminate curb cuts. This streetscape establishes the framework for a future internal "main street." Excessively long blocks are broken up by new streets connecting within the district.

CONSISTENCY/COMPATIBILITY WITH SURROUNDING DEVELOPMENT/ZONING

The proposed rezoning of the subject parcel from General Business District (GB) to Deep-Corridor-5 District (DC-3) is consistent and compatible with the surrounding zoning classifications in terms of land use as there are multi-family residential districts in the vicinity to the north and west. In terms of form and structure, there are multi-story office structures to the west.

ADEQUATE SERVICES AND UTILITIES

All services and utilities necessary for the proposed project may be available and may be adequate. Further analysis of downstream sanitary sewer capacity must be analyzed and affirmed by the Town Engineer. This is a SEQR Unlisted Action, and an environmental assessment consistent with SEQR has been prepared for the subject proposal. The Town Board has been established as Lead Agency. Pursuant to Local Law #3-82, as amended, the requirements of SEQR must still be completed if the Town Board desires to approve the proposed rezoning request. A draft SEQR determination will be prepared by the Planning Department if directed.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Honorable Town Board

Rezone land from GB to DC-5;
property located at 7740 Transit Road
Agenda of April 11, 2022

RECOMMENDATION

The Planning Board at their meeting of February 17, 2022 recommended that the Town Board find that the requirements of SEQR are complete and that the subject request will not have a significant adverse effect on the environment. The Planning Board also recommended that the subject rezoning request be approved.

The Planning Department requests that if the Town Board desires to act on the rezoning request, that a decision date be established after the public hearing so that the Planning Department can prepare a determination of environmental significance pursuant to SEQR, and prepare a resolution for the Town Board's consideration.

Very truly yours,

Daniel C. Howard, AICP
Planning Director

DH/GP/ac
Att.
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_TB_letter_04112022.docx
cc: Stanley Sliwa, Town Attorney

Planning Board Approval February 17, 2022
Ayes 6, Noes 0, Absent 1 (Gill)

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

TOWN OF AMHERST
PLANNING BOARD
ZONING RESOLUTION
Z-2022-01

FEB24'22 PM 4:52 RCVD

PETITIONER

7740 Transit Road Inc.
4110 Thornwood Lane
Williamsville, NY 14221

PROPERTY LOCATION

7740 Transit Road

WHEREAS the Town of Amherst Planning Board on Thursday, February 17, 2022 held a public hearing on the proposed rezoning of land from General Business District (GB) to Deep Corridor-5 District (DC-5), and

WHEREAS the Planning Board has reviewed plans and other materials regarding the rezoning proposal, and

WHEREAS the materials and plans have been referred to the Town's various review agencies, and

WHEREAS in accordance with Section 8-3-5 of the Zoning Ordinance the Planning Board finds that:

A. The proposed zoning and development plan is generally consistent with the policies of the Comprehensive Plan and the Zoning Ordinance.

B. The proposed zoning is consistent with the Conceptual Land Use Plan which shows Commercial-Mixed-Use in this area of the Town to be developed under Suburban Corridor design standards.

C. The proposed zoning is consistent with the requirements in Section 5A-3-5 of the zoning ordinance, "Deep Corridor 5 (DC-5)" because it does not immediately abut single family lots and is therefore appropriate for a 4- and 5-story structure with a major arterial frontage.

D. There are adequate services and utilities available or proposed to be made available in the construction of the development.

E. The proposal is compatible with the present zoning and conforming uses of nearby property and with the character of the neighborhood.

F. The subject property is suitable for uses permitted by the current versus the proposed district.

G. The proposed change does tend to improve the balance of uses, or meets a specific demand in the Town.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

TOWN OF AMHERST
PLANNING BOARD
ZONING RESOLUTION
Z-2022-01

FEB24'22 PM 4:52 RCVD

PETITIONER

7740 Transit Road Inc.

PROPERTY LOCATION

7740 Transit Road

H. Review by the US Army Corps of Engineers under Section 404 of the Clean Water Act may be waived because the parcel is developed.

WHEREAS pursuant to Local Law #3-82, as amended, the Planning Board recommends that the Town Board determine that the requirements of SEQR are complete and that the subject proposal is not expected to have a significant adverse effect on the environment.

NOW THEREFORE BE IT RESOLVED that the Planning Board recommends to the Town Board in accordance with Section 8-3-4 of the Zoning Ordinance, that the rezoning request be approved subject to the following conditions:

1. The petitioner shall include ADA accessible parking during the site plan review process.

2. The petitioner shall address the requirements or concerns raised in the February 11, 2021 correspondence from the New York State Department of Transportation, during the site plan review process.

The foregoing resolution was adopted by the Town of Amherst Planning Board, February 17, 2022; moved by - Giuliani; seconded by - Chmiel; ayes 6, noes 0; absent 1 (Gill).

Robert J. Gilmour, Chair

2-24-22
Date

GP/ac
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_resolution_021722.doc
Cc: Town Clerk
Commissioner of Building
Highway Superintendent
Town Engineer
Traffic/Safety Coordinator
740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

RECEIVED
JAN 03 2022
TOWN OF AMHERST
PLANNING DEPT.

MBL ENGINEERING, PLLC

December 27, 2021

Town of Amherst Planning Department
Attn: Gary Palumbo, AICP – Associate Planner
5583 Main Street
Williamsville, NY 14221
716.6317053

Re: 7740 Transit Road Inc. – Re-zone Application

Mr. Palumbo,
In response to the pre-planning meeting on December 3, 2021, a formal submission is being provided per the requirements in the Re-zoning application.

The project is occurring where the existing Restaurant has been abandoned. It is proposed to remove the existing buildings and parking areas to construct the new multi-family structure. The impervious coverage will be less after the proposed construction by approximately 0.1-acres. The intended use of the site appears to align with the Bi-centennial Comprehensive plan and fits with the Adopted Zoning for DC-5 (Deep Corridor 5). This will allow the mixed-use type buildings and multi-family structures.

Because the impervious coverage will be reduced stormwater is planned to be collected and treated using hydrodynamic separators as outlined in the NYSDEC design manual for re-development sites. A full Stormwater Pollution Prevention Plan will be prepared for the project construction.

The entrance is aligned with the existing DOT access point with minor improvements within the NYSDOT ROW. A pedestrian connection is provided to the existing sidewalks along Transit Road and the ramp to Sheridan Drive. Parking is accomplished with site parking as well as a parking garage under a portion of the proposed structure.

Per the re-zoning application the attachments below are provided to assist in the review.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

(p) 315.486.0501 | (f)315.295.2569 | 16510 Balch Place Mannsville, NY 13661| Mike.Lasell@MBLEngineering.com

Also, once the electronic package is approved, we can provide (13) full size and (10)11x17 copies of the plan package for distribution to the board so we can be placed on the January 6, 2022 Reviewers meeting and February 17, 2022 meeting agenda. Please call with any questions. Thank you.

Sincerely,

Michael B. Lasell, P.E., LEED AP
MBL Engineering, PLLC

Attachments:

1. *Town Application for Re-Zoning*
2. *Overall Site Plan*
3. *Boundary Survey and Legal Description*
4. *Architectural Layout Concept Plans*
5. *Short Environmental Assessment Form with Amendment*
6. *Draft Local Law*
7. *$1,265.00 Application Fee*

CC:/

Ravi Sabharwal – Owner
Jayesh Patel – Owner
Josh Best - Architect

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

(p) 315.486.0501 | (f)315.295.2569 | 16510 Balch Place Mannsville, NY 13661| Mike.Lasell@MBLEngineering.com

Attachment 1

Re-Zoning Application

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

RECEIVED
JAN 03 2022
TOWN OF AMHERST
PLANNING DEPT.

TOWN OF AMHERST PLANNING DEPARTMENT

Application for Rezoning

For Official Use

File #: Z-2022-01 **Acreage** 1.05 **Fee $** ~~1,250~~ $1,265

Address Verified by Assessor's Office
VERIFIED BY DATE

Application Received by Planning Department
GJP 1/3/2022
ACCEPTED BY DATE

Materials Checked by Zoning Enforcement Officer
CHECKED BY DATE

Materials & Fee Paid to Town Clerk
ACCEPTED BY DATE

		Fill In Applicable Fees
2 ACRES OR LESS	**$1,250.** ✓	GJP
2 – 20 ACRES **$1,250 + $250/acre or fraction thereof over 2 acres** (fractions of an acre to be counted as 1 acre)		
21 – 30 ACRES **$5,700 + $150/acre or fraction thereof over 21 acres** (fractions of an acre to be counted as 1 acre)		
OVER 30 ACRES **$6,900 +$75/acre or fraction thereof over 30 acres** (fractions of an acre to be counted as 1 acre)		
~~**Request for Relief of / Change to Conditions of Zoning Approval**~~	~~**$1,200.**~~	
AFFIDAVIT FEE FOR PUBLIC HEARING	**$15.** ✓	GJP
TOTAL FEE:		**$** 1,265.00 ✓

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

TO BE COMPLETED BY APPLICANT

1. **Petitioner:**

Name: 7740 Transit Road Inc.

Address: 4110 Thornwood Lane

Williamsville | NY | 14221

City | State | Zip Code

Phone: 716. Fax

E Mail:

2. **The undersigned hereby petitions the Honorable Town Board to rezone the following described property:**

From: GB - General Business District

To: DC-5 - Deep Corridor 5 District

3. **Street address of land to be rezoned:** (must be verified by Town Assessor's Office)

7740 Transit Road

SBL #: 70.09-1-13

4. **Area of land to be rezoned** (in acres): 1.53-Acres

5. **Owner of Land:**

Name: 7740 Transit Road Inc.

Address:

City | State | Zip Code

Phone: 716.553.1031

6. **Representative** (Architect, Engineer, Landscape Architect, Surveyor or Attorney):

Name: MBL Engineering, PLLC - Michael Lasell / Joshua Best, AIA

Address: 16510 Balch Place

Mannsville | NY | 13661

City | State | Zip Code

Phone: 315.486.0501 Fax

E Mail: mike.lasell@mblengineering.com Josh@bestbrothersdevelopment.com

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

7. Petitioner's interest in property

_____Option to purchase
__X__Owner
_____Other (explain) _____

8. The following are all others having an interest in this application and join herein with the petitioner named above: (describe extent of interest; attach sheets as needed)

9. Attach Survey and Legal description of land to be rezoned. The Survey must be prepared by a New York State Licensed Land Surveyor.

10. Said property has the following deed restrictions or covenants: (attach copy)

Liber 10930 Page 7057

11. Information on proposed project:

A. Description of the character of the proposed development:
The existing abandoned restaurant and associated parking will be demolished and a proposed 40 unit multi-family dwelling is planned to be constructed.

B. Rationale for rezoning request:

1. Why was this site chosen? The proximity to amenities and the workplace made this site very attractive for the multi-family/ mixed use type development. Also, it fits into the Section 5A adopted by the Town On september 3, 2019

2. Why cannot land be used with the existing zoning?
The existing zoning is General Business, which the current area is in need of more connection with multi-family and pedestrian friendly development.

3. How will this rezoning impact surrounding properties?
No Impact is suspected, the current site is a vacant building with multi-family in the surrounding areas.

4. How will this rezoning impact the school system?
The focus market for the multi-family buildings will be young professionals which would typically not add students to the school system. This development should only add additional tax dollars without burdening the district with additional students.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

12. Quantitative Data:

A. Total # of dwelling units: 40-units

B. Distribution of dwelling units by type: (24) 2 Bedrooms, (10) 1 Bedrooms, and (6) Studio Lofts

C. Gross Residential Density per acre: 26 Units/Acre

D. Total amount of Open Space: Park Area Space - 5,000-SF

E. Proposed Non-Residential Floor Area: Amenity space - 5,000-SF and Rooftop Space of 5,000-SF

13. Development Schedule:

Start: Spring 2022

Finish: Spring 2023

Stages (# of): 1

14. If any portion of the proposed development is planned to be sold or leased, please describe:

N/A

15. Open Space ownership and maintenance provisions (if applicable):

N/A

16. Basis for Findings (Sec. 8-3-5 of the Town Zoning Code) (Attach sheets and supplemental materials as necessary.)

A. <u>The proposed zoning and development plan must be generally consistent with the policies of the Comprehensive Plan and the Town Zoning Ordinance.</u>

1. State in detail why the proposed zoning is consistent with the adopted <u>Town of Amherst Bicentennial Comprehensive Plan</u>. Cite specific sections, maps, and/or figures in the Plan that support the proposed zoning at this location (The Comprehensive Plan document is available at the Planning Department, Town Clerk's Office, Amherst libraries, or at <u>www.amherst.ny.us</u>). Add sheets as needed.

Section 5A-3-5 DC-5 (Deep Corridor 5) aligns with the proposed use for lots over 200-feet and does not abut residential lots. The Bicentennial Comp Plan outlines the existing areas as commercial office and non-office. on Figure 3. A goal of the comprehensive plan is to revitalize the commercial corridors with more pedestrian frie connections and more green space. As shown on figure 6 of the plan this area is a suburban corridor.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

2. Pursuant to NYS Town Law Section 272a(11), "All Town land use regulations must be i accordance with a comprehensive plan adopted pursuant to this Section." The Amhers Town Board adopted the Bicentennial Comprehensive Plan pursuant to NYS Town Lav 272 on January 2, 2007. If the rezoning is approved, the Town Board may require the Plan to be amended, as applicable.

   Cite all text, maps, or figures that must be amended to support the proposed zoning at this location (attach pages as necessary) and provide detailed suggested amendments

   The existing GB district would need to be changed on the Zonining Map F-13. Since the proposed zoning is already described in the newly adopted mixed use code this could be incorporated into the map for DC-5.

3. State why the proposed zoning is consistent with intent and objectives (Sec. 1-2-2) of the Zoning Ordinance:

   See notes above aligning with the comprehensive objective and the adopted mixed use code.

B. Adequate Services and Utilities are available or are proposed to be made available with the construction of the development:

1. Sanitary Sewer X
2. Storm Sewer/Drainage X
3. Water X
4. Other

C. Compatibility with the present zoning and conforming uses of nearby property and with the character of the neighborhood:

Existing multifamily exists nearby.

D. Suitability of the subject property for uses permitted by the current versus the proposed district: The current GB zoning allows for upper story Dwelling but does not fit into the comp plan of mixed use with open space .

E. Whether the proposed change tends to improve the balance of uses, or meets a specific demand in the Town:

The proposed use will add a balance to the Town to meet the Comprehensive plan.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

17. The petitioner encloses herewith the sum of $_____ to pay the fee, and consents to the placement of a sign(s) at the described location identifying this request for a period of time to be determined by the Town Clerk.

18. The undersigned certifies that all information required to be disclosed pursuant to Section 809 of the General Municipal Law (see below) is as follows:

The undersigned swears or affirms that all statements made herein are true, that all drawings submitted correctly show the situation involved in this petition.

Signature of Petitioner AMBAR BHARGAVA, AS ATTORNEY

Subscribed and sworn to before me this 27th *day of* December, 20 21

Notary Public, Erie County, New York _____

SARAH M HUYNH
Notary Public - State of New York
No. 01HU6249468
Qualified in Erie County
My Commission Exp: Oct. 11, 2023

N.Y.S. General Municipal Law - Section 809 Disclosure in certain applications.

1. Every application, petition or request submitted for a variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provision of any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state office or any office or employee of such municipality or of a municipality of which such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

2. For the purpose of this section an officer or employee shall be deemed to have an interest in the applicant when he, his spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them

(a) is the applicant, or
(b) is an officer, director, partner or employee of the applicant, or
(c) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
(d) is a party to an agreement with such an applicant, express or implied, whereby he may receive any payment or other benefit, whether or not for services rendered, dependent or contingent upon the favorable approval of such applicant, petition or request.

3. In the county of Nassau the provisions of subdivisions one and two of this section shall also apply to a party officer. "Party Officer" shall mean any person holding any position or office, whether by election, appointment or otherwise, in any party as defined by subdivision four or section two of the election law.

4. Ownership of less than five per cent of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

5. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Rezoning Application Requirements and Checklist

The following checklist outlines the information required by the Town of Amherst to accept a Rezoning application. ***It is strongly recommended that you make an appointment with Planning Staff to discuss what information will be needed to address the items shown on the checklist.***

Item No.	Item	Submitted	Official use
I Application Information			
1.0	**Town of Amherst Rezoning / Comprehensive Plan Amendment Application Form (available from Planning Department)**	X	
1.1	Name, address, and contact information of the petitioner	X	
1.2	Name and address of property owners(s) – if different than petitioner	X	
1.3	If petitioner is different than property owner, provide statement describing interest in property and a letter from the property owner authorizing the application		
1.4	Identify existing and proposed zoning and acreage of area proposed to be rezoned	X	
1.5	Parcel addresses and Section, Block, and Lot (SBL) numbers of all properties proposed to be rezoned. Indicate if a portion of any parcel is involved, if applicable	X	
1.6	Statement of planning objectives to be achieved by the proposed rezoning, including the following: • How the proposed zoning and development plan meets the objectives of the Comprehensive Plan • A description of the character of the proposed development • The rationale behind the assumptions that are presented	X	
1.7	Cite specific maps and / or figures in the Comprehensive Plan that must be amended to support the proposed zoning and provide suggested amendments.	X	
1.8	A general statement about how any proposed open space will be maintained (if applicable)	X	
1.9	A development schedule indicating the approximate date when construction is expected to begin and be completed. Identify schedule of any proposed phasing of the development (attach pages as necessary)	X	
1.10	A statement of the petitioner's intentions regarding future sale or leasing of all or portions of the proposed development	X	
II Survey and Legal Description			
1.0	**Complete boundary survey that includes all existing structures, acreage, legal description, and easements plotted to scale by a NYS licensed land surveyor**	X	
1.1	Raised/wet seal and signature of licensed surveyor	X	
1.2	Clear delineation and acreage of area to be rezoned if different than property boundary	N/A	
2.0	**Legal Description of the total area proposed to be rezoned. (must be consistent with area shown to be rezoned on boundary survey)**	X	

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Item No.	Item	Submitted	Official use
III Concept Plan (if required by the Planning Board)			
1.0	**Conceptual development plan drawn to scale (no larger than 24" x36" format and folded into 8 ½" x 11" size)**	X	
1.1	North arrow	X	
1.2	Scale of drawing	X	
1.3	Property lines (existing and proposed)	X	
1.4	Unique natural features and tree cover	X	
1.5	Information on land controlled by the applicant located within 500 feet of the perimeter of the area proposed to be rezoned	X	
1.6	Location of all proposed structures and other improvements	X	
1.7	Number and type of dwelling units (if applicable)	X	
1.8	Gross square feet of commercial space (if applicable)		
1.9	Maximum structure heights	X	
1.10	Architectural sketches	X	
1.11	Existing and proposed contours	X	
1.12	Existing utility systems (sanitary sewers, water, storm drainage)	X	
1.13	Location of proposed storm water detention or retention facilities	X	
1.14	Proposed land use arrangement	N/A	
1.15	Location of all parking, loading, stacking and interior circulation drives	X	
1.16	Location of proposed curb cuts	X	
1.17	Location of cross access drives to adjacent parcels		
1.18	Pedestrian circulation system	X	
1.19	Location of NYSDEC wetlands (including buffer area) and/or federal wetlands; indicate jurisdictional status	N/A	
1.20	Location of floodway and 100-year floodplain (if applicable)	N/A	
1.21	Location and purpose of any proposed easements	N/A	
1.22	Location and proposed development of all open spaces, including parks, playgrounds, conservation areas, and dedicated open space; indicate intended ownership of such areas	X	
1.23	Additional data as required by the Planning Board		
V Other Required Information			
1.0	**Completed and signed Environmental Assessment Form**	X	
11	Soil boring report and geotechnical report prepared by a qualified Professional Engineer (if applicable)	N/A	
1.2	Traffic impact study (if applicable)	N/A	
1.3	Archaeological assessment (if applicable)	N/A	
1,4	Wetland Delineation report (if applicable)	N/A	
2.0	**8 1/2" X 11" reduction of concept plan drawing (see appendix B)**	X	
3.0	**A CD containing a PDF of the complete submittal package, including all drawings.**	EMAIL	

For official use only:

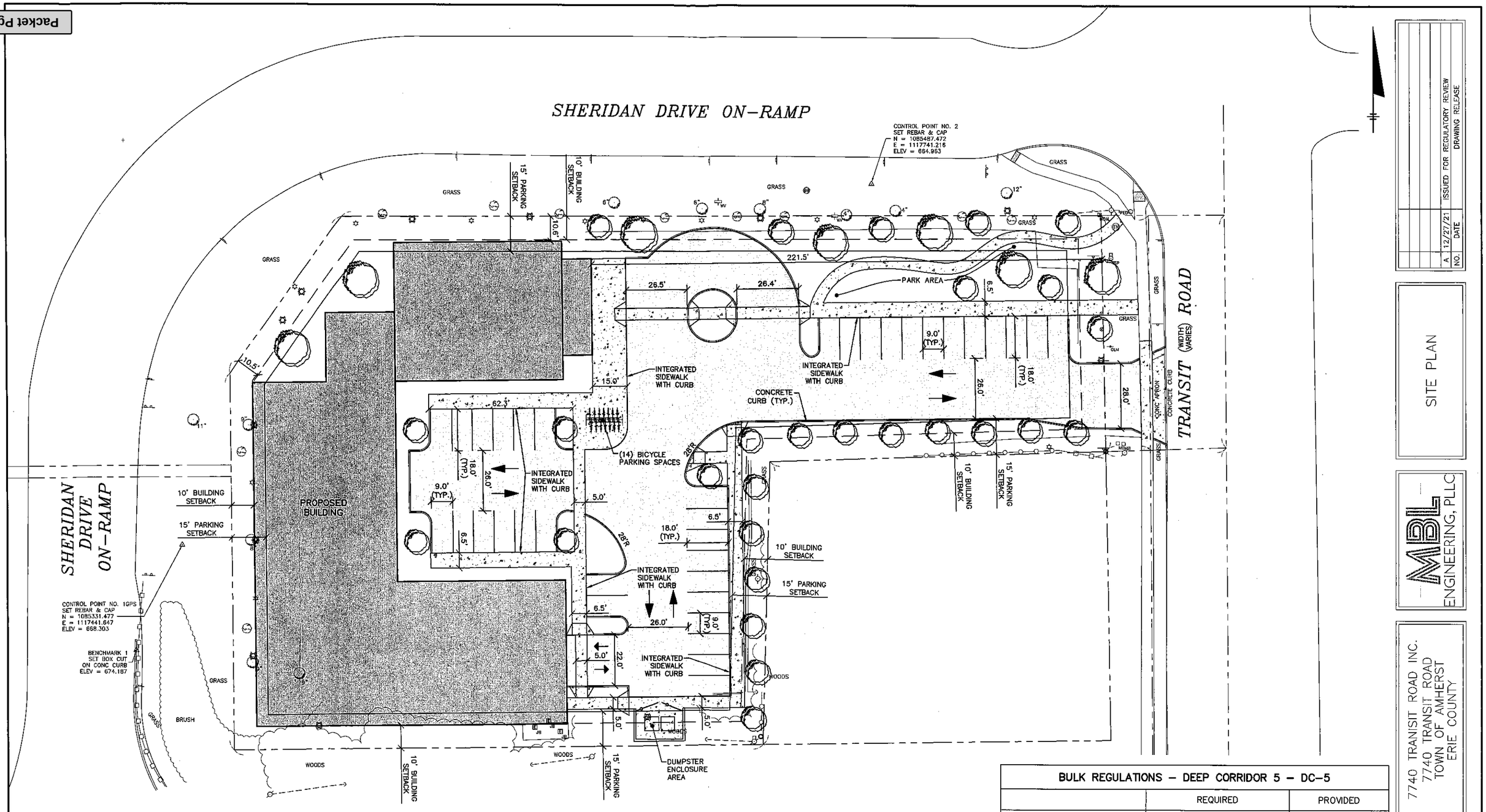
_____

Approved/Date

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)



PLAN
SCALE: 1"=20'

BULK REGULATIONS – DEEP CORRIDOR 5 – DC-5		
	REQUIRED	PROVIDED
BUILDING SETBACK	10'	10'
PARKING SETBACK	15'	15'
PARKING SPACES	1 PER 1-2 BDRM DWELLING UNIT=40	72
EV PARKING SPACES	10% OF ALL SPACES	PROVIDED IN GARAGE
BICYCLE PARKING SPACES	0.5 SPACE PER DWELLING UNIT=14	14 SPACES
MAX. BUILDING HEIGHT	5 STORIES OR 75'	5 STORIES

RECEIVED
JAN 03 2022
TOWN OF AMHERST
PLANNING DEPT.

1"=20' 20 0 20 40

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED / ... USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE ... LICENSED ENGINEER, TO ALTER ...

PRELIMINARY NOT FOR CONSTRUCTION
DATE: 12/27/21

NO.	DATE	
A	12/27/21	ISSUED FOR REGULATORY REVIEW
		DRAWING RELEASE

SITE PLAN

MBL ENGINEERING, PLLC

7740 TRANSIT ROAD INC.
7740 TRANSIT ROAD
TOWN OF AMHERST
ERIE COUNTY

PROJECT # 21-286

DATE: SEPTEMBER 2021

SHEET # C-102

Attachment 3

Boundary Survey & Legal Description

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Agency Use Only [If applicable]

Project: Z-2022-01

Date: February 8, 2021

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.
Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☑	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☑	☐
3. Will the proposed action impair the character or quality of the existing community?	☑	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☑	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☑	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☑	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☑	☐
b. public / private wastewater treatment utilities?	☑	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☑	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☑	☐
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☑	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☑	☐

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

PRINT FORM

SEAF 2019

Agency Use Only [If app
Project: Z-2022-01
Date: February 8, 2022

Short Environmental Assessment Form
Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

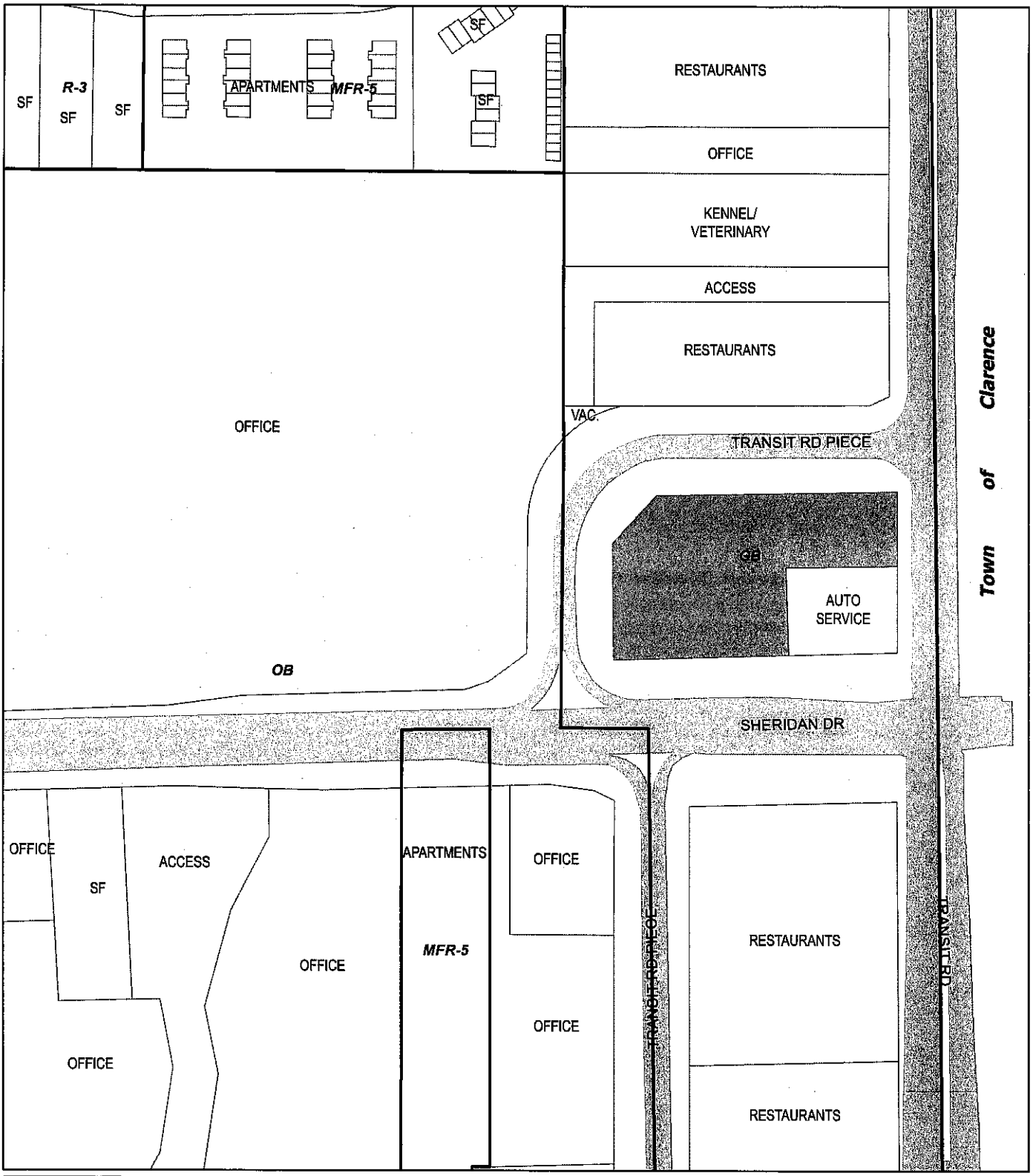
Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☑ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT FORM



Z-2022-01

Request to Rezone 1.5+/- Acres of Land from GB to DC-5
Property Located at 7740 Transit Road

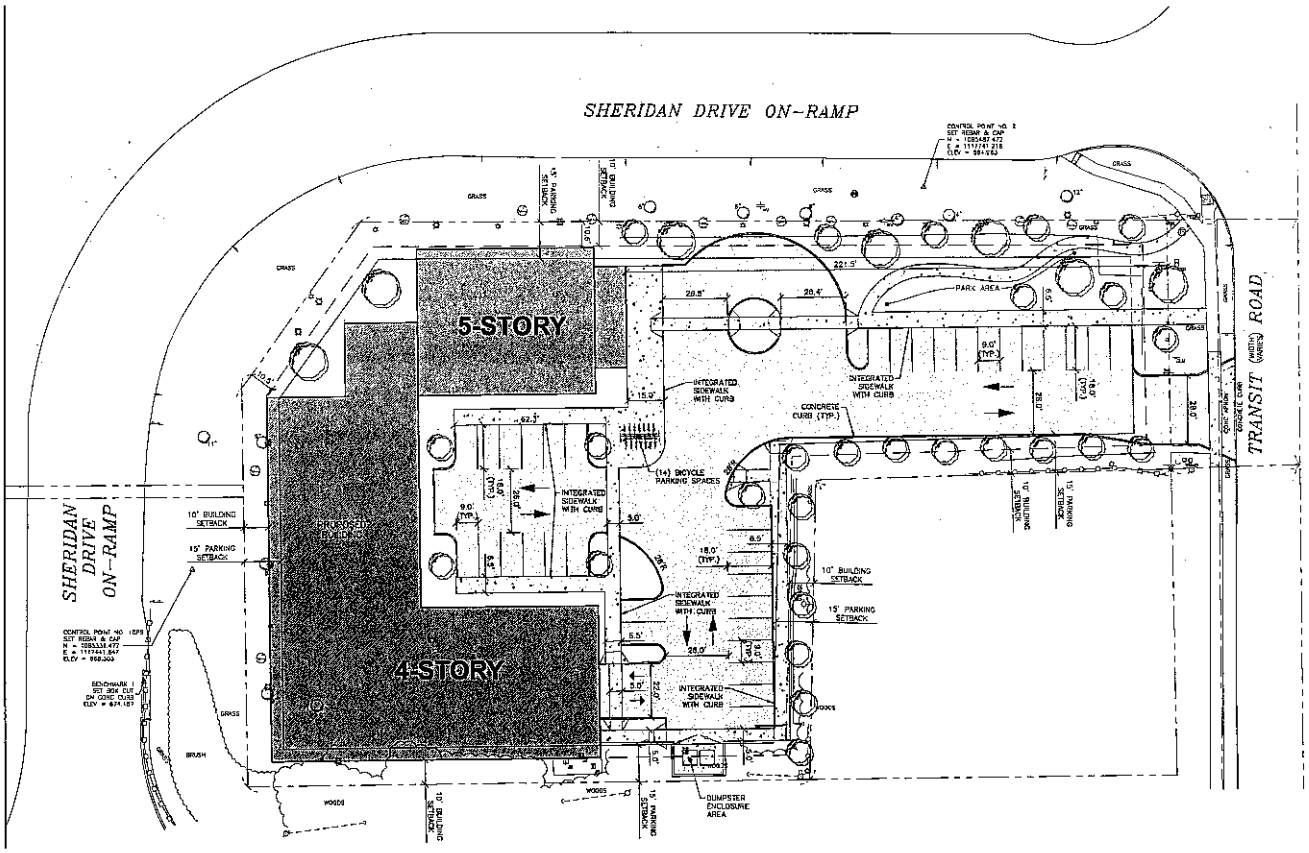
7740 Transit Road, Inc., Petitioner

February 17, 2022

7740 Transit Road

Prepared by the Town of Amherst Planning Department

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

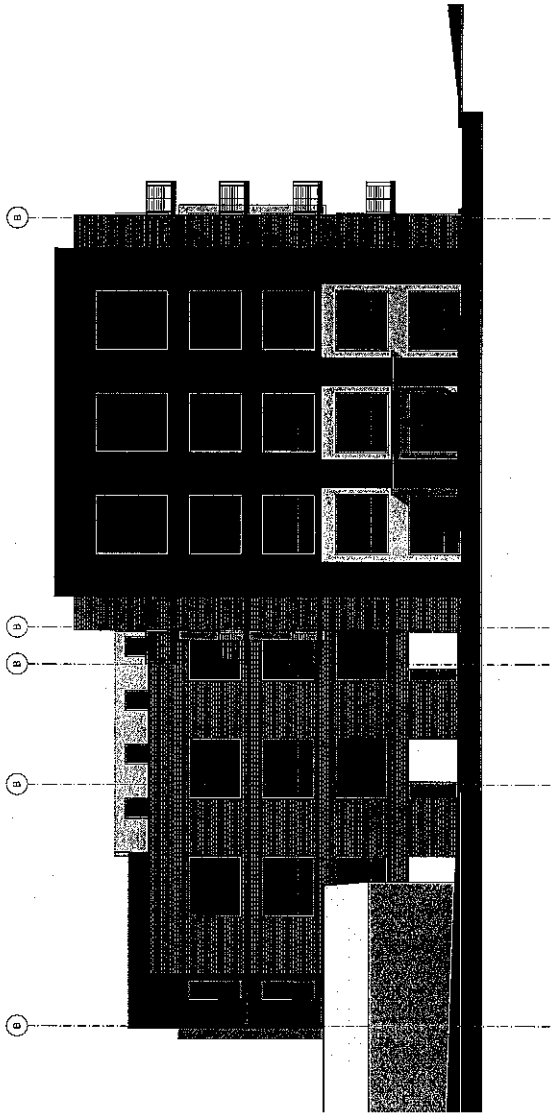


CONCEPT PLAN

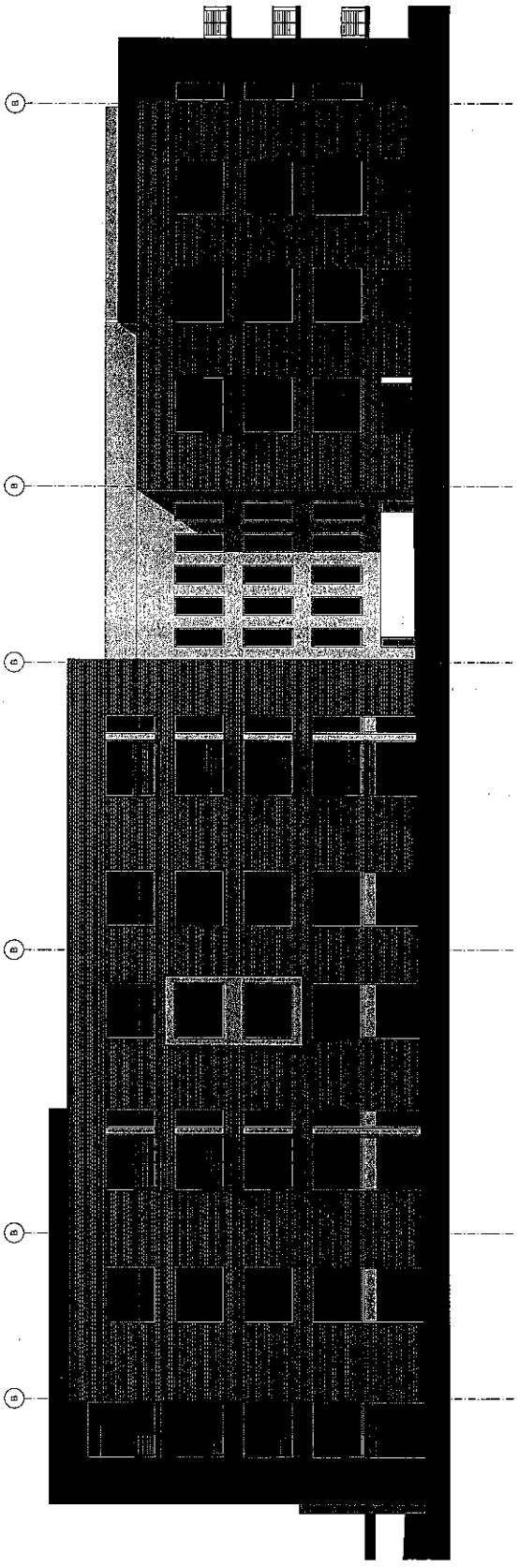
Z-2022-01
7740 Transit Road
Received: 12/27/2021

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

EAST ELEVATION



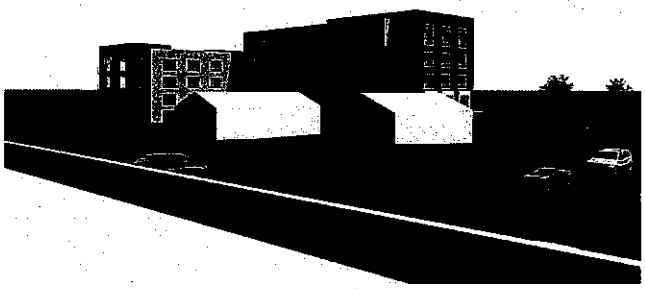
NORTH ELEVATION



ELEVATION

Z-2022-01
7740 Transit Road
Received: 12/27/2021

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)



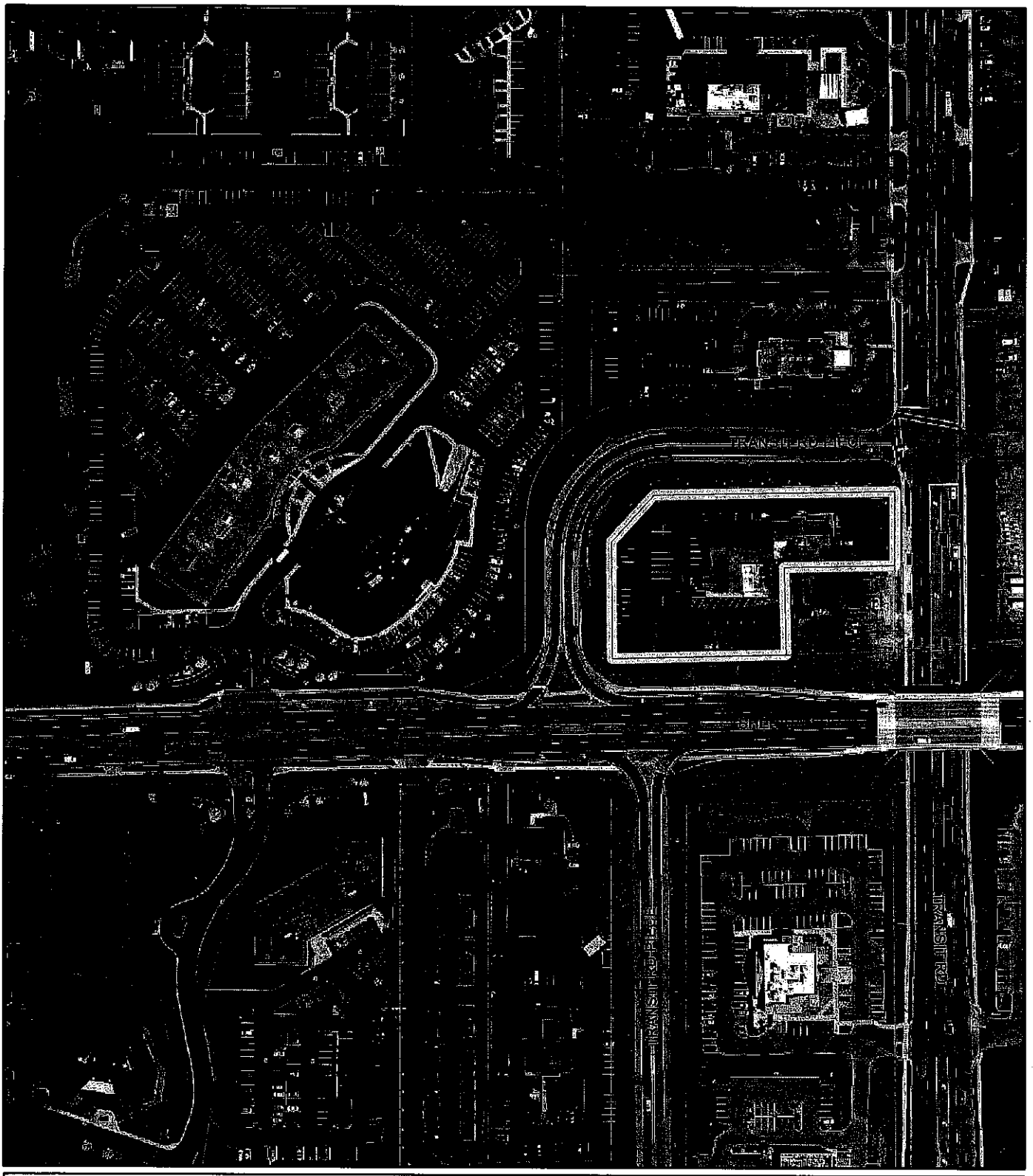
SOUTH EAST VIEW

SOUTH VIEW

ELEVATION

Z-2022-01
7740 Transit Road
Received: 12/27/2021

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)



Z-2022-01

Request to Rezone 1.5+/- Acres of Land from GB to DC-5
Property Located at 7740 Transit Road

7740 Transit Road, Inc., Petitioner

February 17, 2022

7740 Transit Road

Prepared by the Town of Amherst Planning Department

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Carrato, Amy

From: Ulatowski, Daniel
Sent: Monday, February 14, 2022 9:44 AM
To: Marshall, Scott; Palumbo, Gary; Voigt, Thomas J.
Cc: Carrato, Amy; Fadel, Bryan
Subject: FW: 2022-SP297 T. Amherst 7740 Transit Rd Rezoning Request
Attachments: 2022-SP297 T. Amherst 7740 Transit Rd cover letter.pdf; 2022-SP297 T. Amherst 7740 Transit Rd site plan.pdf

NYSDOT Review attached .

From: Hayes, Ron (DOT) <Ron.Hayes@dot.ny.gov>
Sent: Friday, February 11, 2022 12:15 PM
To: Ulatowski, Daniel <dulatowski@amherst.ny.us>
Subject: 2022-SP297 T. Amherst 7740 Transit Rd Rezoning Request

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Dan,

New York State Department of Transportation (NYSDOT) reviewed the site plan information submitted for the subject project rezoning and has the following comments:

- NYSDOT requests an opportunity to review the project's Engineering Report and Hydraulic Analysis.
- With the proposed project driveway proximity to the intersection, NYSDOT will require signs, markings, etc. prohibiting left turns out of the site. Specifically, the installation of a no left turn sign, pavement markings showing a straight arrow in the entrance lane and a right-turn arrow in the exit lane.
- A NYSDOT Highway Work Permit will be required for utility access.
- A NYSDOT Highway Work Permit will be required for the work that is located within the State Highway Right-of-Way.
    - More detailed plans will be required for the Highway Work Permit application. Additional site engineering review will be performed as part of the Highway Work Permit process. This correspondence does not constitute approval for the purpose of a Highway Work Permit. The applicant should direct the Highway Work Permit application and/or questions to:

      Nickolas Kinderman, North Erie Resident Engineer
      New York State Department of Transportation
      111 Indian Road, Depew, New York 14043
      (716) 683-3476

If you have any questions, Please do not hesitate to contact me either by email or phone.

Sincerely,

Ron

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Ronald J. Hayes
Planning and Program Management
SEQR/Site Plan Coordinator

New York Department of Transportation
100 Seneca Street, Buffalo, NY 14203

(716) 847-3381 I (518) 810-9951 cell
Ron.Hayes@dot.ny.gov www.dot.ny.gov

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

SITE PLAN OR ZONING REFERRAL TO COUNTY OF ERIE, NY AND REPLY TO MUNICIPALITY

Note: Please complete in triplicate. Send original and one copy (with attachments) to Erie County Division of Planning, Room 1053, 95 Franklin Street, Buffalo, N.Y. 14202. Retain last copy for your files.

DO NOT WRITE IN THIS SPACE

Case No.: ZR-22-108

Received: 1/12/22

The proposed action described herein is referred in accordance with the provisions of the General Municipal Law, which provides that reply is received in 30 days after receipt of full information including a SEQR EAF if applicable, the municipal agency may take final a without considering such reply. If, however, reply is received at any time prior to municipal Action, such reply must be considered

RECEIVED
FEB 07 2022
TOWN OF AMHERST
PLANNING DEPT.

Description of Proposed Action

1. Name of Municipality: Town of Amherst

2. Hearing Schedule: **Date** February 17, 2022 **Time** 6:30 **Location** 5583 Main Street, Williams

3. Action is before: ☐ Legislative Body ☐ Board of Appeals ☒ Planning Board

4. Action consists of: ☐ New Ordinance ☒ Rezone/Map Change ☐ Ordinance Amendmer

☐ Site Plan ☐ Variance ☐ Special Use Permit ☐ Other

5. Location of Property: ☐ Entire Municipality ☒ Specific as follows 7940 Transit Roa

6. Referral required as Site is within 500' of: ☐ State or County Property/Institution ☒ Municipal Boundary ☐ Farm Operation locate an Agricultural District

☐ Expressway ☐ County Road ☒ State Highway ☐ Proposed State or Co Road, Property, Buildi Institution, Drainagew

7. Proposed change or use: (be specific) Rezone 1.5 ac from General Business Distri Deep Corridor 5 District.

8. Other remarks: (ID#, SBL#, etc.) Z-2022-01

9. Submitted by: Scott A. MARSHALL Principal Planner January 10, 2

Town of Amherst, 5583 Main St., Williamsville, NY 14221

Reply to Municipality by Erie County Division of Planning

Receipt of the above-described proposed action is acknowledged on 1/24/22. **The Division herewith submits its review and reply under the provisions of applicable state and local law, based on the information submitted with this referral.**

1. ☐ **The proposed action is not subject to review under the law.**
2. ☐ **Form ZR-3, Comment on Proposed Action is attached hereto.**
3. ☐ **The proposed action is subject to review; the Division makes the recommendation shown on Form ZR-4, Recommendation on Proposed Action, which is attached hereto.**
4. ☒ **No recommendation; proposed action has been reviewed and determined to be of local concern**

By the Division of Planning: [signature] **Date:** 2/7/22

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

810044

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

RECEIVED
JAN 25 2022
TOWN OF AMHERST
PLANNING DEPT.

MEMORANDUM

January 10, 2022

TO: Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, AICP, Zoning Enforcement Officer
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Williamsville School District
Jonathan Bleuer, Town of Clarence

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

SUBJECT: REQUEST TO REZONE 1.5± ACRES OF LAND FROM **GB** TO **DC-5**; **Z-2022-01**; PROPERTY LOCATED AT **7740 TRANSIT ROAD**. 7740 TRANSIT ROAD, INC., PETITIONER.

REVIEW:

Do you agree with all statements made? YES.

If you do not, briefly state why: _____

General comments relative to your agency interests: NONE.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date:** 1/24/22

DU/GP/bf
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Transmittal_010522.doc

cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM January 10, 2022

RECEIVED
JAN 24 2022
TOWN OF AMHERST
PLANNING DEPT.

RECEIVED
JAN 12 2022
TOWN OF AMHERST
BUILDING DEPT

TO: Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, AICP, Zoning Enforcement Officer
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Williamsville School District
Jonathan Bleuer, Town of Clarence

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

SUBJECT: REQUEST TO REZONE 1.5± ACRES OF LAND FROM **GB** TO **DC-5**; **Z-2022-01**; PROPERTY LOCATED AT **7740 TRANSIT ROAD**. 7740 TRANSIT ROAD, INC., PETITIONER.

REVIEW:

Do you agree with all statements made? Yes.

If you do not, briefly state why: _____

General comments relative to your agency interests: No Accessible Parking Shown on Concept plan.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: Doug Gesel **Date:** 1/24/22

DU/GP/bf
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Transmittal_010522.doc
cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

RECEIVED
JAN 19 2022
TOWN OF AMHERST
PLANNING DEPT.

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

MEMORANDUM January 10, 2022

TO: Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, AICP, Zoning Enforcement Officer
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Williamsville School District
Jonathan Bleuer, Town of Clarence

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

SUBJECT: REQUEST TO REZONE 1.5± ACRES OF LAND FROM **GB** TO **DC-5**; **Z-2022-01**; PROPERTY LOCATED AT **7740 TRANSIT ROAD**. 7740 TRANSIT ROAD, INC., PETITIONER.

REVIEW:

Do you agree with all statements made? YES

If you do not, briefly state why: _____

General comments relative to your agency interests: Nine a Time Time

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date**: 1/18/22

DU/GP/bf
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Transmittal_010522.doc
cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

RECEIVED
JAN 13 2022
TOWN ATTORNEY

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Directo

MEMORANDUM January 10, 2022

TO: FROM

Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, AICP, Zoning Enforcement Officer
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Williamsville School District
Jonathan Bleuer, Town of Clarence

RECEIVED
JAN 13 2022
TOWN OF AMHERST
PLANNING DEPT.

TO: FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

SUBJECT: REQUEST TO REZONE 1.5± ACRES OF LAND FROM **GB** TO **DC-5**; **Z-2022-01**; PROPERTY LOCATED AT **7740 TRANSIT ROAD**. 7740 TRANSIT ROAD, INC., PETITIONER.

REVIEW:

Do you agree with all statements made? Yes.

If you do not, briefly state why: _____

_____.

General comments relative to your agency interests: None at this time

_____.

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.)

_____

_____

_____.

Please call the Planning Department if additional information is required (631-7051).

Signature: Stanley Sliwa **Date:** 1/12/22

DU/GP/bf
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Transmittal_010522.doc
cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

RECEIVED
JAN 14 2022
TOWN OF AMHERST
PLANNING DEPT.

MEMORANDUM January 10, 2022

RECEIVED
JAN 13 2022
TOWN ATTORNEY

TO: Kathy Cooper, Deputy Town Clerk
Daniel J. Ulatowski, AICP, Zoning Enforcement Officer
Emily Murphy, Town Assessor
Douglas Gesel, Supervising Code Enforcement Officer, Building Department
Jeffrey Burroughs, Town Engineer
Chris Schregel, Traffic/Safety Coordinator (c/o Eng)
Brian Barnes, Senior GIS Analyst (Eng.) (letter only)
Bryan Parnell, Fire Chiefs' Association (c/o Bldg)
Stan Sliwa, Town Attorney (Local Law Only)
(2) ✓ Ann Demopoulos, Deputy Town Attorney, Right-of-Way Agent
Integrated Review Coordinator, ECDEP
Ronald Hayes, SEQR Review Coordinator, NYSDOT
Williamsville School District
Jonathan Bleuer, Town of Clarence

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

SUBJECT: REQUEST TO REZONE 1.5± ACRES OF LAND FROM **GB** TO **DC-5**; **Z-2022-01**; PROPERTY LOCATED AT **7740 TRANSIT ROAD**. 7740 TRANSIT ROAD, INC., PETITIONER.

REVIEW:

Do you agree with all statements made? Agree with all statements made.

If you do not, briefly state why: N/A

General comments relative to your agency interests: N/A

If improvements are required involving your agency, please state schedule for completion (sewer construction, road widening, etc.) N/A

Please call the Planning Department if additional information is required (631-7051).

Signature: _____ **Date:** 1/14/21

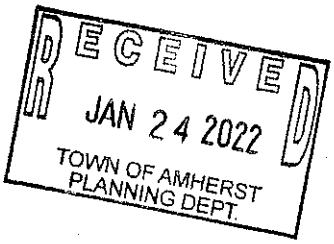
DU/GP/bf
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Transmittal_010522.doc

cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Williamsville Central Schools
Encouraging · Nurturing · Challenging

Thomas R. Maturski
Assistant Superintendent for Finance & Management Services
tmaturski@williamsvillek12.org



January 19, 2022

Daniel J. Ulatowski
Assistant Planning Director
Town of Amherst Planning Department
5583 Main Street
Williamsville, NY 14221

RE: REQUEST TO REZONE 1.5 ACRES OF LAND FROM **GB** TO **DC-5; Z-2022-01**; PROPERTY LOCATED AT 7740 TRANSIT ROAD. 7740 TRANSIT ROAD, INC., PETITIONER.

Dear Mr. Ulatowski:

The Williamsville Central School District has reviewed the plan regarding the proposed change in zoning for 7740 Transit Road. Please be advised that the district chooses not to comment at this time pending further action by the Town of Amherst.

Sincerely,

Thomas R. Maturski
Assistant Superintendent for Finance & Management Services

cc:
Scott Marshall, Principal Planner - smarshall@amherst.ny.us
7740 Transit Road, Inc. 4110 Thornwood Lane, Williamsville NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

TOWN OF AMHERST
ASSESSOR'S OFFICE

5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
PHONE: 716-631-7038
FAX 716-631-7144
www.amherst.ny.us

David C. Marrano
Assessor
dmarrano@amherst.ny.us

RECEIVED
JAN 20 2022
TOWN OF AMHERST
PLANNING DEPT.

MEMORANDUM

TO: Daniel Ulatowski, AICP, Associate Planning Director
Douglas Gesel, Supervising Code Enforcement Officer
Jeff Burroughs, Town Engineer
Scott Marshall, Principle Planner

FROM: Bonnie Arnold, Real Property Tech

DATE: January 20, 2022

SUBJECT: Request to rezone 1.5+ acres of land from GB to DC-5;Z-2022-01
Property Location: **7740 Transit Rd**
Petitioner: **7740 Transit Rd, Inc.**

If rezone is for building single family homes with condominium status then the Assessor's office does not approve.

cc: Scott Marshall, Principal Planner
7740 Transit Road, Inc., 4110 Thornwood Lane, Williamsville, NY 14221
Michael Lasell, MBL Engineering, PLLC, 16510 Balch Place, Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

January 14, 2022

7740 Transit Road, Inc.
4110 Thornwood Lane
Williamsville, New York 14221

SUBJECT:	Rezoning Application Review	**Z-2022-01**
	Proposed:	Rezone 1.5± acres of land from GB to DC-5
	Property located at:	**7740 Transit Road**
	Application received:	January 3, 2022
	Representative:	MBL Engineering, PLLC

Dear Sir/Madam,

Please consider the following comments:

1. The site plan provided with the application is being considered as conceptual only as review for compliance with the §203 of Town Code (Zoning Ordinance) will be done at site plan review.
2. The request will require submission of the SEQR Full Environmental Assessment Form as the action will require the adoption of a local law to implement a zoning change and the information necessary for the Town to complete Part 2 of the form is not provided on the Short EAF.
3. The responses to The Town of Amherst Addendum to the EAF need to be corrected or modified as follows:
   - Item 1. Responses are incorrect or not answered per Table 11 of the Soil Survey of Erie County NY for the soil types listed.
   - Item 2. Based upon our review of the Soil Survey of Erie County NY the project will require the submittal of a geotechnical report.
4. Please note that any other SEQR-related issues raised during the review process for this rezoning must be addressed prior to action by the Planning Board.
5. Revise the Draft Local Law as follows and provide it in digital format (MS word).
   - Section 1: note rezoning is from General Business District (GB) to Deep Corridor 5 District (DC-5).
   - Section 3: Incorporate the legal description of the requested rezoning are into this section.
6. Please provide an 8½ " x 11" reduction of any revised concept plan **and an electronic version** of any revised plans or information submitted for review.

This is a review only and does not constitute approval of the Rezoning Request. Should you have questions regarding this correspondence, please contact Scott A. Marshall, Principal Planner at smarshall@amherst.ny.us

Very truly yours,

Daniel C. Howard, AICP
Planning Director

DH/SM/ac
X:\Current_Planning\Files\Rezonings\2022\Z-2022-01_(7740_Transit_Rd)_2022\Z-2022-01_Pln_Dpt_Rvw_Letter_01122022.doc
cc: Michael Lasell, MBL Engineering, PLLC, 16510 Balch Pl., Mannsville, NY 13661

Attachment: Z-2022-01 TB letter packet 041122 (RES-2022-347 : 7740 Transit Road Rezoning)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Councilmembers
Initiated by: **Jacqualine Berger**
Co-Sponsored by:

DOC ID: 25658 **RESOLUTION 2022-348** **ADOPTED**

Zoning Board of Appeals Appointment

WHEREAS, the Town of Amherst maintains a Zoning Board of Appeals (ZBA) authorized to grant relief from any provision of the Town of Amherst Zoning Ordinance or any decision of an administrative official charged with the enforcement of that ordinance; and

WHEREAS, the ZBA is empowered to grant special use permits in certain instances as spelled out in the Zoning Ordinance. Town Law specifies the grounds and criteria that the ZBA must use to grant a variance; and

WHEREAS, the ZBA consisting of five (5) members appointed by the Town Board, each for a term of five (5) years on a staggered basis; and

WHEREAS, the ZBA currently has a vacancy that Ellen Parker has expressed interest in filling.

NOW, THEREFORE, BE IT RESOLVED that the Amherst Town Board appoints Ellen Parker to her first term to conclude December 31, 2022.

4/11/2022
Consent

FINANCIAL IMPACT:

None.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Jacqualine Berger, Deputy Supervisor
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Councilmembers
Initiated by: **Deborah Bruch Bucki**
Co-Sponsored by:

DOC ID: 25651 **RESOLUTION 2022-349** **ADOPTED**

Amherst Community Diversity Commission Appointments

WHEREAS, the purpose of the Amherst Community Diversity Commission (ACDC) is to enhance and increase cooperation, understanding, and dialogue among residents of diverse cultural, religious, socio-economic and racial backgrounds, and to promote inclusion throughout the town; and

WHEREAS, the Commission will study the demographics of Amherst, promote town-wide events that foster cultural awareness, increase minority participation on governmental boards, committees and in the town's workplace, and to facilitate meetings designed to promote a better understanding of who Amherst is as a community; and

WHEREAS, the Amherst Community Diversity Commission generally meets on the second Tuesday of the month, with the exception of July, August and December; and

WHEREAS, the ACDC has a maximum roster of 15 members, with the Supervisor and each Councilmember personally appointing up to three individual members who shall serve a two year term; and

WHEREAS, the ACDC currently has a Board of nine members, who shall continue to serve until their term of appointment expires, as personal appointments reflected in the following list:

Dr. Mohan Devgun, Vice-Chair, with term that expires 12-31-2023; Councilmember Berger
Gul A. Rahman, Secretary, with a term that expires 12-31-2023; Supervisor Kulpa
Pam Kefi, Member, with a term that expires 12-31-2023; Councilmember Szukala
Dr. Mohammed Khan, Member, with a term that expires 12-31-2023; Supervisor Kulpa
Heidi Nicklaus Lefebvre, Member, with a term that expires 12-31-2023; Councilmember Lavin
Thomas Lucia, Member, with a term that expires 12-31-2023; Councilmember Szukala
Anne Rohrer, Member, with a term that expires 12-31-2023; Councilmember Berger
Dr. Joseph Sankoh, Member, with a term that expires 12-31-2023; Councilmember Bucki
Maria Rosario Cala, Member, with a term that expires 12-31-2023; Councilmember Lavin; and

WHEREAS, the Members of the Commission shall, by majority vote, elect a Chairperson from among the members and such officers as may be deemed necessary from time to time; and

WHEREAS, Zhen Liu and Prachee Samant have expressed interest in serving on the ACDC.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Councilmember Bucki appoints Zhen Liu and Prachee Samant to the Amherst Community Diversity Commission, for their first term, each to conclude on December 31, 2023.

4/11/2022
Consent

FINANCIAL IMPACT:

None.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Deborah Bruch Bucki, Councilmember
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Councilmembers
Initiated by: **Michael Szukala**
Co-Sponsored by:

DOC ID: 25647 **RESOLUTION 2022-350** **ADOPTED**

Creation of the Merged Amherst Government Financial Advisory Board and the Appointments of Resident Volunteers

WHEREAS, the Town of Amherst has over 30 Boards and Committees; and

WHEREAS, in evaluating the Boards and Committees some of the duties responsibilities have been expired or now duplicated; and

WHEREAS, volunteers are limited when requesting residents to step into Board and Committee memberships; and

WHEREAS, the Government Study Committee and the Citizens' Financial Advisory Committee are two committees that could be merged to continue to serve the community's needs; and

WHEREAS, the conjoined committee name would now be the Amherst Government Financial Advisory Board; and

WHEREAS, the Amherst Government Financial Advisory Board would consist of five (5) members appointed by the Amherst Town Board majority to serve a two year term; and

WHEREAS, the Amherst Government Financial Advisory Board will meet once a quarter, or more, as needed; and

WHEREAS, the purpose and mission of the Board would be to review management letters from the Town auditors and to continue with each of the future management letter responses; and

WHEREAS, to investigate where the Comptroller's Department is not in compliance with the management letter and make recommendations to help ensure the compliance process; and

WHEREAS, to suggest improvements of the effectiveness or modification of the Town of Amherst government activities; and

WHEREAS, Jason Zaklikowski, John DiPasquale, Alexander Wyse, Kenneth Smith, and Gregory M. Dionne have expressed interest in serving on the Amherst Government Financial Advisory Board; and

WHEREAS, these volunteers have served on the Amherst Government Study Committee and/or Amherst Citizens' Financial Advisory Board and would like to continue serving on the newly merged Amherst Government Financial Advisory Board and the Town of Amherst.

NOW, THEREFORE, BE IT RESOLVED that the Amherst Town Board approves the merge of the Citizens Financial Advisory Committee and the Amherst Government Study Committee to be now named the Amherst Government Financial Advisory Board; and

BE IT FURTHER RESOLVED that the Amherst Town Board appoints Jason Zaklikowski, John DiPasquale, Alexander Wyse, Kenneth Smith, and Gregory M. Dionne to the Amherst Government Financial Board for a term to expire December 31, 2023.

4/11/2022
Consent

FINANCIAL IMPACT:

None.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Michael Szukala, Councilmember
SECONDER:	Brian J. Kulpa, Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25618 A **RESOLUTION 2022-351** **ROLL CALL VOTE (ADOPTED)**

Townwide Centralized Security (Bond Resolution - $100,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Townwide Centralized Security Improvements**
2022-2027 C.I.P. - Project No. PO-05
Bond Resolution - $100,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $100,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Scott P. Chamberlin, Chief of Police *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and

unanimously approved via Roll Call vote 5-0.

FINANCIAL IMPACT:

Bond Resolution - $100,000

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AICP
Planning Director

Daniel J. Ulatowski, AICP
Assistant Planning Director

Transmitted electronically

MEMORANDUM February 24, 2022

TO: Captain Kevin Brown
Police Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town-wide Centralized Security Improvements
2022-2027 C.I.P. Project PO-05

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\February 2022_Town wide Centralized Security Improvements.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: SEQR.TwnCenSec-03302022124823 (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

EXTRACT OF MINUTES

Meeting of the Town Board of the

Town of Amherst, in the

County of Erie, New York

April 11, 2022

* * *

A regular meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, was held at the Town Hall, 5583 Main Street, Williamsville, New York, on April 11, 2022.

There were present:	Hon. Brian J. Kulpa, Supervisor; and
Board members:	Jacqualine Berger, Councilwoman Deborah Bruch Bucki Councilwoman Shawn Lavin, Councilman Michael R. Szukala, Councilman
There were absent:	
Also present:	Francina J. Spoth, Town Clerk

* * *

_____ offered the following resolution and moved its adoption:

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

BOND RESOLUTION OF THE TOWN OF AMHERST, NEW YORK, ADOPTED APRIL 11, 2022, AUTHORIZING TOWN-WIDE CENTRALIZED SECURITY IMPROVEMENTS, STATING THE ESTIMATED MAXIMUM COST THEREOF IS $100,000, APPROPRIATING SAID AMOUNT FOR SUCH PURPOSE, AND AUTHORIZING THE ISSUANCE OF BONDS IN THE PRINCIPAL AMOUNT OF $100,000 TO FINANCE SAID APPROPRIATION

THE TOWN BOARD OF THE TOWN OF AMHERST, IN THE COUNTY OF ERIE, NEW YORK, HEREBY RESOLVES (by the favorable vote of not less than two-thirds of all the members of said Town Board) AS FOLLOWS:

Section 1. The Town of Amherst, in the County of Erie, New York (herein called the "Town"), is hereby authorized to undertake Town-wide centralized security improvements, as described in the map, plan and report dated February 2022 and prepared by the Town Police Department (2022-2027 Capital Improvement Program Project P0-5). The estimated maximum cost thereof, including preliminary costs and costs incidental thereto and the financing thereof, is $100,000 and said amount is hereby appropriated for such purpose. The plan of financing includes the issuance of bonds in the principal amount of $100,000 to finance said appropriation, and the levy and collection of taxes on all the taxable real property in the Town to pay the principal of said bonds and the interest thereon as the same shall become due and payable.

Section 2. Bonds of the Town in the principal amount of $100,000 are hereby authorized to be issued pursuant to the provisions of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York (herein called the "Law"), to finance said appropriation.

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

Section 3. The following additional matters are hereby determined and declared:

(a) The period of probable usefulness applicable to the class of objects or purposes for which said bonds are authorized to be issued, within the limitations of Section 11.00 a. 35 of the Law, is five (5) years.

(b) The proceeds of the bonds herein authorized and any bond anticipation notes issued in anticipation of said bonds may be applied to reimburse the Town for expenditures made after the effective date of this resolution for the purpose for which said bonds are authorized. The foregoing statement of intent with respect to reimbursement is made in conformity with Treasury Regulation Section 1.150-2 of the United States Treasury Department.

(c) The proposed maturity of the bonds authorized by this resolution will not exceed five (5) years.

Section 4. Each of the bonds authorized by this resolution, and any bond anticipation notes issued in anticipation of the sale of said bonds, shall contain the recital of validity as prescribed by Section 52.00 of the Law and said bonds, and any notes issued in anticipation of said bonds, shall be general obligations of the Town, payable as to both principal and interest by general tax upon all the taxable real property within the Town. The faith and credit of the Town are hereby irrevocably pledged to the punctual payment of the principal of and interest on said bonds, and any notes issued in anticipation of the sale of said bonds, and provision shall be made annually in the budget of the Town by appropriation for (a) the amortization and redemption of the bonds, and any notes in anticipation thereof to mature in such year, and (b) the payment of interest to be due and payable in such year.

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

Section 5. Subject to the provisions of this resolution and of the Law and pursuant to the provisions of Section 21.00 of the Law relative to the authorization of the issuance of bonds with substantially level or declining annual debt service, Section 30.00 relative to the authorization of the issuance of bond anticipation notes and Section 50.00 and Sections 56.00 to 60.00 and 168.00 of the Law, the powers and duties of the Town Board relative to authorizing bond anticipation notes and prescribing the terms, form and contents and as to the sale and issuance of the bonds herein authorized, and of any bond anticipation notes issued in anticipation of said bonds, and the renewals of said bond anticipation notes, and as to the execution of agreements for credit enhancements, are hereby delegated to the Supervisor, the chief fiscal officer of the Town.

Section 6. The validity of the bonds authorized by this resolution, and of any notes issued in anticipation of the sale of said bonds, may be contested only if:

(a) such obligations are authorized for an object or purpose for which the Town is not authorized to expend money, or

(b) the provisions of law which should be complied with at the date of the publication of such resolution, or a summary thereof, are not substantially complied with,

and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of such publication, or

(c) such obligations are authorized in violation of the provisions of the constitution.

Section 7. This bond resolution shall take effect immediately, and the Town Clerk is hereby authorized and directed to publish the foregoing resolution, in summary, together with a Notice attached in substantially the form prescribed by Section 81.00 of the Law in the

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

"Amherst Bee," a newspaper having a general circulation within said Town and hereby designated as the official newspaper of the Town for such publication.

The adoption of the foregoing resolution was seconded by _____and duly put to a vote on roll call, which resulted as follows:

AYES:

NOES:

The resolution was declared adopted.

****

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed extract from the minutes of a meeting of the Town Board of said Town of Amherst duly called and held on April 11, 2022, has been compared by me with the original minutes as officially recorded in my office in the Minute Book of said Town Board and is a true, complete and correct copy thereof and of the whole of said original minutes so far as the same relate to the subject matters referred to in said extract.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this _____day of April, 2022.

(SEAL)

_____
Town Clerk

Attachment: CertBondReso (RES-2022-351 : Townwide Centralized Security (Bond Resolution - $100,000))

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

Town of Amherst
Police Department

Town-wide Centralized Security Improvements

2022-2027 C.I.P

PO-05

Map, Plan & Report

February 2022

CONTENTS:

- Approved 2022 – 2027 CIP Project PO-5
- Proposed Scope of Improvements
- Financial Summary / Taxation Summary
- SEQR Determination

TOWN OF AMHERST POLICE DEPARTMENT
Town-wide Centralized Security Improvements

Police Department — *Recommended Schedule (X $1,000)*

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
1	**Police Vehicles:** Funding for six police vehicles to replace older ones with excessive mileage & maintenance issues. *(2019)*	255 LA	255 LA	255 LA	255 LA	255 LA	255 LA	**$1,530,000**

Police Department (cont'd) — *Recommended Schedule (X $1,000)*

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
2	**Police Garage and Court Building Roof Improvements:** Replace and improve the existing roof systems at the Police Maintenance Garage/Court Building. *(2019)*	232 LA						**$232,000**
3	**APD/Court Building Improvements:** Installation of awnings, a gradual replacement of the crawl space piping, building windows and window sills, and an efficiency study of interior space. *(2019)*	100 LA						**$100,000**
4	**Police HVAC System Improvements – Phase 5:** Last phase to replace the police firing range HVAC controls. *(2019)*	350 LA						**$350,000**
5	**Town-wide Centralized Security Improvements:** Security and building improvements to Town buildings such as security camera upgrades, access control system improvements, physical barriers/fencing, and fixtures. *(2018)*	100 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$600,000**
6	**Bike Path Phone Replacement and Security Improvements:** Replacement of seven aging & malfunctioning emergency phones on the Amherst bike path. *(2022)*	700 LA						**$700,000**
7	**Police & Fire Emergency Communications Tower:** Co-locate up to 3 cellular carriers and police/fire antennas on a 300 ft. tower in North Amherst. *(2021)*	500 LA						**$500,000**
8	**Bailey Ave Police Training Center Improvements:** Upgrade the bathroom facilities, water service, & storage space. *(2019)*	241.5 LA						**$241,500**

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

TOWN OF AMHERST POLICE DEPARTMENT
Town-wide Centralized Security Improvements

PROPOSED SCOPE OF IMPROVEMENTS:

The Town of Amherst Police Department is chiefly responsible for providing adequate safety and security for the residential tax base as well as town employees while town-related business and activities are conducted at town-owned facilities. The scope of this project contains funding for additional safety and security measures as outlined by the Police department. These measures are anticipated to include the following measures and improvements.

Security Camera System Upgrades:

To date, the Police Department has developed a robust security camera system network made up of controls, communication facilities and the cameras themselves. To date, the system network is fully complete and functional but consists of only a small number of cameras. With intent to serve and protect more town-owned facilities, the fully scalable system needs to be expanded. In an effort to address the required expansion of the existing camera system, a number of improvements will be completed. A thorough analysis of each town-owned facility will be conducted in an effort to determine a priority list of needs based on exposure and threat-level. Based on that priority, the existing system will be expanded with new cameras being installed at several town-owned facilities. As needed and in order to accommodate the new cameras, the cameras system network may also require improvements and/or upgrades. Ancillary building improvements will also be made as needed in an effort to accommodate these new cameras and/or network improvements.

The project will include the ability to maintain the installed infrastructure thru regular troubleshooting and repair contracts.

Access Control System Improvements:

The existing access control system employed by the Town of Amherst Police Department is currently in use within the Police Headquarters and Court Facilities. That system was designed as a scalable centralized system which could be expanded in an effort to provide safe, secure and reliable access control on a town-wide basis for numerous town-owned facilities. The system is largely key-fob based and provides for computer-controlled security of doors and barriers within town-owned facilities. That system will be expanded as-needed in an effort to broaden the scope of security over other town-owned facilities as dictated by a needs assessment to be conducted by the Police Department.

The project will include the ability to maintain the installed infrastructure thru regular troubleshooting and repair contracts.

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

TOWN OF AMHERST POLICE DEPARTMENT
Town-wide Centralized Security Improvements

Physical Security Barriers / Fencing and Fixture Improvements:

Based on a Police Department needs assessment, all town-owned facilities will be prioritized based on their need for additional physical barriers and/or fencing and/or fixture improvements. These barriers typically include fencing but may also include motorized gates and/or physical impediments. As needed and in most cases, these additional security measures will provide benefit by providing an additional layer of perimeter control over town-owned facilities.

The project will include the ability to maintain the installed infrastructure thru regular troubleshooting and repair contracts.

As per the above, the scope of this project will include a mix of equipment, hardware and software control replacements and improvements. The project scope described above will be designed, bid and constructed during 2022. If any other security-related projects become prioritized during this period, these funds will be available for use for those projects as well. The above project will be bonded against the Town of Amherst General Fund at a total project cost of $100,000.00, financed entirely with serial bonds. The above project is characterized as a replacement-in-kind project. The improvements provided within the scope of this project will have a minimum life cycle of five (5) years.

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

TOWN OF AMHERST POLICE DEPARTMENT
Town-wide Centralized Security Improvements

FINANCIAL SUMMARY:

Tax Impact		2022 CIP#:	PO-5 Town Wide Centralized Security Improvements		
4%					
5					
$100,000					
				($22,462.71)	
	1	$100,000	$4,000.00	$(22,462.71)	$81,537.29
	2	$81,537.29	$3,261.49	$(22,462.71)	$62,336.07
	3	$62,336.07	$2,493.44	$(22,462.71)	$42,366.80
	4	$42,366.80	$1,694.67	$(22,462.71)	$21,598.76
	5	$21,598.76	$863.95	$(22,462.71)	$0.00
		annual payment		$(22,462.71)	
		Total cost over life		$(112,313.56)	
	2022 General Fund assessed value			$10,703,322,209	
		cost per $1,000 AV		$(0.0021)	
	est annual cost for $200,000 home			$(0.4197)	

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

TOWN OF AMHERST POLICE DEPARTMENT
Town-wide Centralized Security Improvements

SEQR Determination:

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM February 24, 2022

TO: Captain Kevin Brown
Police Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town-wide Centralized Security Improvements
2022-2027 C.I.P. Project PO-05

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\February 2022_Town wide Centralized Security Improvements.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: MPR PO-5 Town Wide Centralized Security Improvements (RES-2022-351 : Townwide Centralized Security (Bond Resolution -

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25619 **RESOLUTION 2022-352** **ROLL CALL VOTE (ADOPTED)**

Town Facility Parking Lot Paving (Bond Resolution - $110,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Town Facility Parking Lot Maintenance**
2022-2027 C.I.P. - Project No. B-2
Bond Resolution - $110,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $110,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Daniel J. Rizzo, Director, Facilities Department *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond

resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved via Roll Call vote 5-0.

FINANCIAL IMPACT:

Bond Resolution - $110,000

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM March 7, 2022

TO: Brian J. Armstrong, EIT, Assistant Municipal Engineer
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town Facility Parking Lot Maintenance
2022-2027 C.I.P. Project B-2, TOA Project Number 2022.008

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\March 2022_Town Facility Parking Lot Maint -CIP_B-2.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution -

Town of Amherst
Building Maintenance Department

Town Facility Parking Lot Maintenance

2022-2027 C.I.P. Project B-2

Town of Amherst Project # 2022.008

Map, Plan & Report

March 2022

CONTENTS:

- Approved 2022 – 2027 CIP Project B-2
- Introductions / Existing Conditions
- Proposed Scope of Improvements
- Financial / Taxation Summary
- Project Cost Estimate
- SEQR Determination – Type II Action

Prepared by
Town of Amherst Engineering Department
1100 North Forest Rd.
Williamsville, NY 14221
(716) 631-7154

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution -

Town Facility Parking Lot Maintenance

TOWN OF AMHERST

Approved 2022 – 2027 Capital Improvement Program

Note: Completion of projects with Federal or State funding (F/S) is contingent upon successful pursuit of those funds by the sponsoring department.

Building Department — ***Recommended Schedule (X $1,000)***

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
B-1	**Building Department / Maintenance Vehicles:** Replace one mini dump truck used for daily tasks. *(2019)*	80 LA						**$80,000**
B-2	**Town Parking Lot Paving:** Parking lot paving improvements at Town buildings and facilities to correct deterioration and conduct subsequent maintenance. *(2009)*	110 LA	100 LA 100 LW	100 LA 100 LW	100 LA	100 LA	100LA	**$810,000**
B-3	**Town Parking Lot Sealing & Striping:** Parking lot seal coating, crack filling, and striping at Town buildings and facilities. *(2009)*	100 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$600,000**
B-4	**Steffen Building Roof Replacement:** Replace the failing roof on the Steffen Building at BNHV. *(2022)*	400 LA						**$400,000**
B-5	**Town Hall Improvements:** Resurface terrazzo hallway floors. *(2019)*				120 LA			**$120,000**
B-6	**Harlem Road Community Center HVAC Controls:** Replace antiquated pneumatic control system with low voltage digital controls at HRCC. *(2020)*		320 LA					**$320,000**
B-7	**Harlem Road Community Center Auditorium Ceiling & Seating Replacement:** Replacement and abatement of ceiling tiles with acoustical design, replace seating and carpeting, and paint the entire room. *(2019)*		463 LA 1,000 X					**$1,463,000**
B-8	**Museum Improvements:** Maintain Town-owned buildings at the Buffalo Niagara Heritage Village required by the Town's contract. *(2019)*	200 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$700,000**

Key:

Funding Source
T – Tax
L – Bond
S – Surplus
E - Encumbered
I/M – I&I or Mitigation Funds
RF – Recreation Fund
OF – Open Space Fund
F/S – Federal or State Aid
X – Private Source

Funding Account
A – General Account
B – Part Town
C – Community Environment
D – Highway
F – Lighting
G – Sanitary Sewer District
H – Storm Drainage District
I – Water District
W – Water Pollution Control Facility
– Special District Number
NS – None Submitted

INTRODUCTION / EXISTING CONDITIONS:

The Town of Amherst owns and operates numerous facilities within the Town of Amherst. Many of those facilities incorporate the use of a parking lot. These typically asphalt parking lots must be maintained on a consistent basis in order to avoid costly, complete replacement of these lots. In 2004, the Town removed parking lot maintenance from the annual budget process from each Department and directed that all maintenance of off-street parking serving Town of Amherst buildings and facilities be funded through the Town's annual Capital Improvements Program.

In 2005, a condition survey of all town facility off-street parking lots was conducted and based on the response from all department heads, 28 lots totaling over 2,000,000 sq. ft. were identified for improvement. The following represents an analysis of the improvements that have been made in recent years:

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution -

2016 Improvements

Facility	Improvement
Clearfield Library	Seal / Stripe
Senior Center	Seal / Stripe
WPCF	Seal / Stripe
Paradise Park	Seal / Stripe
Police Dept.	Seal / Stripe
Town Court	Seal / Stripe
North Amherst Rec. Center	Seal / Stripe
Clearfield Rec Center	Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Parks Dept.	Mill / Pave / Stripe
Highway Dept.	Mill / Pave / Stripe
Engineering	Stripe
Audubon Library	Stripe

2017 Improvements

Facility	Improvement
Sweet Home Park	Mill / Pave / Stripe
Eggertsville Youth & Comm. Center	Mill / Pave / Stripe
Audubon Golf Course	Mill / Pave / Stripe
Harlem Rd. Comm. Center	Crack Fill / Seal / Stripe
Engineering Dept.	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Police Dept. (rear lot)	Crack Fill / Seal / Stripe
SSgt. Billy Wilson Park	Crack Fill / Seal / Stripe
Parks Dept.	Crack Fill / Seal / Stripe
Highway Dept. (portion)	Crack Fill / Seal / Stripe
Audubon Library	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe / Conc. Aprons

2018 Improvements

Facility	Improvement
Smith Road Buildings A/B/C	Crack Fill / Seal / Stripe
Amherst State Park	Crack Fill / Seal / Stripe
WPCF	Crack Fill
North French Soccer Complex	Crack Fill / Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Amherst Museum	Mill / Pave / Stripe
Amherst Veteran's Park	Mill / Pave
Senior Center	Crack Fill / Seal / Stripe
Eggertsville Youth & Comm. Center	Crack Fill / Seal / Stripe
Eggertsville Park	Crack Fill / Seal / Stripe
Amherst Police & Court	Crack Fill / Seal / Stripe
Audubon Golf Course	Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Highway Department	Mill / Pave
Amherst Bike Path Trail-head	Mill / Pave

2019 Improvements

Facility	Improvement
WPCF	Mill / Pave
Clearfield Recreation Center	Excavation Repair / Mill / Pave
Northtown Center	Mill / Pave

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution -

2020 Improvements

Facility	Improvement
North Forest Park	Excavation Repair / Mill / Pave
Paradise Park	Excavation Repair / Mill / Pave

2021 Improvements

Facility	Improvement
Williamsville Youth and Family Center	Excavation Repair / Mill / Pave

PROPOSED SCOPE OF IMPROVEMENTS:

In order to address the ongoing deterioration of town facility parking lots, sidewalks and aprons, numerous improvement activities are planned. Asphalt excavation repairs, milling and paving will be provided at numerous locations. Some locations will be improved through replacement of concrete curbs, sidewalks and/or parking lot aprons. Further, some facilities will also have their drainage receivers and/or parking stops improved or replaced. A breakdown of proposed improvement activities and associated costs per facility are provided within this report. The planned improvements at these facilities will address the current highest priority (worst condition) required improvements. All of the improvements described herein will have a minimum useful life of 10-years.

The improvements outlined herein will begin in 2022 and be completed within the 2023 construction season. The above project will be bonded against the Town of Amherst General Fund at a *total project cost* of $110,000, financed entirely with serial bonds. The above project is characterized as a replacement-in-kind project.

FINANCIAL SUMMARY:

Estimated Construction Costs	$ 109,450
Legal / Administrative	550
Project Total	**$ 110,000**

TAXATION SUMMARY:

Total Bond Amount:	$110,000
Bond Term:	10 Years
Annual Tax Impacts:	$0.0013 per $1,000 AV (General Fund)
Typical Property Taxation Impact:	$0.25 per $100,000 property

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution -

2022 Proposed Town Facility Parking Improvements

Project Cost Estimate per facility

Facility Description	Mill [sq.yd.]	Item Cost	Pave 1.25" Top (Type 7) [sq.yd.]	Item Cost	Pave 2.0" Binder [sq.yd.]	Item Cost	Receivers	Item Cost	Parking Stops	Item Cost	Facility Totals
Veteran's Park	6,000	$18,000	6,000	$36,875	6,000	$49,333	2	$1,000	50	2,600	$107,808
Town Facilities							2	$1,000	10	520	$1,520
Totals	6,000		6,000		6,000		4		60		$109,328
Converted to Tons			417		667						
Costs	$3.00		$88.50		$74.00		$500.00		$52.00		
Estimated Costs	$18,000.00	$18,000.00	$36,875.00	$36,875.00	$49,333.33	$49,333.33	$2,000.00	$2,000.00	$3,120.00	$3,120.00	

Subtotal	$109,328
Admin / Bond Costs	$550
Total to spend	**$109,878**
Bonded Amount	**$110,000**

Attachment: March 2022_Town Facility Parking Lot Maint -CIP_B-2 (RES-2022-352 : Town Facility Parking

EXTRACT OF MINUTES

Meeting of the Town Board of the

Town of Amherst, in the

County of Erie, New York

April 11, 2022

* * *

A regular meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, was held at the Town Hall, 5583 Main Street, Williamsville, New York, on April 11, 2022.

There were present:	Hon. Brian J. Kulpa, Supervisor; and
Board members:	Jacqualine Berger, Councilwoman Deborah Bruch Bucki Councilwoman Shawn Lavin, Councilman Michael R. Szukala, Councilman
There were absent:	
Also present:	Francina J. Spoth, Town Clerk

* * *

_____ offered the following resolution and moved its adoption:

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

BOND RESOLUTION OF THE TOWN OF AMHERST, NEW YORK, ADOPTED APRIL 11, 2022, AUTHORIZING TOWN-WIDE PARKING LOT PAVING IMPROVEMENTS, STATING THE ESTIMATED TOTAL MAXIMUM COST THEREOF IS $110,000, APPROPRIATING SAID AMOUNT FOR SUCH PURPOSE, AND AUTHORIZING THE ISSUANCE OF BONDS IN THE PRINCIPAL AMOUNT OF $110,000 TO FINANCE SAID APPROPRIATION

THE TOWN BOARD OF THE TOWN OF AMHERST, IN THE COUNTY OF ERIE, NEW YORK, HEREBY RESOLVES (by the favorable vote of not less than two-thirds of all the members of said Town Board) AS FOLLOWS:

Section 1. The Town of Amherst, in the County of Erie, New York (herein called the "Town"), is hereby authorized to undertake Town-wide parking lot paving improvements, as described in the map, plan and report dated March 2022, prepared by the Town Engineering Department (2022-2027 Capital Improvement Program Project B-2). The estimated total maximum cost thereof, including preliminary costs and costs incidental thereto and the financing thereof, is $110,000 and said amount is hereby appropriated for such purpose. The plan of financing includes the issuance of bonds in the aggregate principal amount of $110,000 to finance said appropriation, and the levy and collection of taxes on all the taxable real property in the Town to pay the principal of said bonds and the interest thereon as the same shall become due and payable.

Section 2. Bonds of the Town in the principal amount of $110,000 are hereby authorized to be issued pursuant to the provisions of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York (herein called the "Law"), to finance said objects or purposes as set forth in section 1 hereof.

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Section 3. The following additional matters are hereby determined and declared:

(a) The period of probable usefulness applicable to the class of objects or purposes for which said $110,000 bonds are authorized to be issued, within the limitations of Section 11.00 a. 20(f) of the Law, is ten (10) years.

(b) The proceeds of the bonds herein authorized and any bond anticipation notes issued in anticipation of said bonds may be applied to reimburse the Town for expenditures made after the effective date of this resolution for the purpose for which said bonds are authorized. The foregoing statement of intent with respect to reimbursement is made in conformity with Treasury Regulation Section 1.150-2 of the United States Treasury Department.

(c) The proposed maturity of the bonds authorized by this resolution will exceed five (5) years.

Section 4. Each of the bonds authorized by this resolution, and any bond anticipation notes issued in anticipation of the sale of said bonds, shall contain the recital of validity as prescribed by Section 52.00 of the Law and said bonds, and any notes issued in anticipation of said bonds, shall be general obligations of the Town, payable as to both principal and interest by general tax upon all the taxable real property within the Town. The faith and credit of the Town are hereby irrevocably pledged to the punctual payment of the principal of and interest on said bonds, and any notes issued in anticipation of the sale of said bonds, and provision shall be made annually in the budget of the Town by appropriation for (a) the amortization and redemption of the bonds, and any notes in anticipation thereof to mature in such year, and (b) the payment of interest to be due and payable in such year.

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Section 5. Subject to the provisions of this resolution and of the Law and pursuant to the provisions of Section 21.00 of the Law relative to the authorization of the issuance of bonds with substantially level or declining annual debt service, Section 30.00 relative to the authorization of the issuance of bond anticipation notes and Section 50.00 and Sections 56.00 to 60.00 and 168.00 of the Law, the powers and duties of the Town Board relative to authorizing bond anticipation notes and prescribing the terms, form and contents and as to the sale and issuance of the bonds herein authorized, and of any bond anticipation notes issued in anticipation of said bonds, and the renewals of said bond anticipation notes, and as to the execution of agreements for credit enhancements, are hereby delegated to the Supervisor, the chief fiscal officer of the Town.

Section 6. The validity of the bonds authorized by this resolution, and of any notes issued in anticipation of the sale of said bonds, may be contested only if:

(a) such obligations are authorized for an object or purpose for which the Town is not authorized to expend money, or

(b) the provisions of law which should be complied with at the date of the publication of such resolution, or a summary thereof, are not substantially complied with,

and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of such publication, or

(c) such obligations are authorized in violation of the provisions of the constitution.

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Section 7. This bond resolution is subject to a permissive referendum and the Town Clerk is hereby authorized and directed, within fifteen (15) days after the adoption of this resolution, to cause to be published, in full, in "The Amherst Bee," a newspaper having a general circulation within said Town and hereby designated the official newspaper of the Town for such publication and posted on the sign board of the Town maintained pursuant to the Town Law, a Notice in substantially the following form:

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

TOWN OF AMHERST. NEW YORK

PLEASE TAKE NOTICE that on April 11, 2022, the Town Board of the Town of Amherst, in the County of Erie, New York, adopted a bond resolution entitled:

> "BOND RESOLUTION OF THE TOWN OF AMHERST, NEW YORK, ADOPTED APRIL 11, 2022, AUTHORIZING TOWN-WIDE PARKING LOT PAVING IMPROVEMENTS, STATING THE ESTIMATED TOTAL MAXIMUM COST THEREOF IS $110,000, APPROPRIATING SAID AMOUNT FOR SUCH PURPOSE, AND AUTHORIZING THE ISSUANCE OF BONDS IN THE PRINCIPAL AMOUNT OF $110,000 TO FINANCE SAID APPROPRIATION,"

an abstract of which bond resolution concisely stating the purpose and effect thereof, being as follows:

FIRST: AUTHORIZING said Town is authorized to undertake Town-wide parking lot paving improvements, as described in the map, plan and report dated March 2022, prepared by the Town Engineering Department (2022-2027 Capital Improvement Program Project B-2); STATING the estimated total maximum cost thereof, including preliminary costs, and costs incidental thereto and the financing thereof, is $110,000; APPROPRIATING said amount for such purpose; and STATING the plan of financing includes the issuance of bonds in the principal amount of $110,000 to finance said appropriation, and the levy and collection of taxes on all the taxable real property in the Town to pay the principal of said bonds and the interest thereon;

SECOND: AUTHORIZING the issuance of bonds in the principal amount of $110,000 pursuant to the Local Finance Law of the State of New York (the "Law") to finance said appropriation;

THIRD: DETERMINING and STATING the period of probable usefulness applicable to the purpose for which said bonds are authorized to be issued is ten (10) years; the proceeds of said bonds and any bond anticipation notes issued in anticipation thereof may be applied to reimburse the Town for expenditures made after the effective date of this bond resolution for the purpose for which said bonds are authorized; and the proposed maturity of said bonds will exceed five (5) years;

FOURTH: DETERMINING that said bonds, and any bond anticipation notes issued in anticipation of said bonds, and the renewals of said bond anticipation notes shall be general obligations of the Town; and PLEDGING to their payment the faith and credit of the Town;

FIFTH: DELEGATING to the Supervisor the powers and duties as to the issuance of said bonds, and any bond anticipation notes issued in anticipation of said bonds, or the renewals thereof; and

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

SIXTH: DETERMINING that the bond resolution is subject to a permissive referendum.

DATED: April 11, 2022

FRANCINA J. SPOTH,
Town Clerk

Section 8. The Town Clerk is hereby authorized and directed to cause said bond resolution to be published, in summary, after said bond resolution shall take effect, in the newspaper referred to in Section 7 hereof, and hereby designated the official newspaper for said publication, together with a Notice in substantially the form as provided by Section 81.00 of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York.

* * *

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

The adoption of the foregoing resolution was seconded by _____and duly put to a vote on roll call, which resulted as follows:

AYES:

NOES:

The resolution was declared adopted.

****

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed extract from the minutes of a meeting of the Town Board of said Town of Amherst duly called and held on April 11, 2022, has been compared by me with the original minutes as officially recorded in my office in the Minute Book of said Town Board and is a true, complete and correct copy thereof and of the whole of said original minutes so far as the same relate to the subject matters referred to in said extract.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this _____day of April, 2022.

(SEAL)

_____
Town Clerk

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

AFFIDAVIT OF POSTING

STATE OF NEW YORK)
:ss:
COUNTY OF ERIE)

FRANCINA J. SPOTH, being duly sworn, deposes and says:

That she is and at all times hereinafter mentioned she was the duly elected, qualified and acting Town Clerk of the Town of Amherst, State of New York;

That on _____, 2022, she has caused to be conspicuously posted and fastened up a Notice setting forth an abstract of the bond resolution duly adopted by the Town Board on April 11, 2022, a copy of which is annexed hereto and made a part hereof, on the sign board of the Town maintained pursuant to the Town Law.

_____
Town Clerk

Subscribed and sworn to before me

this _____ day of April, 2022.

_____
Notary Public, State of New York

Attachment: CertBondReso (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Attachment: MPR B-2 Town Parking Lot Paving (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Town of Amherst
Building Maintenance Department

Town Facility Parking Lot Maintenance

2022-2027 C.I.P. Project B-2

Town of Amherst Project # 2022.008

Map, Plan & Report

March 2022

CONTENTS:

- Approved 2022 – 2027 CIP Project B-2
- Introductions / Existing Conditions
- Proposed Scope of Improvements
- Financial / Taxation Summary
- Project Cost Estimate
- SEQR Determination – Type II Action

Prepared by
Town of Amherst Engineering Department
1100 North Forest Rd.
Williamsville, NY 14221
(716) 631-7154

Town Facility Parking Lot Maintenance

TOWN OF AMHERST

Approved 2022 – 2027 Capital Improvement Program

Note: Completion of projects with Federal or State funding (F/S) is contingent upon successful pursuit of those funds by the sponsoring department.

Building Department — ***Recommended Schedule (X $1,000)***

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
B-1	**Building Department / Maintenance Vehicles:** Replace one mini dump truck used for daily tasks. *(2019)*	80 LA						**$80,000**
B-2	**Town Parking Lot Paving:** Parking lot paving improvements at Town buildings and facilities to correct deterioration and conduct subsequent maintenance. *(2009)*	110 LA	100 LA 100 LW	100 LA 100 LW	100 LA	100 LA	100LA	**$810,000**
B-3	**Town Parking Lot Sealing & Striping:** Parking lot seal coating, crack filling, and striping at Town buildings and facilities. *(2009)*	100 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$600,000**
B-4	**Steffen Building Roof Replacement:** Replace the failing roof on the Steffen Building at BNHV. *(2022)*	400 LA						**$400,000**
B-5	**Town Hall Improvements:** Resurface terrazzo hallway floors. *(2019)*				120 LA			**$120,000**
B-6	**Harlem Road Community Center HVAC Controls:** Replace antiquated pneumatic control system with low voltage digital controls at HRCC. *(2020)*		320 LA					**$320,000**
B-7	**Harlem Road Community Center Auditorium Ceiling & Seating Replacement:** Replacement and abatement of ceiling tiles with acoustical design, replace seating and carpeting, and paint the entire room. *(2019)*		463 LA 1,000 X					**$1,463,000**
B-8	**Museum Improvements:** Maintain Town-owned buildings at the Buffalo Niagara Heritage Village required by the Town's contract. *(2019)*	200 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$700,000**

Key:

Funding Source
T – Tax
L – Bond
S – Surplus
E - Encumbered
I/M – I&I or Mitigation Funds
RF – Recreation Fund
OF – Open Space Fund
F/S – Federal or State Aid
X – Private Source

Funding Account
A – General Account
B – Part Town
C – Community Environment
D – Highway
F – Lighting
G – Sanitary Sewer District
H – Storm Drainage District
I – Water District
W – Water Pollution Control Facility
– Special District Number
NS – None Submitted

INTRODUCTION / EXISTING CONDITIONS:

The Town of Amherst owns and operates numerous facilities within the Town of Amherst. Many of those facilities incorporate the use of a parking lot. These typically asphalt parking lots must be maintained on a consistent basis in order to avoid costly, complete replacement of these lots. In 2004, the Town removed parking lot maintenance from the annual budget process from each Department and directed that all maintenance of off-street parking serving Town of Amherst buildings and facilities be funded through the Town's annual Capital Improvements Program.

In 2005, a condition survey of all town facility off-street parking lots was conducted and based on the response from all department heads, 28 lots totaling over 2,000,000 sq. ft. were identified for improvement. The following represents an analysis of the improvements that have been made in recent years:

Attachment: MPR B-2 Town Parking Lot Paving (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

2016 Improvements

Facility	Improvement
Clearfield Library	Seal / Stripe
Senior Center	Seal / Stripe
WPCF	Seal / Stripe
Paradise Park	Seal / Stripe
Police Dept.	Seal / Stripe
Town Court	Seal / Stripe
North Amherst Rec. Center	Seal / Stripe
Clearfield Rec Center	Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Parks Dept.	Mill / Pave / Stripe
Highway Dept.	Mill / Pave / Stripe
Engineering	Stripe
Audubon Library	Stripe

2017 Improvements

Facility	Improvement
Sweet Home Park	Mill / Pave / Stripe
Eggertsville Youth & Comm. Center	Mill / Pave / Stripe
Audubon Golf Course	Mill / Pave / Stripe
Harlem Rd. Comm. Center	Crack Fill / Seal / Stripe
Engineering Dept.	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Police Dept. (rear lot)	Crack Fill / Seal / Stripe
SSgt. Billy Wilson Park	Crack Fill / Seal / Stripe
Parks Dept.	Crack Fill / Seal / Stripe
Highway Dept. (portion)	Crack Fill / Seal / Stripe
Audubon Library	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe / Conc. Aprons

2018 Improvements

Facility	Improvement
Smith Road Buildings A/B/C	Crack Fill / Seal / Stripe
Amherst State Park	Crack Fill / Seal / Stripe
WPCF	Crack Fill
North French Soccer Complex	Crack Fill / Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Amherst Museum	Mill / Pave / Stripe
Amherst Veteran's Park	Mill / Pave
Senior Center	Crack Fill / Seal / Stripe
Eggertsville Youth & Comm. Center	Crack Fill / Seal / Stripe
Eggertsville Park	Crack Fill / Seal / Stripe
Amherst Police & Court	Crack Fill / Seal / Stripe
Audubon Golf Course	Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Highway Department	Mill / Pave
Amherst Bike Path Trail-head	Mill / Pave

2019 Improvements

Facility	Improvement
WPCF	Mill / Pave
Clearfield Recreation Center	Excavation Repair / Mill / Pave
Northtown Center	Mill / Pave

Attachment: MPR B-2 Town Parking Lot Paving (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

2020 Improvements

Facility	Improvement
North Forest Park	Excavation Repair / Mill / Pave
Paradise Park	Excavation Repair / Mill / Pave

2021 Improvements

Facility	Improvement
Williamsville Youth and Family Center	Excavation Repair / Mill / Pave

PROPOSED SCOPE OF IMPROVEMENTS:

In order to address the ongoing deterioration of town facility parking lots, sidewalks and aprons, numerous improvement activities are planned. Asphalt excavation repairs, milling and paving will be provided at numerous locations. Some locations will be improved through replacement of concrete curbs, sidewalks and/or parking lot aprons. Further, some facilities will also have their drainage receivers and/or parking stops improved or replaced. A breakdown of proposed improvement activities and associated costs per facility are provided within this report. The planned improvements at these facilities will address the current highest priority (worst condition) required improvements. All of the improvements described herein will have a minimum useful life of 10-years.

The improvements outlined herein will begin in 2022 and be completed within the 2023 construction season. The above project will be bonded against the Town of Amherst General Fund at a *total project cost* of $110,000, financed entirely with serial bonds. The above project is characterized as a replacement-in-kind project.

FINANCIAL SUMMARY:

Estimated Construction Costs	$ 109,450
Legal / Administrative	550
Project Total	**$ 110,000**

TAXATION SUMMARY:

Total Bond Amount:	$110,000
Bond Term:	10 Years
Annual Tax Impacts:	$0.0013 per $1,000 AV (General Fund)
Typical Property Taxation Impact:	$0.25 per $100,000 property

Attachment: MPR B-2 Town Parking Lot Paving (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

2022 Proposed Town Facility Parking Improvements

Project Cost Estimate per facility

Facility Description	Mill [sq.yd.]	Item Cost	Pave 1.25" Top (Type 7) [sq.yd.]	Item Cost	Pave 2.0" Binder [sq.yd.]	Item Cost	Receivers	Item Cost	Parking Stops	Item Cost	Facility Totals
Veteran's Park	6,000	$18,000	6,000	$36,875	6,000	$49,333	2	$1,000	50	2,600	$107,808
Town Facilities							2	$1,000	10	520	$1,520
Totals	6,000		6,000		6,000		4		60		$109,328
Converted to Tons			417		667						
Costs	$3.00		$88.50		$74.00		$500.00		$52.00		
Estimated Costs	$18,000.00	$18,000.00	$36,875.00	$36,875.00	$49,333.33	$49,333.33	$2,000.00	$2,000.00	$3,120.00	$3,120.00	

Subtotal	$109,328
Admin / Bond Costs	$550
Total to spend	**$109,878**
Bonded Amount	**$110,000**

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM March 7, 2022

TO: Brian J. Armstrong, EIT, Assistant Municipal Engineer
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town Facility Parking Lot Maintenance
2022-2027 C.I.P. Project B-2, TOA Project Number 2022.008

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\March 2022_Town Facility Parking Lot Maint -CIP_B-2.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: MPR B-2 Town Parking Lot Paving (RES-2022-352 : Town Facility Parking Lot Maintenance (Bond Resolution - $110,000))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25620 A **RESOLUTION 2022-353** **ROLL CALL VOTE (ADOPTED)**

Town Facility Ashalt Sealing and Striping (Bond Resolution - $100,000)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **Town Facility Asphalt Sealing and Striping**
2022-2027 C.I.P. - Project No. B-3
Bond Resolution - $100,000

Kindly take the following action with respect to the above bond request:

(1) Adopt the attached SEQR determination for the above project as determined by the Town of Amherst Planning Department; and

(2) Adopt the attached bond resolution authorizing the issuance of $100,000 in serial bonds for the above-referenced Town improvement.

The adoption of the bond resolution does ***not*** require a public hearing to be held because the improvement is a Town improvement not involving a special district.

Also attached is the Map Plan and Report which provides further detail on the scope of the project.

Thank you.

SJS:nmb
Attachments
c: Tim Koller, Deputy Town Clerk *(w/attachment*, **Agenda Item - April 11, 2022**)
Daryl C. Bramer, Comptroller *(w/attachment)*
Lynda Juul, Director of Finance *(w/attachment)*
Dale Ulatowski, AICP, Assistant Planning Director/ZEO (*w/attachment)*
Dan Howard, Director of Planning *(w/attachment)*
Brian J. Armstrong, Assistant Municipal Engineer *(w/attachment)*
Daniel J. Rizzo, Director, Facilities Department *(w/attachment)*

4/11/2022
A motion to adopt the SEQR determination was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0. A motion to approve the Bond

resolution was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved via Roll Call vote 5-0.

FINANCIAL IMPACT:

Bond Resolution - $100,000

RESULT:	**ROLL CALL VOTE (ADOPTED) [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM March 7, 2022

TO: Brian J. Armstrong, EIT, Assistant Municipal Engineer
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town Facility Asphalt Sealing & Striping
2022-2027 C.I.P. Project B-3, TOA Project Number 2022.008A

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

Town of Amherst
Building Maintenance Department

Town Facility Asphalt Sealing & Striping

2022-2027 C.I.P. Project B-3

Town of Amherst Project # 2022.008A

Map, Plan & Report

March 2022

CONTENTS:

- Approved 2022 - 2027 CIP Project B-3
- Introductions / Existing Conditions
- Proposed Scope of Improvements
- Financial / Taxation Summary
- SEQR Determination – Type II Action

Prepared by
Town of Amherst Engineering Department
1100 North Forest Rd.
Williamsville, NY 14221
(716) 631-7154

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

Town Facility Asphalt Sealing & Striping

TOWN OF AMHERST

Approved 2022 – 2027 Capital Improvement Program

Note: Completion of projects with Federal or State funding (F/S) is contingent upon successful pursuit of those funds by the sponsoring department.

Green highlights indicate possible Energy Performance Contract (EPC) funded projects
Blue highlights indicate possible American Rescue Plan Act (ARPA) funded projects

Building Department — ***Recommended Schedule (X $1,000)***

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
B-1	**Building Department / Maintenance Vehicles:** Replace one mini dump truck used for daily tasks. *(2019)*	80 LA						**$80,000**
B-2	**Town Parking Lot Paving:** Parking lot paving improvements at Town buildings and facilities to correct deterioration and conduct subsequent maintenance. *(2009)*	110 LA	100 LA 100 LW	100 LA 100 LW	100 LA	100 LA	100LA	**$810,000**
B-3	**Town Parking Lot Sealing & Striping:** Parking lot seal coating, crack filling, and striping at Town buildings and facilities. *(2009)*	100 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$600,000**
B-4	**Steffen Building Roof Replacement:** Replace the failing roof on the Steffen Building at BNHV. *(2022)*	400 LA						**$400,000**
B-5	**Town Hall Improvements:** Resurface terrazzo hallway floors. *(2019)*				120 LA			**$120,000**
B-6	**Harlem Road Community Center HVAC Controls:** Replace antiquated pneumatic control system with low voltage digital controls at HRCC. *(2020)*		320 LA					**$320,000**
B-7	**Harlem Road Community Center Auditorium Ceiling & Seating Replacement:** Replacement and abatement of ceiling tiles with acoustical design, replace seating and carpeting, and paint the entire room. *(2019)*		463 LA 1,000 X					**$1,463,000**
B-8	**Museum Improvements:** Maintain Town-owned buildings at the Buffalo Niagara Heritage Village required by the Town's contract. *(2019)*	200 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$700,000**

Key:

Funding Source
T – Tax
L – Bond
S – Surplus
E - Encumbered
I/M – I&I or Mitigation Funds
RF – Recreation Fund
OF – Open Space Fund
F/S – Federal or State Aid
X – Private Source

Funding Account
A – General Account
B – Part Town
C – Community Environment
D – Highway
F – Lighting
G – Sanitary Sewer District
H – Storm Drainage District
I – Water District
W – Water Pollution Control Facility
– Special District Number
NS – None Submitted

INTRODUCTION / EXISTING CONDITIONS:

The Town of Amherst owns and operates numerous facilities within the Town of Amherst. Many of those facilities incorporate the use of a parking lot. These typically asphalt parking lots must be maintained on a consistent basis in order to avoid costly, complete replacement of these lots. In 2004, the Town removed parking lot maintenance from the annual budget process from each Department and directed that all maintenance of off-street parking serving Town of Amherst buildings and facilities be funded through the Town's annual Capital Improvements Program.

In 2005, a condition survey of all town facility off-street parking lots was conducted and based on the response from all department heads, 28 lots totaling over 2,000,000 sq. ft. were identified for improvement. The following represents an analysis of the improvements that have been made in recent years:

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

2017 Improvements

Facility	Improvement
Sweet Home Park	Mill / Pave / Stripe
Eggertsville Youth & Comm. Center	Mill / Pave / Stripe
Audubon Golf Course	Mill / Pave / Stripe
Harlem Rd. Comm. Center	Crack Fill / Seal / Stripe
Engineering Dept.	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Police Dept. (rear lot)	Crack Fill / Seal / Stripe
SSgt. Billy Wilson Park	Crack Fill / Seal / Stripe
Parks Dept.	Crack Fill / Seal / Stripe
Highway Dept. (portion)	Crack Fill / Seal / Stripe
Audubon Library	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe / Conc. Aprons

2018 Improvements

Facility	Improvement
Smith Road Buildings A/B/C	Crack Fill / Seal / Stripe
Amherst State Park	Crack Fill / Seal / Stripe
WPCF	Crack Fill
North French Soccer Complex	Crack Fill / Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Amherst Museum	Mill / Pave / Stripe
Amherst Veteran's Park	Mill / Pave
Senior Center	Crack Fill / Seal / Stripe
Eggertsville Youth & Comm. Center	Crack Fill / Seal / Stripe
Eggertsville Park	Crack Fill / Seal / Stripe
Amherst Police & Court	Crack Fill / Seal / Stripe
Audubon Golf Course	Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Highway Department	Mill / Pave
Amherst Bike Path Trail-head	Mill / Pave

2019 Improvements

Facility	Improvement
Parks Department	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal
Highway Department	Crack Fill / Seal / Stripe
Northtown Ice Center	Crack Fill / Seal / Stripe
Audubon Parkway Complex	Crack Fill / Seal / Stripe
North French Soccer Complex	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Bassett Park	Crack Fill / Seal / Stripe

2020 Improvements

Facility	Improvement
Amherst State Park	Crack Fill / Seal / Stripe
Bassett Park	Crack Fill / Seal / Stripe
Billy Wilson Park	Crack Fill / Seal / Stripe
Eggertsville Public Library	Crack Fill / Seal / Stripe
Engineering Department	Crack Fill / Seal / Stripe
Highway Department (Front lot)	Crack Fill / Seal / Stripe
North French Soccer Complex	Crack Fill / Seal / Stripe

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

Northtown Skate Park	Crack Fill / Seal / Stripe
Senior Center	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal / Stripe
Mathewson McCarthy Park (East lot)	Stripe
North Forest Pool (potion)	Stripe
Paradise Park	Stripe

2021 Improvements

Facility	**Improvement**
Mathewson McCarthy Park (West lot)	Crack Fill / Seal / Stripe
North Forest Pool	Crack Fill / Seal / Stripe
Highway Department (Rear lot)	Crack Fill / Seal / Stripe
Paradise Park	Crack Fill / Seal / Stripe
Northtown Ice Center	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Central Amherst Little League	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal / Stripe
Audubon Par 3 GC	Crack Fill / Seal / Stripe
Audubon Complex – Police / Court	Crack Fill / Seal / Stripe
Harlem Road Community Center	Crack Fill / Seal / Stripe
North Amherst Recreation Center	Crack Fill / Seal / Stripe
Williamsville Youth & Family Center	Stripe

PROPOSED SCOPE OF IMPROVEMENTS:

In order to address the ongoing deterioration of town facility parking lots and walkways, numerous improvement activities are planned. Asphalt areas will be cleaned and have crack-filler applied as required. The subject asphalt areas will then be sealed and striped as required. These improvements may be completed at any town-owned facility depending on condition, but are anticipated to be completed at the following locations:

- Highway Department (Front Lot)
- Northtown Ice Center
- Audubon Par 3 GC
- Town Hall
- Plant No. 16 Wastewater Treatment Facility
- Bedford Park
- Amherst Museum
- Amherst Senior Center
- Clearfield Library
- Audubon Library
- Eggertsville Library
- Audubon Golf Course and Driving Range
- Clearfield Recreation Center
- Eggertsville Youth & Community Center
- Veteran's Park
- Parks Department
- North Forest Park
- Central Amherst Little League
- Amherst Community Policing and Training Center
- Williamsville Youth & Family Center

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

The planned improvements at these facilities will address the current highest priority (worst condition) required improvements. All of the improvements described herein will have a minimum useful life of 5-years.

The improvements outlined herein will begin in 2022 and be completed within the 2023 construction season. The above project will be bonded against the Town of Amherst General Fund at a *total project cost* of $100,000, financed entirely with serial bonds. The above project is characterized as a replacement-in-kind project.

FINANCIAL SUMMARY:

Estimated Construction Costs	$ 99,500
Legal / Administrative	500
Project Total	**$ 100,000**

TAXATION SUMMARY:

Total Bond Amount:	$ 100,000
Bond Term:	5 Years
Annual Tax Impacts:	$0.0021 per $1,000 AV (General Fund)
Typical Property Taxation Impact:	$0.42 per $200,000 property

Attachment: March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3 (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond

EXTRACT OF MINUTES

Meeting of the Town Board of the

Town of Amherst, in the

County of Erie, New York

April 11, 2022

* * *

A regular meeting of the Town Board of the Town of Amherst, in the County of Erie, New York, was held at the Town Hall, 5583 Main Street, Williamsville, New York, on April 11, 2022.

There were present:	Hon. Brian J. Kulpa, Supervisor; and
Board members:	Jacqualine Berger, Councilwoman Deborah Bruch Bucki Councilwoman Shawn Lavin, Councilman Michael R. Szukala, Councilman
There were absent:	
Also present:	Francina J. Spoth, Town Clerk

* * *

_____ offered the following resolution and moved its adoption:

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

BOND RESOLUTION OF THE TOWN OF AMHERST, NEW YORK, ADOPTED APRIL 11, 2022, AUTHORIZING TOWN-WIDE PARKING LOT ASPHALT SEALING AND STRIPING, STATING THE ESTIMATED TOTAL MAXIMUM COST THEREOF IS $100,000, APPROPRIATING SAID AMOUNT FOR SUCH PURPOSE, AND AUTHORIZING THE ISSUANCE OF BONDS IN THE PRINCIPAL AMOUNT OF $100,000 TO FINANCE SAID APPROPRIATION

THE TOWN BOARD OF THE TOWN OF AMHERST, IN THE COUNTY OF ERIE, NEW YORK, HEREBY RESOLVES (by the favorable vote of not less than two-thirds of all the members of said Town Board) AS FOLLOWS:

Section 1. The Town of Amherst, in the County of Erie, New York (herein called the "Town"), is hereby authorized to undertake Town-wide parking lot asphalt sealing and striping, as described in the map, plan and report dated March 2022, prepared by the Town Engineering Department (2022-2027 Capital Improvement Program Project B-3). The estimated total maximum cost thereof, including preliminary costs and costs incidental thereto and the financing thereof, is $100,000 and said amount is hereby appropriated for such purpose. The plan of financing includes the issuance of bonds in the aggregate principal amount of $100,000 to finance said appropriation, and the levy and collection of taxes on all the taxable real property in the Town to pay the principal of said bonds and the interest thereon as the same shall become due and payable.

Section 2. Bonds of the Town in the principal amount of $100,000 are hereby authorized to be issued pursuant to the provisions of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York (herein called the "Law"), to finance said objects or purposes as set forth in section 1 hereof.

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

Section 3. The following additional matters are hereby determined and declared:

(a) The period of probable usefulness applicable to the class of objects or purposes for which said $100,000 bonds are authorized to be issued, within the limitations of Section 11.00 a. 20(f) of the Law, is ten (10) years.

(b) The proceeds of the bonds herein authorized and any bond anticipation notes issued in anticipation of said bonds may be applied to reimburse the Town for expenditures made after the effective date of this resolution for the purpose for which said bonds are authorized. The foregoing statement of intent with respect to reimbursement is made in conformity with Treasury Regulation Section 1.150-2 of the United States Treasury Department.

(c) The proposed maturity of the bonds authorized by this resolution will exceed five (5) years.

Section 4. Each of the bonds authorized by this resolution, and any bond anticipation notes issued in anticipation of the sale of said bonds, shall contain the recital of validity as prescribed by Section 52.00 of the Law and said bonds, and any notes issued in anticipation of said bonds, shall be general obligations of the Town, payable as to both principal and interest by general tax upon all the taxable real property within the Town. The faith and credit of the Town are hereby irrevocably pledged to the punctual payment of the principal of and interest on said bonds, and any notes issued in anticipation of the sale of said bonds, and provision shall be made annually in the budget of the Town by appropriation for (a) the amortization and redemption of the bonds, and any notes in anticipation thereof to mature in such year, and (b) the payment of interest to be due and payable in such year.

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

Section 5. Subject to the provisions of this resolution and of the Law and pursuant to the provisions of Section 21.00 of the Law relative to the authorization of the issuance of bonds with substantially level or declining annual debt service, Section 30.00 relative to the authorization of the issuance of bond anticipation notes and Section 50.00 and Sections 56.00 to 60.00 and 168.00 of the Law, the powers and duties of the Town Board relative to authorizing bond anticipation notes and prescribing the terms, form and contents and as to the sale and issuance of the bonds herein authorized, and of any bond anticipation notes issued in anticipation of said bonds, and the renewals of said bond anticipation notes, and as to the execution of agreements for credit enhancements, are hereby delegated to the Supervisor, the chief fiscal officer of the Town.

Section 6. The validity of the bonds authorized by this resolution, and of any notes issued in anticipation of the sale of said bonds, may be contested only if:

(a) such obligations are authorized for an object or purpose for which the Town is not authorized to expend money, or

(b) the provisions of law which should be complied with at the date of the publication of such resolution, or a summary thereof, are not substantially complied with,

and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of such publication, or

(c) such obligations are authorized in violation of the provisions of the constitution.

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

Section 7. This bond resolution is subject to a permissive referendum and the Town Clerk is hereby authorized and directed, within fifteen (15) days after the adoption of this resolution, to cause to be published, in full, in "The Amherst Bee," a newspaper having a general circulation within said Town and hereby designated the official newspaper of the Town for such publication and posted on the sign board of the Town maintained pursuant to the Town Law, a Notice in substantially the following form:

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

TOWN OF AMHERST. NEW YORK

PLEASE TAKE NOTICE that on April 11, 2022, the Town Board of the Town of Amherst, in the County of Erie, New York, adopted a bond resolution entitled:

> "BOND RESOLUTION OF THE TOWN OF AMHERST, NEW YORK, ADOPTED APRIL 11, 2022, AUTHORIZING TOWN-WIDE PARKING LOT ASPHALT SEALING AND STRIPING, STATING THE ESTIMATED TOTAL MAXIMUM COST THEREOF IS $100,000, APPROPRIATING SAID AMOUNT FOR SUCH PURPOSE, AND AUTHORIZING THE ISSUANCE OF BONDS IN THE PRINCIPAL AMOUNT OF $100,000 TO FINANCE SAID APPROPRIATION,"

an abstract of which bond resolution concisely stating the purpose and effect thereof, being as follows:

FIRST: AUTHORIZING said Town is authorized to undertake Town-wide parking lot asphalt sealing and striping, as described in the map, plan and report dated March 2022, prepared by the Town Engineering Department (2022-2027 Capital Improvement Program Project B-3); STATING the estimated total maximum cost thereof, including preliminary costs, and costs incidental thereto and the financing thereof, is $100,000; APPROPRIATING said amount for such purpose; and STATING the plan of financing includes the issuance of bonds in the principal amount of $100,000 to finance said appropriation, and the levy and collection of taxes on all the taxable real property in the Town to pay the principal of said bonds and the interest thereon;

SECOND: AUTHORIZING the issuance of bonds in the principal amount of $100,000 pursuant to the Local Finance Law of the State of New York (the "Law") to finance said appropriation;

THIRD: DETERMINING and STATING the period of probable usefulness applicable to the purpose for which said bonds are authorized to be issued is ten (10) years; the proceeds of said bonds and any bond anticipation notes issued in anticipation thereof may be applied to reimburse the Town for expenditures made after the effective date of this bond resolution for the purpose for which said bonds are authorized; and the proposed maturity of said bonds will exceed five (5) years;

FOURTH: DETERMINING that said bonds, and any bond anticipation notes issued in anticipation of said bonds, and the renewals of said bond anticipation notes shall be general obligations of the Town; and PLEDGING to their payment the faith and credit of the Town;

FIFTH: DELEGATING to the Supervisor the powers and duties as to the issuance of said bonds, and any bond anticipation notes issued in anticipation of said bonds, or the renewals thereof; and

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

SIXTH: DETERMINING that the bond resolution is subject to a permissive referendum.

DATED: April 11, 2022

FRANCINA J. SPOTH,
Town Clerk

Section 8. The Town Clerk is hereby authorized and directed to cause said bond resolution to be published, in summary, after said bond resolution shall take effect, in the newspaper referred to in Section 7 hereof, and hereby designated the official newspaper for said publication, together with a Notice in substantially the form as provided by Section 81.00 of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York.

* * *

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

The adoption of the foregoing resolution was seconded by _____and duly put to a vote on roll call, which resulted as follows:

AYES:

NOES:

The resolution was declared adopted.

****

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

CERTIFICATE

I, FRANCINA J. SPOTH, Town Clerk of the Town of Amherst, in the County of Erie, State of New York, HEREBY CERTIFY that the foregoing annexed extract from the minutes of a meeting of the Town Board of said Town of Amherst duly called and held on April 11, 2022, has been compared by me with the original minutes as officially recorded in my office in the Minute Book of said Town Board and is a true, complete and correct copy thereof and of the whole of said original minutes so far as the same relate to the subject matters referred to in said extract.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town of Amherst this _____day of April, 2022.

(SEAL)

_____
Town Clerk

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

AFFIDAVIT OF POSTING

STATE OF NEW YORK)
:ss:
COUNTY OF ERIE)

FRANCINA J. SPOTH, being duly sworn, deposes and says:

That she is and at all times hereinafter mentioned she was the duly elected, qualified and acting Town Clerk of the Town of Amherst, State of New York;

That on _____, 2022, she has caused to be conspicuously posted and fastened up a Notice setting forth an abstract of the bond resolution duly adopted by the Town Board on April 11, 2022, a copy of which is annexed hereto and made a part hereof, on the sign board of the Town maintained pursuant to the Town Law.

_____
Town Clerk

Subscribed and sworn to before me

this _____ day of April, 2022.

_____
Notary Public, State of New York

Attachment: CertBondReso (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution - $100,000))

Town of Amherst
Building Maintenance Department

Town Facility Asphalt Sealing & Striping

2022-2027 C.I.P. Project B-3

Town of Amherst Project # 2022.008A

Map, Plan & Report

March 2022

CONTENTS:

- Approved 2022 - 2027 CIP Project B-3
- Introductions / Existing Conditions
- Proposed Scope of Improvements
- Financial / Taxation Summary
- SEQR Determination – Type II Action

Prepared by
Town of Amherst Engineering Department
1100 North Forest Rd.
Williamsville, NY 14221
(716) 631-7154

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

Town Facility Asphalt Sealing & Striping

TOWN OF AMHERST

Approved 2022 – 2027 Capital Improvement Program

Note: Completion of projects with Federal or State funding (F/S) is contingent upon successful pursuit of those funds by the sponsoring department.

Green highlights indicate possible Energy Performance Contract (EPC) funded projects
Blue highlights indicate possible American Rescue Plan Act (ARPA) funded projects

Building Department — ***Recommended Schedule (X $1,000)***

Project ID	Project Title/Description	2022	2023	2024	2025	2026	2027	Total Cost
B-1	**Building Department / Maintenance Vehicles:** Replace one mini dump truck used for daily tasks. *(2019)*	80 LA						**$80,000**
B-2	**Town Parking Lot Paving:** Parking lot paving improvements at Town buildings and facilities to correct deterioration and conduct subsequent maintenance. *(2009)*	110 LA	100 LA 100 LW	100 LA 100 LW	100 LA	100 LA	100LA	**$810,000**
B-3	**Town Parking Lot Sealing & Striping:** Parking lot seal coating, crack filling, and striping at Town buildings and facilities. *(2009)*	100 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$600,000**
B-4	**Steffen Building Roof Replacement:** Replace the failing roof on the Steffen Building at BNHV. *(2022)*	400 LA						**$400,000**
B-5	**Town Hall Improvements:** Resurface terrazzo hallway floors. *(2019)*				120 LA			**$120,000**
B-6	**Harlem Road Community Center HVAC Controls:** Replace antiquated pneumatic control system with low voltage digital controls at HRCC. *(2020)*		320 LA					**$320,000**
B-7	**Harlem Road Community Center Auditorium Ceiling & Seating Replacement:** Replacement and abatement of ceiling tiles with acoustical design, replace seating and carpeting, and paint the entire room. *(2019)*		463 LA 1,000 X					**$1,463,000**
B-8	**Museum Improvements:** Maintain Town-owned buildings at the Buffalo Niagara Heritage Village required by the Town's contract. *(2019)*	200 LA	100 LA	100 LA	100 LA	100 LA	100 LA	**$700,000**

Key:

Funding Source
T – Tax
L – Bond
S – Surplus
E - Encumbered
I/M – I&I or Mitigation Funds
RF – Recreation Fund
OF – Open Space Fund
F/S – Federal or State Aid
X – Private Source

Funding Account
A – General Account
B – Part Town
C – Community Environment
D – Highway
F – Lighting
G – Sanitary Sewer District
H – Storm Drainage District
I – Water District
W – Water Pollution Control Facility
– Special District Number
NS – None Submitted

INTRODUCTION / EXISTING CONDITIONS:

The Town of Amherst owns and operates numerous facilities within the Town of Amherst. Many of those facilities incorporate the use of a parking lot. These typically asphalt parking lots must be maintained on a consistent basis in order to avoid costly, complete replacement of these lots. In 2004, the Town removed parking lot maintenance from the annual budget process from each Department and directed that all maintenance of off-street parking serving Town of Amherst buildings and facilities be funded through the Town's annual Capital Improvements Program.

In 2005, a condition survey of all town facility off-street parking lots was conducted and based on the response from all department heads, 28 lots totaling over 2,000,000 sq. ft. were identified for improvement. The following represents an analysis of the improvements that have been made in recent years:

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

2017 Improvements

Facility	Improvement
Sweet Home Park	Mill / Pave / Stripe
Eggertsville Youth & Comm. Center	Mill / Pave / Stripe
Audubon Golf Course	Mill / Pave / Stripe
Harlem Rd. Comm. Center	Crack Fill / Seal / Stripe
Engineering Dept.	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Police Dept. (rear lot)	Crack Fill / Seal / Stripe
SSgt. Billy Wilson Park	Crack Fill / Seal / Stripe
Parks Dept.	Crack Fill / Seal / Stripe
Highway Dept. (portion)	Crack Fill / Seal / Stripe
Audubon Library	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe / Conc. Aprons

2018 Improvements

Facility	Improvement
Smith Road Buildings A/B/C	Crack Fill / Seal / Stripe
Amherst State Park	Crack Fill / Seal / Stripe
WPCF	Crack Fill
North French Soccer Complex	Crack Fill / Seal / Stripe
Northtown Center	Crack Fill / Seal / Stripe
Amherst Museum	Mill / Pave / Stripe
Amherst Veteran's Park	Mill / Pave
Senior Center	Crack Fill / Seal / Stripe
Eggertsville Youth & Comm. Center	Crack Fill / Seal / Stripe
Eggertsville Park	Crack Fill / Seal / Stripe
Amherst Police & Court	Crack Fill / Seal / Stripe
Audubon Golf Course	Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Highway Department	Mill / Pave
Amherst Bike Path Trail-head	Mill / Pave

2019 Improvements

Facility	Improvement
Parks Department	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal
Highway Department	Crack Fill / Seal / Stripe
Northtown Ice Center	Crack Fill / Seal / Stripe
Audubon Parkway Complex	Crack Fill / Seal / Stripe
North French Soccer Complex	Crack Fill / Seal / Stripe
Eggertsville Library	Crack Fill / Seal / Stripe
Bassett Park	Crack Fill / Seal / Stripe

2020 Improvements

Facility	Improvement
Amherst State Park	Crack Fill / Seal / Stripe
Bassett Park	Crack Fill / Seal / Stripe
Billy Wilson Park	Crack Fill / Seal / Stripe
Eggertsville Public Library	Crack Fill / Seal / Stripe
Engineering Department	Crack Fill / Seal / Stripe
Highway Department (Front lot)	Crack Fill / Seal / Stripe
North French Soccer Complex	Crack Fill / Seal / Stripe

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

Northtown Skate Park	Crack Fill / Seal / Stripe
Senior Center	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal / Stripe
Mathewson McCarthy Park (East lot)	Stripe
North Forest Pool (potion)	Stripe
Paradise Park	Stripe

2021 Improvements

Facility	**Improvement**
Mathewson McCarthy Park (West lot)	Crack Fill / Seal / Stripe
North Forest Pool	Crack Fill / Seal / Stripe
Highway Department (Rear lot)	Crack Fill / Seal / Stripe
Paradise Park	Crack Fill / Seal / Stripe
Northtown Ice Center	Crack Fill / Seal / Stripe
Town Hall	Crack Fill / Seal / Stripe
Central Amherst Little League	Crack Fill / Seal / Stripe
Plant No. 16 Wastewater Treatment Facility	Crack Fill / Seal / Stripe
Audubon Par 3 GC	Crack Fill / Seal / Stripe
Audubon Complex – Police / Court	Crack Fill / Seal / Stripe
Harlem Road Community Center	Crack Fill / Seal / Stripe
North Amherst Recreation Center	Crack Fill / Seal / Stripe
Williamsville Youth & Family Center	Stripe

PROPOSED SCOPE OF IMPROVEMENTS:

In order to address the ongoing deterioration of town facility parking lots and walkways, numerous improvement activities are planned. Asphalt areas will be cleaned and have crack-filler applied as required. The subject asphalt areas will then be sealed and striped as required. These improvements may be completed at any town-owned facility depending on condition, but are anticipated to be completed at the following locations:

- Highway Department (Front Lot)
- Northtown Ice Center
- Audubon Par 3 GC
- Town Hall
- Plant No. 16 Wastewater Treatment Facility
- Bedford Park
- Amherst Museum
- Amherst Senior Center
- Clearfield Library
- Audubon Library
- Eggertsville Library
- Audubon Golf Course and Driving Range
- Clearfield Recreation Center
- Eggertsville Youth & Community Center
- Veteran's Park
- Parks Department
- North Forest Park
- Central Amherst Little League
- Amherst Community Policing and Training Center
- Williamsville Youth & Family Center

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

The planned improvements at these facilities will address the current highest priority (worst condition) required improvements. All of the improvements described herein will have a minimum useful life of 5-years.

The improvements outlined herein will begin in 2022 and be completed within the 2023 construction season. The above project will be bonded against the Town of Amherst General Fund at a *total project cost* of $100,000, financed entirely with serial bonds. The above project is characterized as a replacement-in-kind project.

FINANCIAL SUMMARY:

Estimated Construction Costs	$ 99,500
Legal / Administrative	500
Project Total	**$ 100,000**

TAXATION SUMMARY:

Total Bond Amount:	$ 100,000
Bond Term:	5 Years
Annual Tax Impacts:	$0.0021 per $1,000 AV (General Fund)
Typical Property Taxation Impact:	$0.42 per $200,000 property

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa
Supervisor

Daniel C. Howard, AI
Planning Director

Daniel J. Ulatowski, AI
Assistant Planning Dire

Transmitted electronically

MEMORANDUM March 7, 2022

TO: Brian J. Armstrong, EIT, Assistant Municipal Engineer
Engineering Department

FROM: Daniel J. Ulatowski, AICP, Assistant Planning Director

RE: SEQR Determination
Town Facility Asphalt Sealing & Striping
2022-2027 C.I.P. Project B-3, TOA Project Number 2022.008A

The Planning Department has reviewed the Map, Plan & Report for the subject project and has determined it to be a Type II action under the provisions of SEQR according to Part 617.5. Therefore, no further environmental work is required.

Please contact our office if you have any questions.

X:\Special_Projects\SEQR_Engineering & Other TOA\Type_II_Actions_(PJ-2015-001)\March 2022_Town Facility Asphalt Sealing & Striping -CIP_B-3.docx

cc:
Brian Kulpa, Town Supervisor
Stanley J. Sliwa, Esq., Town Attorney
Daryl Bramer, Comptroller
Daniel Howard, Planning Director

Attachment: MPR B-3 Town Parking Lot Sealing & Striping (RES-2022-353 : Town Facility Asphalt Sealing and Striping (Bond Resolution -

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25641 B **RESOLUTION 2022-354** **ADOPTED**

PILOT Agreement - Amherst Senior Housing LLC (CRS# 3270)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **PILOT Agreement:**
Amherst Senior Housing LLC and the Town of Amherst, et al.
(CRS# 3270)

Kindly adopt the following resolution with respect to the above matter:

WHEREAS, Amherst Senior Housing LLC has requested that the Town Board approve a PILOT Agreement with a term of fifteen (15) years for the Property; and

WHEREAS, the content and form of the proposed PILOT Agreement have been reviewed and approved by the Town Assessor's Office and the Town Attorney's Office and a copy of the approved form of the proposed PILOT Agreement is attached hereto; and

WHEREAS, the PILOT Agreement must be approved by Erie County and the Williamsville Central School District;

NOW, THEREFORE, BE IT RESOLVED, that the Town Board approves the requested PILOT Agreement for the Project subject to the three (3) conditions set forth below and the Supervisor of the Town of Amherst is hereby authorized to sign the PILOT Agreement between Amherst Senior Housing LLC and the Town of Amherst, Erie County, and the Williamsville Central School District upon satisfaction of the following three (3) conditions:

1. The PILOT Agreement is subject to review and approval by Erie County;

2. The PILOT Agreement is subject to review and approval by the Williamsville Central School District; and

3. Approval of the PILOT Agreement is subject to successful completion of the Town's contract routing system (CRS).

Please note that the Schedule A that is separately attached will replace the Schedule A that is a part of the originally submitted PILOT.

SAA:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment*, **Agenda Item - April 11, 2022**)
Emily Murphy, Town Assessor (*w/attachment*)

4/11/2022
Consent

FINANCIAL IMPACT:

PILOT

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

AGREEMENT FOR PAYMENT IN LIEU OF TAXES FOR JEWISH FEDERATION AFFORDABLE SENIOR HOUSING PROJECT AT 275 ESSJAY ROAD

Between AMHERST SENIOR HOUSING LLC

and

THE TOWN OF AMHERST, ERIE COUNTY & THE WILLIAMSVILLE CENTRAL SCHOOL DISTRICT

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

AGREEMENT FOR PAYMENT IN LIEU OF TAXES FOR AFFORDABLE SENIOR HOUSING PROJECT AT 275 ESSJAY ROAD

THIS AGREEMENT FOR PAYMENT IN LIEU OF TAXES made as of the ____ day of _____ 2022 ("the PILOT agreement") FOR REAL PROPERTY by and among the **TOWN OF AMHERST**, a municipal corporation organized and existing under the laws of the State of New York, having its principal office at 5583 Main Street, Williamsville, New York 14221 (the "Town"), the **COUNTY OF ERIE,** a municipal corporation organized and existing under the laws of the State of New York, having its principal office c/o Erie County Department of Finance, 95 Franklin Street, Buffalo, New York 14202 (the "County"), the **WILLIAMSVILLE CENTRAL SCHOOL DISTRICT**, a school district formed pursuant to Article 37 of the Education Law of the State of New York, having its principal office at 105 Casey Road, East Amherst, NY 14051 ("School District"), is made and entered into as of _____ ___, 2022,by **AMHERST SENIOR HOUSING LLC**, a New York limited liability company with an address of 86 Route 59, Spring Valley, New York 10977, with offices at 680 Fifth Avenue, 17th Floor, New York, New York 10019, (the "Taxpayer") and the **TOWN OF AMHERST**, a municipal corporation duly authorized with an address of 5583 Main Street, Williamsville, New York 14221 (the "***Town***"), Erie County ("***Erie County***") and the Williamsville Central School District ("***School District***").

WHEREAS, the Project Sponsor is the owner and operator of an affordable senior housing project located at 275 Essjay Road in the Town of Amherst consisting of 150 affordable senior apartments and related improvements which it purchased in 2019 from the prior owner and operator, Jewish Federation Housing, Inc. (the "***Project***") as further described within the attached legal description at Exhibit "1", in the Town of Amherst, County of Erie and State of New York ("Land"; collectively, the "Project"), and

WHEREAS, the proposed project provides affordable senior apartments to tenants pursuant to a Housing Assistance Payments Multi-Year Contract entered into between Amherst Senior Housing LLC and the U.S. Department of Housing and Urban Development ("***HUD***") dated August 31, 2019("***HUD Contract***") which succeeded the Housing Assistance Payments Multi-Year Contract for the Project entered into between Jewish Federation Housing, Inc. and HUD dated May 31, 2015; and,

WHEREAS, the monthly rents paid by tenants of the affordable senior apartments at the Project are subject to HUD approval to ensure the monthly rents are affordable and as of May 31, 2019 the HUD authorized monthly rents for the apartments at the Project are as follows:

Number of Units	Number of Bedrooms	Contract Rent	Utility Allowance Allowance	Gross Rent
130	1 bedroom	$623.00	$80.00	$703.00
13	1 bedroom	$623.00	$92.00	$715.00
5	2 bedroom	$764.00	$82.00	$846.00
2	2 bedroom	$807.00	$83.00	$890.00

WHEREAS, the development of the Project is of vital public interest to the Town, County and School District; and

WHEREAS, the development of the Project is intended to be **affordable to low** income households, and **affordability** of the property for residential use by low income persons shall remain consistent throughout the duration of the PILOT Agreement; and

WHEREAS, at the time of the Project Sponsor's purchase of the Project HUD, Jewish Federation Housing, Inc. and the Project Sponsor entered into an Assignment, Assumption and Amendment of Section 8 Housing Assistance Payments Contract by which the Project Sponsor has been approved by HUD to provide affordable senior housing at the Project which resulted in the HUD Contract; and

WHEREAS, subsequent to its purchase of the Project, the Project Sponsor made substantial improvements to the Project including upgrades to the affordable senior apartments, and upgrades to common areas; and

WHEREAS, the Project Sponsor's partner, as defined in PHFL Section 16, and management qualifies for those certain tax exemptions pursuant to Article 11 of the PHFL

WHEREAS, the Project Sponsor is the beneficial fee owner of the Project; and

WHEREAS, the Town, County and School District wish to grant the Taxpayer and the Company and its partners such relief as permitted under Section 577 of the PHFL.

WHEREAS, it is the intention of the Parties that Project Sponsor make annual payments to the Town of Amherst, Erie County and the School District for the term of this Agreement in lieu of real property taxes that would otherwise be assessed on the Project; and

WHEREAS, because both Project Sponsor and the Town need an accurate projection of their respective expenses and revenues with respect to the real property and improvements comprising the Project that are taxable under law, the Parties believe that it is in their mutual best interests to enter into this Agreement establishing the payments that will be made with respect to the Project for the term of this Agreement; and

WHEREAS, the Town, by resolution of the Town Board, adopted Resolution No. 2022-____ on March , 2022 approved this Agreement and authorized this Agreement to be executed on behalf of the Town by the Supervisor; and

WHEREAS, Erie County, by resolution of the Erie County Legislature, adopted a resolution on _____ __, 2022 approved this Agreement and its execution on behalf of the County; and

WHEREAS, the School District, by resolution of the Board of Education, adopted a resolution on _____ ___, 2022 approved this Agreement and its execution on behalf of the School

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

District; and

NOW, THEREFORE, in consideration of the covenants and agreements contained in this PILOT Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties covenant and agree as follows:

1. **Tax Exemption**. The parties agree that Project Sponsor qualifies for real property tax exemption for the Project in accordance with the provisions of Article XI of the PHFL and the Town hereby exempts from local and municipal taxes, including school taxes, other than assessments for local improvements, one hundred percent (100%) of the value of the Project and the Property, including both land and improvements. "***Local and Municipal Taxes***" shall mean any and all real estate taxes levied by the County, the Town, the School District (collectively, the "***Taxing Jurisdictions***"). The Parties understand that the exemption extended pursuant to section 577 of the PHFL and this Agreement does not include exemption from special assessments, special ad valorem levies, improvement district charges or similar tax equivalents. This Agreement shall not limit or restrict the Project Sponsor's right to apply for or obtain any other tax exemption to which it might be entitled upon the expiration of this Agreement.

2. **Obligation of the Project Sponsor to Make Payments in Lieu of Taxes**. So long as the aforementioned exemption remains in place, the Project Sponsor will make annual payments in lieu of taxes ("***PILOT Payments***") to the Taxing Jurisdictions in the amounts set forth in ***Schedule "A"***, as attached hereto and made a part hereof, in satisfaction of all real property taxes. The PILOT Payments shall be required to be made to the Taxing Jurisdictions following the March 1, 2022 tax status date commencing with the 2023 tax fiscal year of the Town, the 2023 tax fiscal year of the County, and the 2022-2023 tax fiscal year of the School District. The Parties agree that no refund of any real property taxes levied upon the Property prior to the 2023 tax fiscal year of the Town, the 2023 tax fiscal year of the County, and the 2022-2023 tax fiscal year of the School District shall be sought or claimed on account of the exemption made effective pursuant to this Agreement.

3. **PILOT Term**. The fiscal years with respect to which payments shall be due under this Agreement (the "***PILOT Term***") shall be fifteen (15) years beginning as of July 1, 2022 and shall continue until December 31, 2037. The PILOT term may be extended if at the time of such future extension the Project Sponsor continues to provide affordable senior housing at the Project as evidenced by a contract with HUD and such written extension is approved by the Town of Amherst, Erie County and the School District.

4. **Requirements of the Project Sponsor**

a. The tax exemption provided by this Agreement will continue for a term of fifteen (15) years, unless sooner terminated by law or mutual agreement upon prior written consent of the Parties, provided that the Project Sponsor continues to operate the Project and the Property for persons of low income in conformance with law, the HUD Contract, and Article XI of the PHFL..

b. The Project Sponsor will provide the Town such information concerning its operations and the operations of the Project in form and substance as may from time to time be reasonably requested. Such information shall include, but shall not be

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

limited to, general certificates of the Project Sponsor and the annual financial statements of the Project Sponsor from the calendar year immediately preceding the fiscal year in which payments are due.

c. The Project Sponsor will permit the Comptroller of the Town to audit its books and records within fourteen (14) days after receiving a written request from the Town.

5. Taxing Authorities and Amounts.

a. Upon commencement of the Town's March 1, 2022 taxable status date (the "Commencement Date"), the Project Sponsor shall make annual payments in lieu of local and municipal real estate taxes, including school taxes but not including assessments for local improvements and special assessments on the Land and improvements constituting the Project as follows.

i. A fixed annual PILOT Payment to the Town in the amounts as stated in ***Schedule "A"***, as attached hereto and made a part hereof, in satisfaction of all real property taxes.

ii. In addition to the payments set forth in ***Schedule "A"***, the Project Sponsor will be responsible for paying all special district assessments and other assessments for local improvements permitted by law;

iii. At the expiration of the PILOT Term, this PILOT Agreement will cease to have any effect on the taxes due with respect to the property and the property will be taxed in accordance with applicable law unless otherwise extended or modified pursuant to a separate Agreement.

b. The PILOT Payments shall be payable annually. Each annual PILOT Payment to the Town shall be made on or before January 31st of each year and shall be delivered to the Town Clerk's Office, 5583 Main Street, Williamsville, New York 14221 or such other place as may be designated from time to time by the Town. Each such PILOT Payment to the County shall be made on or before January 31 of that year, or such payment shall be considered delinquent, and such PILOT Payment shall be delivered to County of Erie, c/o Director of Real Property Tax Services, The Edward A. Rath County Office Building, Room 100, 95 Franklin Street, Buffalo, New York 14202, or such other place as may be designated from time to time by the County. Each such PILOT Payment to the School District shall be made on or before September 30 of that year, or such payment shall be considered delinquent, and such PILOT Payment shall be delivered to the Williamsville Central School District, 105 Casey Road, East Amherst, New York 14051.

6. No Other Reductions or Increases Based on Tax Rate Changes. Except to the extent this Agreement explicitly provides otherwise, Developer agrees that the

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

Payments in Lieu of Taxes to be made pursuant to the PILOT Payment Schedule attached as Schedule "A" of this Agreement shall not be reduced or increased based on an increase or reduction of tax rate of Taxing Jurisdictions.

7. **Improvements or Modifications to Project**. To the extent the Project Sponsor, at its sole option, makes any capital improvements or modifications to the Project, such improvements or modifications shall not result in any changes to the Payments in Lieu of Taxes unless such improvements or modifications increases or decreases the number of affordable senior housing apartments at the Project, in which case the Payments in Lieu of Taxes as set forth in PILOT Payment Schedule attached as Schedule "A" shall be adjusted to reflect the number of affordable senior housing apartments at the Project. By way of example for illustrative purposes only, if the number of affordable senior housing apartments at the Project increases from 150 to 155 units during fifth year of the PILOT Term, the Payment in Lieu of Taxes payable by the Project to the Taxing Jurisdictions for the sixth year of the PILOT Term shall increase from $130,418.33 based on 150 units ($869.45 per unit) to $134,764.75 ($869.45 per unit x 155 units) and each successive annual Payment in Lieu of Taxes shall be also adjusted accordingly.

8. **Defaults in Payment in Lieu of Taxes**. In the event the Project Sponsor fails to make any payment in lieu of real property taxes when due, the amount or amounts not so paid shall be a lien on the Project in the same manner that delinquent real property taxes would be and continue as an obligation of the Project Sponsor until fully paid. In addition, the Project Sponsor shall pay the appropriate taxing authority's or authorities' interest and penalties on the unpaid amount or amounts accruing at the same times and at the interest rates as if such amounts were delinquent real property taxes. In addition to any other remedies available to them for the collection of delinquent real property taxes, including, without limitation, in rem proceedings, the Town, County and School District may exercise any other remedies available, and such remedies shall be cumulative and the exercise of any remedy shall not be an action of remedies under law.

9. **Effect of Fulfillment of the Requirement**. Once having paid the amounts required by this PILOT Agreement when due, the Property Sponsor shall not be required to pay any real property taxes for which such payments in lieu of taxes have been made, except special district assessments and other special assessments for local improvements permitted by law.

10. **Events of Default and Termination of Tax Exemption**.

    a. An event of default ("Event of Default") shall be defined as (l) failure of the Project Sponsor to make any payment required under the PILOT Agreement when due, (2) the Project Sponsor's failure to provide any notice as required by this PILOT Agreement to the Town, County or School District, (3) Taxpayer's failure to qualify, or continue to qualify, for a real property tax exemption for the Project in accordance with Article XI of the PHFL, (4) failure of Taxpayer to provide any of the information required by Section 3(c) of this PILOT Agreement, or (5) the

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

transfer of title or beneficial ownership of any portion of the Project or the Land without the prior written consent of the Town, County and School District.

b. Upon the occurrence of an Event of Default as defined pursuant to Section 7(a) above, the Project Sponsor shall have ten (10) days after the receipt of Notice from the Town, County or School District regarding such default to cure such default.

c. In the event the Project Sponsor has not cured such default or defaults within the time period set forth in this PILOT Agreement, then the exemption from real property taxes described herein shall be deemed to have been terminated as of the taxable status date of the Town's immediately preceding fiscal year.

d. Upon a termination of the exemption from real property taxes set forth in Section 7(c) above, the Project Sponsor shall be liable for real property taxes on a pro-rata basis from and after the Town's taxable status date immediately preceding the Event of Default and the statutory lien applicable to such real property taxes shall be deemed in effect as of the lien date normally applicable to such year's real property taxes, unless a separate basis for a real property tax exemption then exists for the benefit of Project Sponsor.

e. Any such termination of the real property tax exemption applicable to the Project shall not void the liability of the Project Sponsor for any unpaid payments in lieu of taxes required by this PILOT Agreement prior to such termination.

11. Payment Collection. The terms and conditions of this Agreement shall govern the collection of Payments in Lieu of Taxes provided for in this Agreement.

12. Tax Status. The Taxing Jurisdictions agree that, during the term of this Agreement, that this Agreement will exclusively govern the payments of all ad valorem real property taxes that the Project Sponsor shall be obligated to make to the Taxing Jurisdictions with respect to the Project, provided, however, that this Agreement is not intended to affect, and shall not affect other assessments of general applicability by the Town for Town services provided by the Town to the Project, including but not limited to, fire protection, water, drainage, sanitary sewer, etc. (collectively "***Special District Taxes***"). The Project Sponsor acknowledges that it shall be responsible to make annual payments to the Town for Special District Taxes during the PILOT Term.

13. Agreement not to challenge the assessed value. Applicant agrees not to challenge the assessed value of the Project during the term of this PILOT agreement.

14. Successors and Assigns. This Agreement will be binding upon, and shall be assigned to, the successors and assigns of Project Sponsor, provided that such successor or assign is an eligible party for the purpose of providing affordable senior housing at the Project as evidenced by an assignment of the HUD Contract. In the event that Project Sponsor sells, transfers, leases or assigns all or substantially all of its interest in the Project, this Agreement shall thereafter

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

be assigned to and shall be binding on the purchaser, transferee or assignee.

15. Statement of Good Faith. The Parties agree that the payment obligations established by this Agreement were negotiated in good faith. The Project Sponsor and the Town were represented by counsel in negotiation and preparation of this Agreement and have entered into this Agreement after full and due consideration and with the advice of its counsel. The Parties further acknowledge that this Agreement is fair and mutually beneficial to them because it reduces the likelihood of potential future disputes over real property taxes for the Project, establishes mutually acceptable and reasonable payments in lieu of taxes for the Project that are appropriate and serve their respective interests. The Town acknowledges that this Agreement is beneficial to it because it ensures the Project Sponsor will be able to continue to provide affordable senior housing at the Project in accordance with the applicable standards of HUD that govern the Project.

16. Additional Documentation and Actions. Each party will, from time to time hereafter, execute and deliver or cause to be executed and delivered, such additional documents, and take all such actions, as the parties reasonably request for the purpose of implementing or effectuating the provisions of this Agreement.

17. Invalidity. If, for any reason, it is ever determined by a court of competent jurisdiction that any material provision of this Agreement is unlawful, invalid or unenforceable then the parties shall (i) undertake best efforts to amend and or reauthorize this Agreement so as to render all material provisions lawful, valid and enforceable, and (ii) if such efforts are unsuccessful, undertake reasonable efforts, including without limitation, seeking all necessary approvals, to replicate the benefits and burdens of this Agreement in the form of an Amended PILOT Agreement.

18. Waiver. No waiver or modification of this Agreement shall be valid unless in writing and duly executed by the Parties, and no evidence of any waiver or modification shall be offered or received in evidence in any proceeding, arbitration, or litigation arising out of or affecting this Agreement, or the rights or obligations of any Party hereunder, unless such waiver or modification is in writing, duly executed as aforesaid. No failure or delay on the part of the Town to exercise any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

19. Modification. Neither this Agreement nor any provision hereof may be amended, modified, waived, discharged or terminated, except by an instrument in writing duly executed and agreed to by the parties hereto.

20. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. The exchange of copies of this Agreement and of signature pages by facsimile or portable document format (PDF) transmission shall constitute effective execution and delivery of this Agreement as to the parties hereto and may be used in lieu of the original Agreement and signature pages for all purposes.

21. Pay Equity. The Project Sponsor, with respect to its own employees only, if any,

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

shall comply with Erie County Executive Order 13 (2014) and agrees to complete the Certificate collectively attached hereto as Exhibit "2" and made a part hereof. The Project Sponsor shall make such records available, upon request, to the County's Division of Equal Employment Opportunity for review. The County shall have the right, upon reasonable notice and at reasonable times, to inspect the books and records of the Project Sponsor, its offices and facilities, for the purpose of verifying information supplied in the Erie County Equal Pay Certification and for any other purpose reasonably related to conforming the Agency's compliance with Erie County Executive Order 13 (2014). Notwithstanding the termination provisions contained herein, violation of the provisions of Executive Order 13 (2014), may constitute grounds for the immediate termination of this Agreement and may constitute grounds for determining that the Taxpayer is not qualified to participate in future County contracts.

22. **Notices**. All notices, consents, requests, or other communications provided for or permitted to be given hereunder by a Party must be in writing and will be deemed to have been properly given or served upon the personal delivery thereof, via courier delivery service or otherwise. Such notices shall be addressed or delivered to the Parties at their respective addresses shown below.

To Project Sponsor:

Moshe Eichler
Amherst Senior Housing LLC
86 Route 59
Spring Valley, New York 10977

To the Town:

Town Attorney's Office
Town of Amherst
5583 Main Street
Williamsville, New York 14221

Town Supervisor
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Town Assessor
Town of Amherst
5583 Main Street
Williamsville, NY 14221

To Erie County:

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

Erie County Attorney's Office
95 Franklin Street
Buffalo, NY 14202

To Williamsville Central School District:

Williamsville Central School District
105 Casey Road
Williamsville, New

Any such addresses for the giving of notices may be changed by a party by giving written notice as provided above to the other parties. Notice given by counsel to a party shall be effective as notice from such party.

23. **Applicable Law**. This Agreement will be made and interpreted in accordance with the laws of the State of New York. Developer, the Town, Erie County and the School District each consent to the jurisdiction of New York State courts regarding any and all matters, including interpretation or enforcement of this Agreement or any of its provisions.

24. **Covenants of the Project Sponsor**. During the term of the Agreement, the Project shall not voluntarily do any of the following:

a. Seek to invalidate this Agreement except as expressly provided herein;

b. Convey by sale, lease or otherwise any interest in the Project to any entity or organization that does not quality to provide affordable senior housing at the Project pursuant to a contract with HUD;

c. Abandon or discontinue to provide affordable senior housing apartments at the Project pursuant to HUD Contract; or

d. Fail to pay the Taxing Jurisdictions all amounts due hereunder when due in accordance with the terms and conditions of this Agreement.

25. **Covenants of the Town of Amherst**. During the term of this Agreement, the Town will not do any of the following:

a. Seek to invalidate this Agreement;

b. Seek to collect from Project Sponsor any property tax upon the Property (Special District taxes are not governed by this Agreement) or the improvements thereon in addition to the amounts established herein.

26. **Representations of Town.** The Town represents and warrants to the Project Sponsor that (i) it has secured the approval of the Town Board to duly authorize the execution, delivery and performance of this Agreement and its obligations hereunder, and (ii) it is not prohibited from entering into this Agreement and discharging and performing all covenants and

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

obligations on its part to be performed under and pursuant to this Agreement by the terms, conditions or provisions of any law, any order of any court or other agency or authority of government, or any agreement or instrument to which the Town is a party or by which the Town is bound, and (iii) this Agreement is a legal, valid and binding obligation of the Town and is enforceable in accordance with its terms.

27. **Representations of Project Sponsor**. The Project Sponsor represents and warrants to the Taxing Jurisdictions that (i) it is duly organized and validly existing as a limited liability company and is authorized to conduct business in the State of New York; and (ii) it is authorized and has the power under the laws of the State of New York to enter into this Agreement and to perform and carry out all covenants and obligations on its part to be performed pursuant to this Agreement, and (iii) the performance of its obligations hereunder will not violate, results in a breach of or constitute a default under any agreement or instrument to which Project Sponsor is a party or by which Project Sponsor is bound, and this Agreement is a legal, valid and binding obligation of Project Sponsor enforceable in accordance with its terms.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURES ON FOLLOWING PAGE]

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

IN WITNESS WHEREOF, the Town, Erie County, the School District and the Project Sponsor have caused this Agreement to be executed by their duly authorized representatives as of the dated above written.

AMHERST SENIOR HOUSING LLC

By: _____
Name: Moshe Eichler
Title: Executive Manger

APPROVED AS TO CONTENT BY TOWN OF AMHERST TOWN ATTORNEY'S OFFICE

By: _____
Samuel A. Alba, Senior Deputy Town Attorney

Date: _____

TOWN OF AMHERST

By: _____
Brian J. Kulpa, Supervisor

Date: _____

By: _____
Emily Murphy, Assessor

Date: _____

APPROVED AS TO FORM

By: _____
Print Name: _____
Erie County Attorney Office
Document No.: _____
Date: _____

COUNTYOF ERIE

By: _____
Print Name: _____
Title: _____

WILLIAMSVILLE CENTRAL SCHOOL DISTRICT

By: _____
Name: _____
Title: _____

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

SCHEDULE A

YEAR	Town of Amherst 65%	Erie County 25%	Williamsville CSD 10%	Total Annual PILOT Payment
2022-23	73,125.00	28,125.00	11,250.00	112,500.00
2023-24	75,318.75	28,968.75	11,587.50	115,875.00
2024-25	77,578.31	29,837.81	11,935.13	119,351.25
2025-26	79,905.66	30,732.95	12,293.18	122,931.79
2026-27	82,302.83	31,654.94	12,661.97	126,619.74
2027-28	84,771.92	32,604.58	13,041.83	130,418.33
2028-29	87,315.07	33,582.72	13,433.09	134,330.88
2029-30	89,934.53	34,590.20	13,836.08	138,360.81
2030-31	92,632.56	35,627.91	14,251.16	142,511.63
2031-32	95,411.54	36,696.75	14,678.70	146,786.98
2032-33	98,273.89	37,797.65	15,119.06	151,190.59
2033-34	101,222.10	38,931.58	15,572.63	155,726.31
2034-35	104,258.76	40,099.52	16,039.81	160,398.10
2035-36	107,386.53	41,302.51	16,521.00	165,210.04
2036-37	110,608.12	42,541.59	17,016.63	170,166.34
TOTALS	**$ 1,360,045.58**	**$ 523,094.45**	**$ 209,237.78**	**$ 2,092,377.81**

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

EXHIBIT 1

LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amherst, County of Erie and State of New York, being part of Lot No. 4, Township 12, Range 7 of the Holland Land Survey (so-called) and bounded and described as follows:

BEGINNING at a point in the westerly line of lands conveyed to Jeremy M. Jacobs by deed recorded in Erie County Clerk's Office in Liber 8169 of Deeds at page 419 a distance of One thousand forty-nine (1049) feet southerly, as measured along said westerly line, from a point in the northerly line of said Lot Number four (4) and the center line of Sheridan Drive, said last mentioned point being distant four hundred fifty-five and four tenths (455.4) feet easterly from the northwest comer of Lot Number four (4), as measured along the northerly line of Lot Number four (4) and the center line of Sheridan Drive; thence southerly along the westerly line of lands so conveyed to Jeremy M. Jacobs which said line is also the east line of the Village of Williamsville and parallel with the westerly line of Lot Number four (4), a distance of three hundred and seventy-five (375.0) feet to a point; thence easterly parallel with the northerly line of Lot Number four (4), a distance of four hundred and sixty-four and eighty-three hundredths (464.83) feet to a point; thence northerly parallel with the westerly line of Lot Number four (4), a distance of three hundred and seventy-five (375.0) feet to a point; thence westerly parallel with the northerly line of Lot Number four (4), a distance of four hundred and sixty-four and eighty-three hundredths (464.83) feet to the point or place of beginning, containing four (4) acres, more or less hereinafter referred to as Parcel A.

Together with an easement and right of way for the construction, operation and maintenance of ingress, egress and utility services in common with others upon and across ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amherst, County of Erie and State of New York, being part of Lot Number four (4), Township twelve (12), Range seven (7) of the Holland Land Company's Survey, bounded and described as follows:

BEGINNING at a point in the southeast corner of Parcel "A" above described; thence easterly parallel with the northerly line of Lot Number four (4) and along the southerly line of Parcel "A" extended easterly, to a point in a line drawn parallel with and distant seventy (70) feet easterly, measured at right angles, from the easterly line of Parcel "A"; thence northerly parallel with the easterly line of Parcel "A", a distance of one thousand four hundred twenty-four (1424.00) feet to a point in the northerly line of Lot Number four (4) and the center lie of Sheridan Drive; thence westerly along the northerly line of Lot Number four (4) to a point in the easterly line of Parcel "A" extended northerly; thence southerly along the easterly line of Parcel "A" and said line extended northerly, a distance of one thousand four hundred twenty-four (1424.00) feet to the point or place of beginning.

Together with an easement and right-of-way for pedestrian ingress and egress upon and across the following:

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amherst, County of Erie and State of New York, being part of Lot Number four (4), Township twelve (12), Range seven (7) of the Holland Land Company's Survey, bounded and described as follows:

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

BEGINNING at a point in the northwest corner of Parcel "A" below described thence northerly along the westerly line of Parcel "A", extended northerly, a distance of three hundred (300) feet to a point; thence easterly parallel with the northerly line of Lot Number four (4) to a point in a line drawn parallel with and five (5) feet easterly, measured at right angles, from the first above described course; thence southerly along said last described parallel line, a distance of three hundred (300) feet to a point in the northerly line of Parcel "A"; thence westerly along the northerly line of Parcel "A" to the point or place of beginning.

EXCEPTING THEREFROM ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amherst, County of Erie and State of New York, being part of Lot No. 4, Township 12, Range 7 of the Holland Land Survey (so-called) and bounded and described as follows:

BEGINNING at the northwest comer of lands conveyed to Centerpointe Medical Building, Inc. by Deed recorded in the Erie County Clerk's Office in Liber 11219 of Deeds at page 251, said point being the southwest comer of lands conveyed to Jewish Federation Housing, Inc. by Deed recorded in the Erie County Clerk's Office in Liber 8634 of Deeds at page 290;

THENCE North 00° 08' 00" East along the west line of said Jewish Federation Housing, Inc. lands a distance of 100.50 feet to a point;

THENCE through said Jewish Federation Housing, Inc. lands, the following seven courses and distances;

(1) Easterly at right angles, a distance of 56.00 feet to a point;

(2) Southerly at right angles, a distance of 12.00 feet to a point;

(3) Easterly at right angles, a distance of 25.00 feet to a point;

(4) Southerly at right angles, a distance of 31. 00 feet to a point;

(5) Easterly at right angles, a distance of 120.00 feet to a point;

(6) Southeasterly, on a curve to the right having a radius of 152.50 feet, an arc distance of 41.07 feet, said curve having a chord distance of 40.95 feet and said chord forming an interior angle of 136° 02' 28" with the previous course;

(7) Southerly, perpendicular to the southerly line of said Jewish Federation Housing, Inc. lands a distance of 32.63 feet to the southerly line thereof and the northerly line of said Centerpointe Medical Building, Inc. lands, said point being 234.83 feet westerly from the west line of Essjay Road;

THENCE North 88° 59' 00" West and along the southerly line of said Jewish Federation Housing, Inc. lands and the northerly line of said Centerpointe Medical Building, Inc. lands a distance of 230.00 feet to the POINT OR PLACE OF BEGINNING.

BEING AND HEREBY intending to describe the same premises conveyed to the Grantor by United Jewish Federation of Buffalo, Inc. by deed dated April 14, 1978 and recorded in the

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

Erie County Clerk's Office on April 14, 1978 in Liber 8634 of Deeds at page 290, less and excepting the same premises conveyed by the Grantor to Centerpointe Medical Building, Inc. by deed dated May 17, 2019 and recorded in the Erie County Clerk's Office on May 17, 2019 in Liber 11344 of Deeds at page 5309.

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

EXHIBIT 2
Erie County Equal Pay Certification

In order to comply with Executive Order 13 dated November 6, 2014, we hereby certify that we are in compliance with federal law, including the Equal Pay Act of 1963, Title VII of the Civil Rights Act of 1964, Federal Executive Order 11246 of September 24, 1965 and New York State Labor Law Section 194 (together "Equal Pay Law"). The average compensation for female employees is not consistently below the average compensation for male employees, taking into account mitigating factors. We understand that this certification is a material component of this contract. Violation of the provisions of Executive Order 13, which is attached hereto and made a part hereof, can constitute grounds for the immediate termination of this contract and may constitute grounds for determining that a bidder is not qualified to participate in future county contracts.

We have evaluated wages and benefits to ensure compliance with the Federal Equal Pay Law.

_____
Signature

Verification

STATE OF NEW YORK)
COUNTY OF ERIE) SS:

A)
_____, being duly sworn, states he or she is the owner of (or a partner in) _____, and is making the foregoing Certification and that the statements and representations made in the Certification are true to his or her own knowledge.

B)
_____, being duly sworn, states that he or she is the
(Name of Corporate Officer)
_____, of _____,
(Title of Corporate Officer) (Name of Corporation)

the enterprise making the foregoing Certification, that he or she has read the Certification and knows its contents, that the statements and representations made in the Certification are true to his or her own knowledge, and that the Certification is made at the direction of the Board of Directors of the Corporation.

Sworn to before me this _____ Day of _____, 20____

_____
Notary Public

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

COUNTY OF ERIE

MARK C. POLONCARZ
COUNTY EXECUTIVE

Executive Order #13
Pay Equity Certification on County Contracts

WHEREAS, federal law, including the Equal Pay Act of 1963, Title VII of the Civil Rights Act of 1964 and Federal Executive Order 11246 of September 24, 1965 (Equal Employment Opportunity) (together "Federal Equal Pay Law"), requires that men and women in the same workplace be given equal pay for equal work; and

WHEREAS, Section 194 of New York State Labor Law ("NYS Equal Pay Law") prohibits compensating men and women differently for the same work; and

WHEREAS, on average, a full-time working woman in New York State earns just 85 cents for every dollar that a man earns and the pay gap is even greater for African-American and Latina women; and

WHEREAS, females make up nearly fifty-two percent of Erie County's population; and

WHEREAS, women make up nearly half of the U.S. labor force and are a growing number of breadwinners in their families; and

WHEREAS, this pay differential shortchanges women and their families by thousands of dollars a year, and potentially hundreds of thousands of dollars over a lifetime, presenting a lifelong threat to those families' economic security and reducing their earnings through Social Security and other post retirement plans; and

WHEREAS, poverty is recognized as a leading cause of or contributing factor to many social problems, including but not limited to substance abuse, domestic violence, child abuse, improper nutrition, obesity, improper health care and criminal conduct; and

WHEREAS, the impact of pay differentials is exacerbated as workers age, causing underpaid workers to disproportionally rely upon various forms of public support in their retirement years; and

WHEREAS, pay inequity can significantly impact the County, necessitating the provision of various public subsidies for low income residents and leading to the lack of receipt of income by women residents which would be spent in our local economy; and

RATH BUILDING • 95 FRANKLIN STREET • BUFFALO, N.Y. • 14202 • (716) 858-6000 • WWW.ERIE.GOV

WHEREAS, through the enforcement of current state and federal laws that ban unequal pay for equal work, Erie County can help ameliorate the many negative consequences of pay inequality, thereby improving the lives of those who might otherwise be underpaid, strengthening families and protecting children, and reducing the demand for public services, all positively impacting county, state and federal budgets.

NOW, THEREFORE, I MARK C. POLONCARZ, Erie County Executive, by virtue of the authority vested in me by the Erie County Charter § 302, do hereby order as follows:

1. It is ordered that on and after January 1, 2015, all Erie County offices, departments and administrative units, including but not limited to the Division of Purchase, fully implement a requirement in all bids, requests for proposals and other contract solicitations that the contractor submit an Erie County Equal Pay Certification which certifies the contractor's compliance with Federal Equal Pay Law and New York State Equal Pay Law (together, the "Equal Pay Laws"). Such certification shall be required prior to execution of the contract; and it is,

2. Further ordered that such certification shall include a representation by the contractor that it has not been the subject of an adverse finding under the Equal Pay Laws within the previous five years and shall include disclosure of any currently pending claims against the contractor; and it is,

3. Further ordered that violation of any provision of the Equal Pay Laws during the effective period of such a contract or the filing of a false or misleading Erie County Equal Pay Certificate may constitute grounds for immediate termination of such a contract; and it is,

4. Further ordered that violation of any provision of the Equal Pay Laws during the effective period of such a contract or the filing of a false or misleading Erie County Equal Pay Certificate may constitute grounds for determining a bidder or responder is not qualified to participate in future County contracts; and it is,

5. Further ordered that the Law Department prepare an Erie County Equal Pay Certification for use by Erie County offices, departments and administrative units and assure compliance with this Executive Order in the contract approval process; and it is,

6. Further ordered that the County Division of Equal Employment Opportunity ("EEO") establish a procedure for compliance monitoring and periodic auditing of certification records; and it is,

GIVEN, under my hand and the Privy Seal of the County of Erie in the City of Buffalo this 6th day of November, in the year two thousand fourteen.

COUNTY OF ERIE

BY: _____

MARK C. POLONCARZ
ERIE COUNTY EXECUTIVE

Attachment: Amherst Senior Housing PILOT - FINAL with Exhibits (RES-2022-354 : PILOT Agreement - Amherst Senior Housing LLC (CRS#

SCHEDULE A

ASSESSED YEAR	PILOT AMOUNT -3% ESCALATOR	ERIE COUNTY-25%	SCHOOL DISTRICT 25% (WCSD)	TOWN OF AMHERST 50%
2022	$112,500	$28,125	$28,125	$56,250
2023	$115,875	$28,969	$28,969	$57,938
2024	$119,351	$29,838	$29,838	$59,676
2025	$122,932	$30,733	$30,733	$61,466
2026	$126,620	$31,655	$31,655	$63,310
2027	$130,418	$32,605	$32,605	$65,209
2028	$134,331	$33,583	$33,583	$67,165
2029	$138,361	$34,590	$34,590	$69,180
2030	$142,512	$35,628	$35,628	$71,256
2031	$146,787	$36,697	$36,697	$73,393
2032	$151,191	$37,798	$37,798	$75,595
2033	$155,726	$38,932	$38,932	$77,863
2034	$160,398	$40,100	$40,100	$80,199
2035	$165,210	$41,303	$41,303	$82,605
2036	$170,166	$42,542	$42,542	$85,083
TOTAL	$2,092,378	$523,094	$523,094	$1,046,189

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25622 **RESOLUTION 2022-355** **ADOPTED AS AMENDED**

Sutton Place PILOT Agreement (CRS #3258)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **PILOT Agreement:**
Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership and the Town of Amherst, et al. (CRS# 3258)

Kindly adopt the following resolution with respect to the above matter:

WHEREAS, Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership have requested that the Town Board approve a PILOT Agreement with a term of fifteen (15) years for the Property; and

WHEREAS, the content and form of the proposed PILOT Agreement have been reviewed and approved by the Town Assessor's Office and the Town Attorney's Office and a copy of the approved form of the proposed PILOT Agreement is attached hereto; and

WHEREAS, the PILOT Agreement must be approved by Erie County and the Sweet Home Central School District;

NOW, THEREFORE, BE IT RESOLVED, that the Town Board approves the requested PILOT Agreement for the Project subject to the three (3) conditions set forth below and the Supervisor of the Town of Amherst is hereby authorized to sign the PILOT Agreement between Sutton Place Housing Development Fund Company, Inc. as nominee for Sutton Place Preservation Limited Partnership and the Town of Amherst, Erie County, and the Sweet Home Central School District upon satisfaction of the following three (3) conditions:

1. The PILOT Agreement is subject to review and approval by Erie County;

2. The PILOT Agreement is subject to review and approval by the Sweet Home Central School District; and

3. Approval of the PILOT Agreement is subject to successful completion of the Town's contract routing system (CRS).

SAA:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment*, **Agenda Item - April 11, 2022**)
Emily Murphy, Town Assessor (*w/attachment*)

4/11/2022

A motion to approve was made by Supervisor Kulpa and seconded by Deputy Supervisor Berger. A motion to amend was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0. Amendment adds the updated attachment 'Schedule A - Sutton'. A motion to approve as amended was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

FINANCIAL IMPACT:

PILOT

RESULT:	**ADOPTED AS AMENDED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

AGREEMENT FOR PAYMENT IN LIEU OF TAXES FOR SUTTON PLACE APARTMENTSIN EAST AMHERST, NEW YORK

Between SUTTON PLACE HOUSING DEVELOPMENTFUND COMPANY, INC., as nominee for
SUTTON PLACE PRESERVATION LIMITED PARTNERSHIP

And

THE TOWN OF AMHERST, ERIE COUNTY& SWEET HOME CENTRAL SCHOOL DISTRICT

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

AGREEMENT FOR PAYMENT IN LIEU OF TAXES

THIS AGREEMENT for payment in lieu of taxes is made as of the____day of _____2022 (the "PILOT Agreement"), by and among the **TOWN OF AMHERST**, a municipal corporation organized and existing under the laws of the State of New York, having its principal office at 5583 Main Street, Williamsville, New York 14221 (the "Town"), the **COUNTYOF ERIE,** a municipal corporation organized and existing under the laws of the State of New York, having its principal office c/o Erie County Department of Finance, 95 Franklin Street, Buffalo, New York 14202 (the "County"), the **SWEET HOME CENTRAL SCHOOL DISTRICT**, a school district formed pursuant to Article 37 of the Education Law of the State of New York, having its principal office at 1901 Sweet Home Road, Amherst, NY 14228 ("School District"), **SUTTON PLACE HOUSING DEVELOPMENT FUND COMPANY, INC.**, a New York not-for-profit corporation organized pursuant to Article XI of the New York State Private Housing Finance Law (the "PHFL") with offices at 401 Wilshire Blvd, Suite 1070, Santa Monica, California 90401, (the "Taxpayer") and **SUTTON PLACE PRESERVATION LIMITED PARTNERSHIP**, a New York limited partnership with offices at 401 Wilshire Blvd, , Suite 1070, Santa Monica, California 90401 (the "Company", and together with the Taxpayer, the "Owner"). All being collectively referred to as the "parties" and individually as a "party."

WHEREAS, the proposed project involves the ownership, improvement and rehabilitationof two hundred forty-six (246) apartment units located at 113 Travers Boulevard in Erie Countyas further described within the attached legal description at Exhibit "1", in the Town of Amherst, County of Erie and State of New York ("Land" or "Property" collectively, the "Project"), and

WHEREAS, the development of the Project is of vital public interest to the Town, Countyand School District; and

WHEREAS, the development of the Project is intended to be affordable to low income households, and affordability of the property for residential use by low income persons shall remain consistent throughout the duration of the PILOT Agreement; and

WHEREAS, the Owner qualifies for those certain tax exemptions pursuant to Article 11 of the PHFL; and

WHEREAS, the Taxpayer is the nominal fee owner of the Project for and on behalf of theCompany, which is the beneficial owner thereof; and

WHEREAS, the Town, County and School District wish to grant the Taxpayer and the Company such relief as permitted under Section 577 of the PHFL.

WHEREAS, the Town, by Resolution Number of the Town Board, adopted on _____, 2022 approved such an exemption and authorized this Agreement to be executed on behalf of the Town by the Town Supervisor; and

WHEREAS, the County, by Resolution Numberof the Erie County Legislature,adopted on_____, 2022 approved such an exemption and authorized this Agreement to beexecuted on behalf of the County; and

WHEREAS, the School District, by Resolution Number of the School Board,adopted on_____, 2022 approved such an exemption and authorized this Agreement to beexecuted on behalf of the School District; and

NOW, THEREFORE, in consideration of the covenants and agreements contained in thisPILOT Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties covenant and agree as follows:

1. **Tax Exemption**. The parties agree that Owner qualifies for real property tax exemption for the Project in accordance with the provisions of Article XI of the PHFL and the Town hereby exempts from local and municipal taxes, including school taxes, other than assessments for local improvements, one hundred percent (100%) of the value of the Project, including both Land and improvements. "***Local and Municipal Taxes***" shall mean any and all real estate taxes levied by the County, the Town, the School District (collectively, the "***Taxing Jurisdictions***"). The parties understand that the exemption extended pursuant to section 577 of the PHFL and this Agreement does not include exemption from special assessments, specialad valorem levies, improvement district charges or similar tax equivalents. This Agreement shall not limit or restrict the Owner's right to apply for or obtain any other tax exemption to which it might be entitled upon the expiration of this Agreement.

2. **Obligation of the Owner to Make Payments in Lieu of Taxes**. So long as the aforementioned exemption remains in place, the owner will make annual payments in lieu of taxes("***PILOT Payments***") to the Taxing Jurisdictions in the amounts set forth in ***Schedule "A"***, as attached hereto and made a part hereof, in satisfaction of all real property taxes. The PILOT Payments shall be required to be made to the Taxing Jurisdictions following the March 1, 2022 tax status date commencing with the 2023 tax fiscal year of the Town,

fiscal year of the County, and the 2022-2023 tax fiscal year of the School District. The Parties agree that no refund of any real property taxes levied upon the Property prior to the 2023 tax fiscal year of the Town, the 2023 tax fiscal year of the County, and the 2022-2023 tax fiscal year of the School District shall be sought or claimed on account of the exemption made effective pursuant to this Agreement.

3. **Requirements of the Owner.**

a. The tax exemption provided by this Agreement will continue for a term of fifteen (15) years, unless sooner terminated by law or mutual agreement upon prior writtenconsent of the parties, provided that the Owner continues to operate the Project and the Land for persons of low income in conformance with Article XI of the PHFL.

b. The Owner will provide the Town such information concerning its operations and the operations of the Project in form and substance as may from time to time be reasonably requested. Such information shall include, but shall not be limited to, general certificates of the Owner and the annual financial statements of the Owner from the calendar year immediately preceding the fiscal year in which payments are due.

c. The Owner will permit the Comptroller of the Town to audit its books and records within fourteen (14) days after receiving a written request from the Town.

4. **Taxing Authorities and Amounts**.

a. Upon commencement of the Town's next taxable status date (the "Commencement Date"), the Owner shall make annual payments in lieu of local and municipal real estate taxes, including school taxes but not including assessments for local improvements and special assessments on the Land and improvements constituting the Project as follows.

i. A fixed annual PILOT Payments to the Town, County, and School District in the amounts as stated in ***Schedule "A"***, as attached hereto and made a part hereof, in satisfaction of all real property taxes.

ii. In addition to the payments set forth in ***Schedule "A"***, the Owner will be responsible for paying all special district assessments and other assessmentsfor local improvements permitted by law;

iii. In furtherance of this PILOT Agreement, the Owner hereby agrees to abide by the terms of the Regulatory Agreement in favor of the New York State Division of Housing and Community Renewal ("HCR") for an Agreement, to wit June 30, 2036 (the "Extended Regulatory Term") which would encompass the September 2036 Williamsville Central School District Property Tax Bill and the January 2037 Town of Amherst and County of Erie Property Tax Bill; and

iv. The Owner agrees it will provide a fully executed copy of the HCR to the Town on December 31, 2022 or within fourteen (14) days of the same being signed by all parties, whichever is sooner. The Owner further agrees that a failure to timely provide the HCR to the Town will provide the Town, in its sole discretion, the right but not the obligation to terminate this agreement in its entirety. In the event of such termination the Town will not be held liable for any damages whatsoever whether monetary or equitable and if the Town is named as a party in any action the Town will be entitled to recover its attorneys' fees for the defense of the same.

v. At the expiration of the Extended Regulatory Term, this PILOT Agreement will cease to have any effect on the taxes due with respect to the property and the property will be taxed in accordance with applicable law unless otherwise extended or modified pursuant to a separate Agreement.

b. The PILOT Payments shall be payable annually. Each annual PILOT Payment to the Town shall be made on or before January 31st of each year and shall be delivered to theTown Clerk's Office, 5583 Main Street, Williamsville, New York 14221, or such other place as may be designated from time to time by the Town. Each such PILOT Payment to the County shall be made on or before January 31 of that year, or such payment shall be considered delinquent, and such PILOT Payment shall be delivered to County of Erie, c/o Director of Real Property Tax Services, The Edward A. Rath County Office Building,

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

Room 100, 95 Franklin Street, Buffalo, New York 14202, or such other place as may be designated from time to time by the County. Each such PILOT Payment to the School District shall be made on or before September 30 of that year, or such payment shall be considered delinquent, and such PILOT Payment shall be delivered to the Sweet Home Central School District, Attention Director of Finance, 1901 Sweet Home Road, Amherst, NY 14228 ("School District"), or such other place as may be designated from time to time by the School District..

c. In addition the parties agree that the Owner will pay a one-time community benefit payment of $500,000.00 at the real estate closing of this agreement. This provision is a material term of this agreement and non-payment will void the entire agreement. The community benefit payment is a one-time payment independent of the Owner's payment obligation listed in Schedule A. The one-time community benefit payment is payable to the Town of Amherst.

5. **Defaults in Payment in Lieu of Taxes**. In the event the Owner fails to make any payment in lieu of real property taxes when due, the amount or amounts not so paid shall be a lienon the Project in the same manner that delinquent real property taxes would be and continue as an obligation of the Owner until fully paid. In addition, the Owner shall pay the appropriate taxing authority's or authorities' interest and penalties on the unpaid amount or amounts accruing at the same times and at the interest rates as if such amounts were delinquent real property taxes. In addition to any other remedies available to them for the collection of delinquent real property taxes,including, without limitation, in rem proceedings, the Town, County and School District may exercise any other remedies available, and such remedies shall be cumulative and the exercise of any remedy shall not be an action of remedies under law.

6. **Effect of Fulfillment of the Requirement**. Once having paid the amounts requiredby this PILOT Agreement when due, the Owner shall not be required to pay any real property taxes for which such payments in lieu of taxes have been made, except special district assessmentsand other special assessments for local improvements permitted by law.

7. **Events of Default and Termination of Tax Exemption**.

a. An event of default ("Event of Default") shall be defined as (l) failure of the Owner to make any payment required under the PILOT Agreement when due, (2) the Owner's failure to provide any notice as required by this PILOT Agreement tothe Town, County or School District, (3) Taxpayer's failure to qualify, or continue to qualify, for a real property tax exemption for the Project in accordance with Article XI of the PHFL, (4) failure of Taxpayer to provide any of the information required by Section 3(c) of this PILOT Agreement, or (5) the transfer of title or beneficial ownership of any portion of the Project or the Land without the prior written consent of the Town, County and School District except as otherwise set forth in Section 15 below.

b. Upon the occurrence of an Event of Default as defined pursuant to Section 7(a) above, the Owner shall have ten (10) days after the receipt of Notice from the Town, County or School District regarding such default to cure such default.

c. In the event the Owner has not cured such default or defaults withinthe time period set forth in this PILOT Agreement, then the exemption from real property taxes described herein shall be deemed to have been terminated as of the taxable status dateof the Town's immediately preceding fiscal year.

d. Upon a termination of the exemption from real property taxes set forth in Section 7(c) above, the Owner shall be liable for real property taxes on a pro-rata basis from and after the Town's taxable status date immediately preceding the Event of Default and the statutory lien applicable to such real property taxes shall be deemed in effect as of the lien date normally applicable to such year's real property taxes, unless a separate basis for a real property tax exemption then exists for the benefit of Owner.

Any such termination of the real property tax exemption applicable to the Project shall not void the liability of the Owner for any unpaid payments in lieu of taxes required by this PILOT Agreement prior to such termination.

e. Upon an Event of Default, so long as Harper Capital and/or Dwight Capital and or their successors and/or assigns (the "Lender") holds a HUD-insured mortgage on the Project, the Town agrees to deliver a copy of the written notice set forth in paragraph (b) above to the Lender and Lender shall have the right, but not the obligation, to cure such violation in the same timeframe given to the Owner.

f. The Town agrees that any cure of any Event of Default hereunder made or tendered by Key Community Development Corporation, its successors and/or assigns, as the investor limited partner of the Company's (the "Investor Limited Partner") shall be deemed to be cured by the Company, and shall be accepted or rejected by the Town on the same basis as if made or tendered by the Company. The Investor Limited Partner shall not be obligated to cure any Event of Default.

8. **Waiver**. No waiver or modification of this Agreement shall be valid unless in writing and duly executed by the parties, and no evidence of any waiver or modification shall be offered or received in evidence in any proceeding, arbitration, or litigation arising out of or affecting this Agreement, or the rights or obligations of any party hereunder, unless such waiveror modification is in writing, duly executed as aforesaid. No failure or delay on the part of the Town to exercise any right, power or remedy hereunder shall operate as a waiver thereof, nor shallany single or partial exercise of such right, power or remedy preclude any other or further exercisethereof or the exercise of any other right, power or remedy.

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

9. **Modification**. Neither this Agreement nor any provision hereof may be amended, modified, waived, discharged or terminated, except by an instrument in writing duly executed andagreed to by the parties hereto.

10. **Counterparts**. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. The exchange of copies of this Agreement and of signature pages by facsimile or portable document format (PDF) transmission shall constitute effective execution and delivery of this Agreement asto the parties hereto and may be used in lieu of the original Agreement and signature pages for all purposes.

11. **Pay Equity.** The Owner, with respect to its own employees only, if any, shall comply with Erie County Executive Order 13 (2014) and agrees to complete the Certificate collectively attached hereto as Exhibit "2" and made a part hereof. The Owner shall make such records available, upon request, to the County's Division of Equal Employment Opportunity for review. The County shall have the right, upon reasonable notice and at reasonable times, to inspectthe books and records of the Owner, its offices and facilities, for the purpose of verifying information supplied in the Erie County Equal Pay Certification and for any other purpose reasonably related to conforming the Agency's compliance with Erie County Executive Order 13 (2014). Notwithstanding the termination provisions contained herein, violation of the provisions of Executive Order 13 (2014), may constitute grounds for the immediate termination of this Agreement and may constitute grounds for determining that the Taxpayer is not qualified toparticipate in future County contracts.

12. **Notices.** All notices, demands, requests, consents or other communications required or permitted to be given or made under the PILOT shall be in writing and addressed to the following:

If to the Town:
Town Attorney's Office
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Town Supervisor
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Town Assessor
Town of Amherst
5583 Main Street
Williamsville, NY 14221

If to the Owner:
Sutton Place Preservation Limited Partnership, 401 Wilshire BLVD, Suite 1070, Santa Monica, CA90401

If to Erie County:
Erie County Attorney's Office
95 Franklin Street Buffalo,
New York 14202

If to the School District:
Sweet Home Central School District
1901 Sweet Home Road
Amherst, NY 14228

13. **Binding Effect.** This Agreement shall inure to the benefit of and shall be binding upon the parties. Each of the parties represents and warrants that the execution, delivery and performance of this Agreement has been duly authorized and does not require any other consentor approval, does not violate any article, by-law or organizational document or any law, rule, regulation, order, writ, judgment or decree by which it is bound, and will not result in or constitutea default under any indenture, credit agreement, or any other agreement or instrument to which

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

any of them is a party. Each party represents that this Agreement shall constitute the legal, validand binding agreement of the parties enforceable in accordance with its terms.

14. **Amendments.** This Agreement may not be amended, changed, modified, alteredor terminated without the prior written consent of each of the parties hereto.

15. **Assignments.**

a. This Agreement may not be assigned in whole or in part without the prior written consent of the Town upon application made at least forty-five (45) days prior to a regularly scheduled meeting of the Town Board. A transfer in excess of fifty percent (50%) of the equity voting interests of the Owner (including all parent and subsidiary companies and including the ultimate taxpayer(s) owning or controlling the Project and the Property) shall be deemed an assignment and require the prior written consent of the Town; provided, however, that (a) any transfer between existingholders of ownership interests in the Owner will not require prior written consentof the Town even if such transfer would be in excess of fifty percent (50%) of the equity voting interests in the Owner, and (b) the Investor Limited Partner may transfer its interests in the Company so long as control of the Company's day-to-day operations does not change. Any assignment, if and once approved, shall be on the following conditions, as of the time of such assignment: (i) no assignmentshall relieve the Owner from primary liability for any of its obligations hereunder; (ii) the assignee shall assume the obligations of the Owner hereunder to the extent of the interest so assigned; (iii) the Owner will, within ten (10) days after the delivery thereof, furnish or cause to be furnished to the Town a true and complete copy of such assignment and the instrument of assumption and related documents associated with Approved Assignment; (iv) the Project shall continue to be operatedin compliance with Article XI of the PHFL; and (v) if the Town shall so request, asof the purported effective date of any such assignment, Owner at its sole cost shall furnish to the Town an opinion, in form and substance satisfactory to the Town as to any or all of the items (i), (ii) and (iv) above. Any such assignment shall be subject to the review and approval by the Town and approval as to form by the Town Attorney with any such cost to be paid by the Owner, including reasonable attorneys' fees, and shall contain such terms and conditions as reasonably required by the Town and its counsel.

b. Notwithstanding anything to the contrary contained in this Section 15 or elsewherein this agreement, the prohibition on Transfer described above shall not be construed to prohibit the transfer of title to the Project or any portion thereof to the Lender or its successors or assigns (collectively, "Lender Party") as a result of a foreclosure or the acceptance of a deed in lieu of foreclosure or comparable conversion of the loan held by Lender. During any period of time that a Lender Party owns the Project or if any subsequent owner acquires theProject from Lender Party, neither Lender, nor such Lender Party, nor such subsequent owner will be liable or obligated for the breach or default of any obligation of any prior owner under this Agreement, including, but not limited to, any payment or indemnification obligation, in which case the owner of the Project at the time the default occurred shall remain liable for any and all damages occasioned thereby even after such entity ceases to be the owner (and, in such event, any party seekingto collect such damages shall have no recourse and shall have no right to levy against, or otherwise collect on, any judgment from the Project), provided that suchdefaulting owner shall bear no liability under this Agreement for any damages occasioned by any subsequent default under this Agreement occurring after such entity ceases to be the owner of the Project.

16. **Applicable Law.** This Agreement shall be governed, construed and enforced in accordance with the laws of the State of New York for contracts to be wholly performed therein.

17. **Section Headings Not Controlling.** The headings of the several sections in this Agreement have been prepared for convenience of reference only and shall not control, affect the meaning of or be taken as an interpretation of any provision of this Agreement.

18. **Severability.** If any provision of this Agreement or its application is held invalidor unenforceable to any extent, the remainder of this Agreement shall remain in full force and effect and the application of that provision to other persons or circumstances shall be enforced to the greatest extent permitted by law.

19. **Entire Agreement.** This Agreement constitutes the entire agreement of the Partiesrelating to PILOT Payments with respect to the Project and the Property and supersedes all prior contracts and/or agreements, whether oral or written, with respect thereto.

20. **Authority To Execute.** Any individual executing this Agreement on behalf of a party represents and warrants that he or she is duly authorized to execute and deliver this Agreement on behalf of such party, and this Agreement is binding upon such party in accordance with its terms.

{Rest of Page Left Intentionally Blank}

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

IN WITNESS WHEREOF, the Town, County, and Taxpayer have duly executed this Agreementas of the day and year first above written.

COUNTY OF ERIE ("COUNTY")

Mark C. Poloncarz, County Executive
Maria R. Whyte, Deputy County Executive

Date:

Approved as to content
for Erie County:

Thomas Hersey, Commissioner
Department of Planning
& Economic Development

Date:

Approved as to form for
Erie County:

Kristen M. Walder, Esq.
Assistant County Attorney

Date:

TOWN OF AMHERST ("TOWN")

Brian J. Kulpa, Supervisor

Date:

Approved as to content for
the Town of Amherst:

Emily Murphy, Assessor

Date:

Approved as to form for the
Town of Amherst:

Samuel A. Alba, Esq.,
Senior Deputy Town Attorney

Date:

SWEET HOME CENTRAL SCHOOL DISTRICT ("SCHOOL DISTRICT")

Anthony Day
Superintendent of Schools

Date:

SUTTON PLACE HOUSING DEVELOPMENT FUND COMPANY, INC. ("TAXPAYER")

[name]
[President]

Date:

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

Approved as to content for School District

SUTTON PLACE PRESERVATION LIMITED PARTNERSHIP
("COMPANY")

_____
Donald Feldman
Director of Finance & Plant Services
Supervisor, Community Relations & Health Services
Date:_____

_____
Date: _____

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

STATE OF NEW YORK)
ss.:
COUNTY OF_____)

On the ___day of_____in the year 2022 before me, the undersigned, a Notary Public in and for said State, personally appeared **Mark C. Poloncarz**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose names is subscribed to the within instrument and acknowledged to me that he executed the same in his capacities, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK)
ss.:
COUNTY OF_____)

On the ___day of_____in the year 2022 before me, the undersigned, a Notary Public in and for said State, personally appeared **Brian J. Kulpa**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose names is subscribed to the within instrument and acknowledged to me that he executed the same in his capacities, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

STATE OF NEW YORK)
ss.:
COUNTY OF_____)

On the ___day of_____in the year 2022 before me, the undersigned, a Notary Public in and for said State, personally appeared **Anthony Day**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose names is subscribed to the within instrument and acknowledged to me that he executed the same in his capacities, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

STATE OF NEW YORK)
ss.:
COUNTY OF_____)

On the ___day of_____in the year 2022 before me, the undersigned, a Notary Public in and for said State, personally appeared_____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose names is subscribed to the within instrument and acknowledged to me that he executed the same in his capacities, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

EXHIBIT 1
LEGAL DESCRIPTION

ALL THAT CERTAIN plot, piece or parcel of land, situate, lying and being in the Town of Amherst County of Erie and State of New York, being parts of Lots Nos. 40 and 41, Township 12, Range 7 of the Holland land Company's Survey, bounded and described as follows:

BEGINNING at the southeast corner of Lot No. 41, Township 12, Range 7;

THENCE North 01 degree 08 minutes 23 seconds East, along the east line of said Lot No. 41, 294.99 feet to a point, said point being in the southerly right of way of Sundridge Drive;

THENCE North 88 degrees 51 minutes 37 seconds West, along said right of way 35 feet to a point;

THENCE North 01 degree 08 minutes 23 seconds East along said right of way, 290.70 feet to a point;

THENCE North 89 degrees 15 minutes 02 seconds West, parallel with the south line ofLot No. 41, Township 12, Range 7, 1275.43 feet to a point;

THENCE South 00 degrees 09 minutes 43 seconds East, 736.15 feet to the southeast corner of lands described in Liber 7239 of Deeds at page 425;

THENCE South 89 degrees 15 minutes 02 seconds East and along the north line of lands described in Liber 3722 of Deeds at page 29 and parallel to the south line of Lot No. 41, 1293.71 feet to a point in the east line of Lot No. 40, Township 12, Range 7;

THENCE North 01 degrees 08 minutes 23 seconds East, along said east line of Lot No. 40, 150.14 feet to the point or place of BEGINNING.

For Information Only: Said premises are known as 102-301 Travers Circle, Amherst, NY and designated as Section 26.03 Block 2 Lot 7 as shown on the Erie County Land and Tax Map.

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

EXHIBIT 2
Erie County Equal Pay Certification

In order to comply with Executive Order 13 dated November 6, 2014, we hereby certify that we are in compliance with federal law, including the Equal Pay Act of 1963, Title VII of the Civil Rights Act of 1964, Federal Executive Order 11246 of September 24, 1965 and New York State Labor Law Section 194 (together "Equal Pay Law"). The average compensation for female employees is not consistently below the average compensation for male employees, taking into account mitigating factors. We understand that this certification is a material component of this contract. Violation of the provisions of Executive Order 13, which is attached hereto and made a part hereof, can constitute grounds for the immediate termination of this contract and mayconstitute grounds for determining that a bidder is not qualified to participate in future county contracts.

We have evaluated wages and benefits to ensure compliance with the Federal Equal Pay Law.

Signature

Verification

STATE OF NEW YORK)
COUNTY OF ERIE) SS:

A)
_____, being duly sworn, states he or she is the owner of (or a partner in)_____, and is making the foregoing Certification and that the statements and representations made in the Certification are true to his or her own knowledge.

B)
_____, being duly sworn, states that he or she is the
(Name of Corporate Officer)
_____, of
_____,
(Title of Corporate Officer) (Name of Corporation)

the enterprise making the foregoing Certification, that he or she has read the Certification and knows its contents, that the statements and representations made in the Certification are true to hisor her own knowledge, and that the Certification is made at the direction of the Board of Directorsof the Corporation.

Sworn to before me this_____Day of_____, 20____

_____
Notary Public

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

COUNTY OF ERIE

MARK C. POLONCARZ
COUNTY EXECUTIVE

Executive Order #13
Pay Equity Certification on County Contracts

WHEREAS, federal law, including the Equal Pay Act of 1963, Title VII of the Civil Rights Act of 1964 and Federal Executive Order 11246 of September 24, 1965 (Equal Employment Opportunity) (together "Federal Equal Pay Law"), requires that men and women in the same workplace be given equal pay for equal work; and

WHEREAS, Section 194 of New York State Labor Law ("NYS Equal Pay Law") prohibits compensating men and women differently for the same work; and

WHEREAS, on average, a full-time working woman in New York State earns just 85 cents for every dollar that a man earns and the pay gap is even greater for African-American and Latina women; and

WHEREAS, females make up nearly fifty-two percent of Erie County's population; and

WHEREAS, women make up nearly half of the U.S. labor force and are a growing number of breadwinners in their families; and

WHEREAS, this pay differential shortchanges women and their families by thousands of dollars a year, and potentially hundreds of thousands of dollars over a lifetime, presenting a lifelong threat to those families' economic security and reducing their earnings through Social Security and other post retirement plans; and

WHEREAS, poverty is recognized as a leading cause of or contributing factor to many social problems, including but not limited to substance abuse, domestic violence, child abuse, improper nutrition, obesity, improper health care and criminal conduct; and

WHEREAS, the impact of pay differentials is exacerbated as workers age, causing underpaid workers to disproportionally rely upon various forms of public support in their retirement years; and

WHEREAS, pay inequity can significantly impact the County, necessitating the provision of various public subsidies for low income residents and leading to the lack of receipt of income by women residents which would be spent in our local economy; and

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

WHEREAS, through the enforcement of current state and federal laws that ban unequal pay for equal work, Erie County can help ameliorate the many negative consequences of pay inequality, thereby improving the lives of those who might otherwise be underpaid, strengthening families and protecting children, and reducing the demand for public services, all positively impacting county, state and federal budgets.

NOW, THEREFORE, I MARK C. POLONCARZ, Erie County Executive, by virtue of the authority vested in me by the Erie County Charter § 302, do hereby order as follows:

1. It is ordered that on and after January 1, 2015, all Erie County offices, departments and administrative units, including but not limited to the Division of Purchase, fully implement a requirement in all bids, requests for proposals and other contract solicitations that the contractor submit an Erie County Equal Pay Certification which certifies the contractor's compliance with Federal Equal Pay Law and New York State Equal Pay Law (together, the "Equal Pay Laws"). Such certification shall be required prior to execution of the contract; and it is,

2. Further ordered that such certification shall include a representation by the contractor that it has not been the subject of an adverse finding under the Equal Pay Laws within the previous five years and shall include disclosure of any currently pending claims against the contractor; and it is,

3. Further ordered that violation of any provision of the Equal Pay Laws during the effective period of such a contract or the filing of a false or misleading Erie County Equal Pay Certificate may constitute grounds for immediate termination of such a contract; and it is,

4. Further ordered that violation of any provision of the Equal Pay Laws during the effective period of such a contract or the filing of a false or misleading Erie County Equal Pay Certificate may constitute grounds for determining a bidder or responder is not qualified to participate in future County contracts; and it is,

5. Further ordered that the Law Department prepare an Erie County Equal Pay Certification for use by Erie County offices, departments and administrative units and assure compliance with this Executive Order in the contract approval process; and it is,

6. Further ordered that the County Division of Equal Employment Opportunity ("EEO") establish a procedure for compliance monitoring and periodic auditing of certification records; and it is,

GIVEN, under my hand and the Privy Seal of the County of Erie in the City of Buffalo this 6th day of November, in the year two thousand fourteen.

COUNTY OF ERIE

BY: _____

MARK C. POLONCARZ
ERIE COUNTY EXECUTIVE

Attachment: PILOT - Sutton Place FINAL 4-1-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

Sutton 246 units	Based on EC Policy 5% of EGI	Used 2023 income at $3959313
		did not account for 5% vacancy or projected
		$3959313 x 5% Erie county Policy = $197966

ASSESSED YEAR	PILOT AMOUNT	ERIE COUNTY-25%	SCHOOL DISTRICT 30%	TOWN OF AMHERST 45%	
2022	$197,966	$49,492	$59,390	$89,085	
2023	$203,905	$50,976	$61,171	$91,757	
2024	$210,022	$52,506	$63,007	$94,510	
2025	$216,323	$54,081	$64,897	$97,345	
2026	$222,812	$55,703	$66,844	$100,266	
2027	$229,497	$57,374	$68,849	$103,274	
2028	$236,382	$59,095	$70,915	$106,372	
2029	$243,473	$60,868	$73,042	$109,563	
2030	$250,777	$62,694	$75,233	$112,850	
2031	$258,301	$64,575	$77,490	$116,235	
2032	$266,050	$66,512	$79,815	$119,722	
2033	$274,031	$68,508	$82,209	$123,314	
2034	$282,252	$70,563	$84,676	$127,013	
2035	$290,720	$72,680	$87,216	$130,824	
2036	$299,441	$74,860	$89,832	$134,749	
TOTAL	$3,681,953	$920,488	$1,104,586	$1,656,879	3,681,953

Attachment: SCHEDULE A - SUTTON - Official FINAL 4-11-22 (RES-2022-355 : Sutton Place PILOT Agreement (CRS #3258))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25616 **RESOLUTION 2022-356** **ADOPTED**

IMA - Sweet Home CSD & Town of Amherst (CRS #3263)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Inter-Municipal Agreement**
Sweet Home Central School District & Town of Amherst
Purchase of Fuel (Highway Department) (CRS# 3263)

Kindly adopt a resolution authorizing the Supervisor to execute the attached agreement pending successful completion of the CRS.

Thank you.

SAA:rms
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment,* **Agenda Item : April 11, 2022**)

4/11/2022
Consent

FINANCIAL IMPACT:

Revenue

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

INTER-MUNICIPAL AGREEMENT

THIS AGREEMENT, made this ___day of _____, 2022, by and between the TOWN OF AMHERST, a municipal corporation having an office located at 5583 Main Street, Williamsville, New York 14221 (hereinafter "Amherst"), the SWEET HOME CENTRAL SCHOOL DISTRICT, a municipal corporation having an office located at 1901 Sweet Home Road, Amherst, New York 14228 (hereinafter "Sweet Home").

WITNESSETH:

WHEREAS, Sweet Home wishes to participate in an inter-municipal Agreement pursuant to Article 50G of the New York State General Municipal Law for the purchase of fuel from Amherst.

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter contained, the parties do hereby mutually agree as follows:

1. TERM

The term of this Agreement shall be for four (4) months commencing on the 14th day of May, 2022 and shall continue through and including the 14th day of September 2022. Additionally, Sweet Home will have the option to extend the term of this Agreement, upon the same terms and conditions set forth herein, for three (3) successive periods of four (4) months each, so long as such option is exercised in writing by Sweet Home no later than sixty (60) days prior to the expiration of the original term or any option period. The option may be rejected by the Town in its sole discretion no later than thirty (30) days prior to the expiration of the original term or any option period.

2. MATERIALS AND COST

Sweet Home agrees to purchase fuel from Amherst at a cost of the market rate with a 3% administrative fee. The market rate is subject to change on a daily basis based on the price of fuel. All invoices for fuel must be paid within thirty (30) days of receipt.

Sweet Home will pick up/refuel at the Town of Amherst Highway Department, 1042 N. Forest Road, Williamsville, New York 14221.

3. PRIORITY

Amherst will have priority in fuel use and reserves the right to cancel this agreement on seven (7) business days' notice in the event of a fuel short age resulting inadequate fuel reserves or availability to comply with this agreement.

4. INDEMNIFICATION

To the fullest extent permitted by law, Sweet Home covenants and agrees to indemnify and hold harmless Amherst, its departments, boards, officers, agents and employees from any and all loss,

Attachment: TownofAmherstFuel_Signed (RES-2022-356 : IMA - Sweet Home CSD & Town of Amherst (CRS #3263))

costs, and expense, claims or demands, actions or causes of action, suits, proceedings, damages, liabilities, losses, costs and expenses, including third party claims or actions and attorneys' fees arising directly or indirectly from any negligent acts or omissions of Sweet Home, its officers, agents and employees in carrying out the provisions of this Agreement.

5. **CANCELLATION OF AGREEMENT**

Any party hereto shall have the right upon thirty (30) days prior written notice to cancel this Agreement or any extension thereof.

6. **WAIVER**

No waiver of any breach of any condition of the Agreement shall be binding unless in writing and signed by the party waiving said breach. No such waiver shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall expressly include the same.

7. **CHOICE OF LAW/VENUE**

This Agreement shall be governed by, and interpreted according to the laws of the State of New York. Any and all legal action necessary to enforce the agreement will be held in Erie County, New York.

8. **SEVERABILITY**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party, this contract shall be physically amended forthwith and executed by the parties to make such insertion.

IN WITNESS WHEREOF, the parties hereto have caused their hands and seals to be hereunto affixed and these presents to be signed the day and year first above written.

BRIAN J. KULPA
SUPERVISOR
TOWN OF AMHERST

Signature:_____

Dated:_____

MICHAEL V. GINESTRE,
SUPERINTENDENT
SWEET HOME CENTRAL SCHOOL DISTRICT

Signature:_____

Dated: 4/5/22

Attachment: TownofAmherstFuel_Signed (RES-2022-356 : IMA - Sweet Home CSD & Town of Amherst (CRS #3263))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25624 **RESOLUTION 2022-357** **ADOPTED AS AMENDED**

Grant of Easement - Niagara Mohawk (National Grid) to Town of Amherst (550 Smith Road) (CRS#3259)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Nicole M. Burroughs, Senior Paralegal**

DATE: **April 6, 2022**

RE: **Grant of Permanent Easement (CRS #3259)**
Town of Amherst (550 Smith Road) To Niagara Mohawk Power Corporation (National Grid)

Kindly adopt a resolution authorizing the Supervisor to execute the attached Grant of Easement relative to the above project site pending successful completion of the CRS.

The attached agreement was reviewed and approved by the Engineering Department.

Thank you.

SJS:nmb
Attachment
c: Tim Koller, Deputy Town Clerk (*w/attachment,* **Agenda Item - April 11, 2022**)
Christopher P. Schregel, Project Manager (*w/attachment)*

4/11/2022
A motion to approve was made by Supervisor Kulpa and seconded by Deputy Supervisor Berger. A motion to amend was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 5-0. Amendment adds the updated attachment. A motion to approve as amended was made by Supervisor Kulpa, seconded by Deputy Supervisor Berger and unanimously approved 5-0.

FINANCIAL IMPACT:

None for the purposes of this resolution.

RESULT:	**ADOPTED AS AMENDED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Jacqualine Berger, Deputy Supervisor
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

GRANT OF EASEMENT

TOWN OF AMHERST, a municipal corporation organized pursuant to the laws of the State of New York, having a mailing address of 5583 Main Street, Williamsville, New York 14221, (hereinafter referred to as "Grantor"), for consideration of One Dollar ($1.00), and/or other valuable consideration paid, the receipt and sufficiency of which are hereby acknowledged under seal, hereby grants to **NIAGARA MOHAWK POWER CORPORATION**, a New York corporation, having an address at 144 Kensington Avenue, Buffalo, New York, 14214 (hereinafter referred to as "Grantee"), for Grantee and its lessees, licensees, successors, and assigns, the perpetual right and easement as described in Section 1 below (the "Easement") in, under, through, over, across, and upon the Grantor's land, as described in Section 2 below (the "Grantor's Land").

Section 1 – Description of the Easement. The "Easement" granted by the Grantor to the Grantee consists of a perpetual easement and right-of-way, with the right, privilege, and authority to:

a. Construct, reconstruct, relocate, extend, repair, maintain, operate, inspect, patrol, and, at its pleasure, remove any poles or lines of poles, supporting structures, cables, crossarms, overhead and underground wires, guys, guy stubs, insulators, transformers, braces, fittings, foundations, anchors, lateral service lines, communications facilities, and other fixtures and appurtenances (collectively, the "Facilities"), which the Grantee shall require now and from time to time, for the transmission and distribution of high and low voltage electric current and for the transmission of intelligence and communication purposes, by any means, whether now existing or hereafter devised, for public or private use, in, upon, over, under, and across that portion of the Grantor's Land described in Section 3 below (the "Easement Area"), and the highways abutting or running through the Grantor's Land, and to renew, replace, add to, and otherwise change the Facilities and each and every part thereof and the location thereof within the Easement Area, and utilize the Facilities within the Easement Area for the purpose of providing service to the Grantor and others;

b. From time to time, without further payment therefor, clear and keep cleared, that portion of Grantor's Land described in Section 3 below (the "Trimming Easement Area") of any and all trees, limbs, branches, roots or vegetation and trim and remove danger trees adjacent to the Easement Area that, in the opinion of the Grantee may jeopardize the integrity of the Grantee's electric distribution facilities; Grantee shall follow accepted arboricultural standards which may require Grantor to make pruning cuts closer to the tree stems, outside the 10-foot easement area.

c. Excavate or change the grade of the Grantor's Land as is reasonable, necessary, and proper for any and all purposes described in this Section 1; provided, however, that the Grantee will, upon completion of its work, backfill and restore any excavated areas to reasonably the same condition as existed prior to such excavation; and

d. Pass and repass along the Easement Area to and from the adjoining lands and pass and repass over, across, and upon the Grantor's Land to and from the Easement Area, and construct, reconstruct, relocate, use, and maintain such footbridges, causeways, and ways of access, if any, thereon, as is reasonable and necessary in order to exercise to the fullest extent of the Easement.

Section 2 – Description of Grantor's Land. The "Grantor's Land" is described in a certain Deed recorded in the Erie County Clerk's Office on March 5, 1990 in Liber 10145 of Deeds at Page 673 and consists of land described as being part of Tax Parcel No. **16.00-4-20.1** of the Town of Amherst, County of Erie, State of New York, and part of Lot No. 55, Township 13, Range 7, of the Holland Land Company's Survey commonly known as **550 Smith Road**.

Section 3 – Location of the Easement Area. The "Easement Area" shall consist of a portion of the Grantor's Land twenty feet (20') in width throughout its extent, the centerline of the Easement Area being the centerline of the Facilities. The general location of the Easement Area is shown on the sketch entitled Exhibit A, which sketch is attached hereto and recorded herewith, copies of which are in the possession of the Grantor and the Grantees. The final and definitive location(s) of the Easement Area shall become established by and upon the final installation and erection of the Facilities by the Grantees in substantial compliance with Exhibit A hereto. The "Trimming Easement Area" shall be a strip of land measured ten (10) feet from the outermost electric conductor on each side of the line.

Section 4 – Facilities Ownership. It is agreed that the Facilities shall remain the property of the Grantee, its successors and assigns.

Section 5 – General Provisions. The Grantor, for itself, its heirs, legal representatives, successors, and assigns, hereby covenants and agrees with the Grantee that no act will be permitted within the Easement Area which is inconsistent with the Easement hereby granted; no buildings or structures, or replacements thereof or additions thereto, swimming pools, or obstructions will be erected or constructed above or below grade within the Easement Area; no trees shall be grown, cultivated,

Attachment: 28863-processed-merged (RES-2022-357 : Grant of Easement - Niagara Mohawk (National Grid) to Town of Amherst (550 Smith

or harvested, and no excavating, mining, or blasting shall be undertaken within the Easement Area without the prior written consent of the Grantee; the Easement shall not be modified nor the Easement Area relocated by the Grantor without the Grantee's prior written consent; the present grade or ground level of the Easement Area will not be changed by excavation or filling.

The Grantee, its successors and assigns, are hereby expressly given and granted the right to assign this Easement, or any part thereof, or interest therein, and the same shall be divisible between or among two or more owners, as to any right or rights created hereunder, so that each assignee or owner shall have the full right, privilege, and authority herein granted, to be owned and enjoyed either in common or severally. This Grant of Easement shall at all times be deemed to be and shall be a continuing covenant running with the Grantor's Land and shall inure to and be binding upon the successors, heirs, legal representatives, and assigns of the parties named in this Grant of Easement.

IN WITNESS WHEREOF, the Grantor has duly executed this Grant of Easement under seal this _____ day of _____, 2022.

TOWN OF AMHERST

By: _____
Print ***(sign here)***
Name: _____

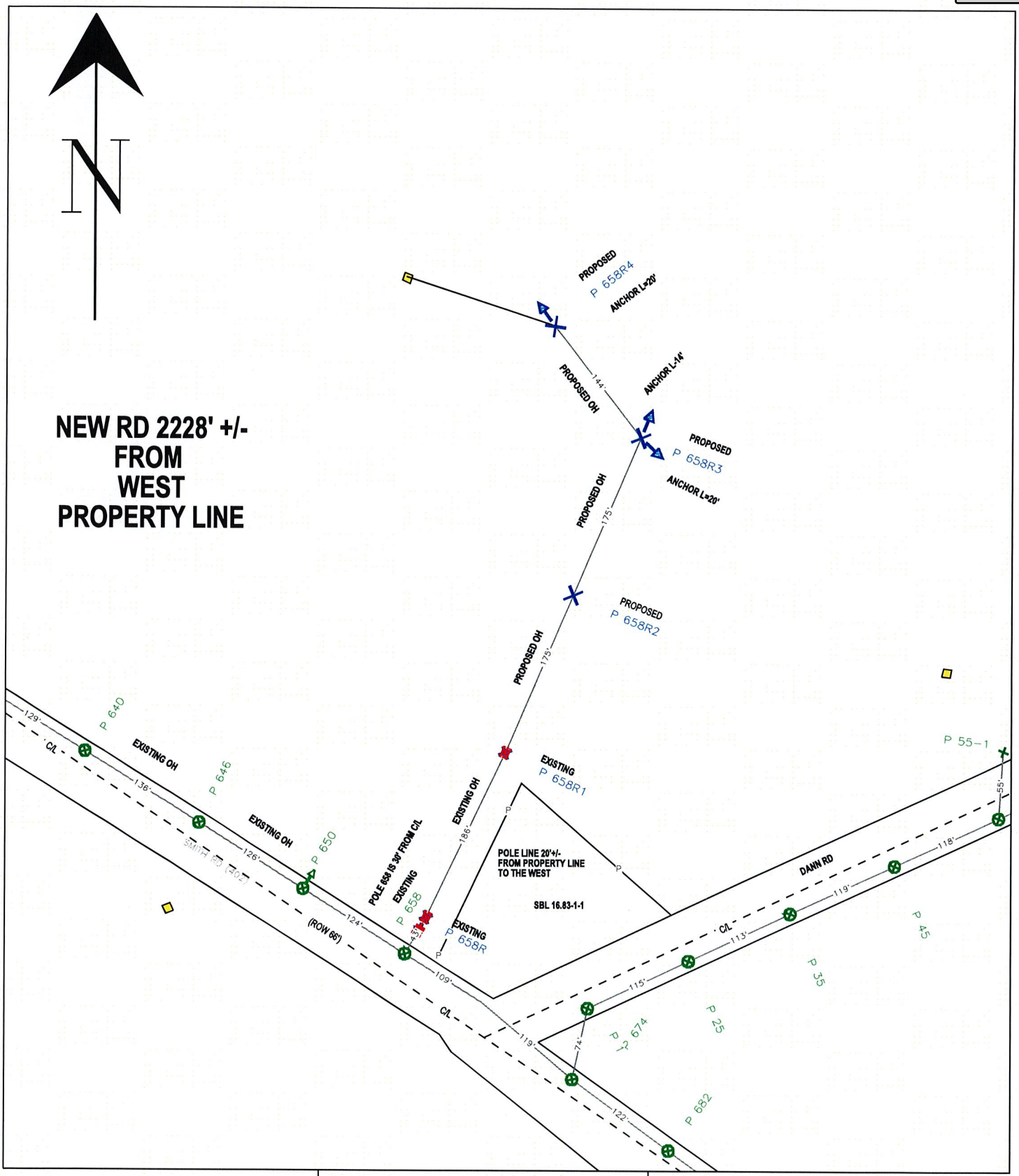
Print Title: _____

State of _____)
) ss:
County of _____)

On the ____ day of _____ in the year 20___, before me, the undersigned, personally appeared_____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

Attachment: 28863-processed-merged (RES-2022-357 : Grant of Easement - Niagara Mohawk (National Grid) to Town of Amherst (550 Smith



EASEMENT #:	EASEMENT SKETCH - EXHIBIT A	NOT TO SCALE
DESIGNER: Strauss, Steven DATE: WORK ORDER #: 03-21-30449432	LANDS OF TOWN OF AMHERST TOWN OF AMHERST COUNTY OF ERIE SBL 16.00-4-20.1	nationalgrid

Attachment: 28863-processed-merged (RES-2022-357 : Grant of Easement - Niagara Mohawk (National Grid) to Town of Amherst (550 Smith

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25625 **RESOLUTION 2022-358** **ADOPTED**

2021 Firefighter Service Award Lists - Mandatory Posting Period - 30 Days

AGENDA ITEM : APRIL 11TH, 2021

TO: **Town Board**

FROM: **Stanley J. Sliwa, Esq., Town Attorney**

DATE: **April 6, 2022**

RE: **2021 Service Award Program**
***East Amherst Fire Department**
***Ellicott Creek Fire Protection District**
***Getzville Fire Protection District**
***Main Transit Fire Protection District**
***North Amherst Fire Protection District**
***North Bailey Fire Protection District**
***Swormville Fire Company, Inc.**

Kindly adopt the following resolution with respect to the above matter:

RESOLVED, the Town Board approves the posting of the following fire company lists in their respective fire halls for the mandatory period of thirty (30) days:

East Amherst Fire Department
Ellicott Creek Fire Protection District
Getzville Fire Protection District
Main Transit Fire Protection District
North Amherst Fire Protection District
North Bailey Fire Protection District
Swormville Fire Company, Inc.

Thank you.

SJS:nmb
c: Tim Koller, Deputy Town Clerk (**Agenda Item : April 11th, 2022**)

4/11/2022
Consent

FINANCIAL IMPACT:

None for the purposes of this resolution.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Stanley J. Sliwa**
Co-Sponsored by:

DOC ID: 25627 **RESOLUTION 2022-359** **ADOPTED**

License Agreement - 117 Canalview Terrace (Crance) (CRS# 3260)

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Nicole M. Burroughs, Senior Paralegal**

DATE: **April 6, 2022**

RE: **Request for License Agreement (CRS #3260)**
Construction and Installation of Fence
Property Located At:
117 Canalview Terrace, Amherst, New York 14228

Kindly adopt a resolution authorizing the Supervisor to execute the attached License Agreement pending successful completion of the CRS.

The owners of the above-referenced property are seeking permission to construct and install a fence on their property that will encroach into an existing Town-owned easement, the details and stipulations of which are more fully described in the License Agreement.

This request was reviewed and approved by the Highway Department.

Thank you for your consideration.

NMB:hs
Attachment
c: Tim Koller, Deputy Town Clerk
(w/attachment, **Agenda Item: April 11, 2022**)
Tim Lucey, General Crew Chief (*w/attachment)*

4/11/2022
Consent

FINANCIAL IMPACT:

150.00 - Fee For License Agreement

$80.00 - ECCO Filing Fee

Both fees paid to the Town in one check by homeowners - $230.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Attachment: LicAgr.117CanalviewTerrCrance-04042022130910 (RES-2022-359 : License Agreement - 117 Canalview Terrace (Crance) (CRS

Return to: Town of Amherst
Attorney's Office
5583 Main Street
Williamsville, New York 14221

TOWN OF AMHERST
LICENSE AGREEMENT

THIS AGREEMENT, made as of this 11th day of April, 2022, between the Town of Amherst, a municipal corporation existing under and by virtue of the laws of the State of New York, having its principal office at 5583 Main Street, Williamsville, New York 14221, Party of the First Part hereinafter referred to as the "Town" and

Jason E. Crance and Gina A. Crance
117 Canalview Terrace
Amherst, New York 14228
SBL: 26.06-6-36

Parties of the Second Part hereinafter referred to as the "Owners."

WITNESSETH:

WHEREAS, the Owners are presently the owners of following described premises:

All of that tract or parcel of land situate in the Town of Amherst, County of Erie, and State of New York, being part of Lot No. 47, Township 13, Range 7 of the Holland Land Company's Survey as shown on map filed in the Erie County Clerk's Office under Cover No. 3533 and is known as Subdivision Lot No. 183.

It is more commonly known as:

117 Canalview Terrace
Amherst, New York 14228
SBL: 26.06-6-36

WHEREAS, the Town became the holder of a 20' Wide Public Drainage Easement and a Varying Width Public Drainage Easement as shown on the Subdivision Map filed in the Erie County Clerk's Office under Cover No. 3533. Said public drainage easements are shown on the survey attached hereto as Exhibit "A;"

WHEREAS, the Owners are desirous of utilizing a portion of the aforementioned easement area:

To construct and place a fence 5' off of the property line (easement side) of the existing home to allow for a gate access, said encroachment being no more than 2' into the existing 20' wide public drainage easement;

as shown on a sketch labeled Exhibit "A," attached hereto and made part hereof. Said fence and gate access are to be constructed in accordance with the guidelines above and as more fully detailed on Exhibit "A" attached hereto and made a part hereof.

WHEREAS, the intended use as hereinafter provided does not interfere with the municipal purpose of which said Public Drainage Easements were acquired.

NOW, THEREFORE, in consideration of the premises and the sum of One Dollar ($1.00) paid to the Town, the receipt whereof is hereby acknowledged, and the covenants and promises hereinafter set forth the parties agree as follows:

The Town does hereby grant to the Owners, his/her successors, distributees and assigns a license and/or privilege to install, maintain, and use a portion of the Public Drainage Easement areas as shown on Exhibit "A," subject to the following conditions:

a. There shall not be installed or placed devices, equipment or structures within the said easement area without prior approval of the Town;

b. The use of said license in the Public Drainage Easement area shall not interfere or restrict the operation, maintenance, repair and/or reconstruction of the Public Drainage Facilities;

c. If it becomes necessary to remove said encroachment(s) for the purpose of repair and/or reconstruction of the Public Drainage facility, the cost of the removal and reinstallation of said improvements shall be at the expense of the Owners, his/her successors, distributees and assigns.

d. If at any time the Public Drainage facilities are exposed, unearthed or damaged, the Town shall be promptly notified and allowed inspection of the easement areas.

e. Owners acknowledge and accept all consequences, including, but not limited to, damage to any and all structures/fixtures/assemblies that encroach into the easement area as a result of a high water event.

Attachment: LicAgr.117CanalviewTerrCrance-04042022130910 (RES-2022-359 : License Agreement - 117 Canalview Terrace (Crance) (CRS

The Owners shall defend, indemnify and hold harmless the Town from any and all claims or causes of action arising out of the use and exercise of this agreement.

This Agreement shall commence on the 11th day of April, 2022 and shall terminate one (1) year thereafter.

This Agreement, however, shall automatically extend for one (1) year periods unless the same is cancelled as herein provided.

Either party may cancel this Agreement by giving sixty (60) days written notice to the other of such cancellation and during said sixty (60) days cancellation shall remove said generator and fence and shall restore the area to the same condition that existed prior.

This Agreement shall ensure to the benefit of the parties, hereto, their successors, distributees, and assigns.

IN WITNESS WHEREOF, the parties to this Agreement have executed the same, the day and year first above written.

TOWN OF AMHERST

_____

Brian J. Kulpa
Supervisor

PROPERTY OWNER

Jason E. Crance

PROPERTY OWNER

Gina A. Crance

Attachment: LicAgr.117CanalviewTerrCrance-04042022130910 (RES-2022-359 : License Agreement - 117 Canalview Terrace (Crance) (CRS

STATE OF NEW YORK }
ERIE COUNTY }SS:

On the _____day of _____ in the year 2022 before me, the undersigned, personally appeared, **Brian J. Kulpa,** personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to within the instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK }
ERIE COUNTY }SS:

On the 2nd day of April in the year 2022 before me, the undersigned, personally appeared, **Jason E. Crance** personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to within the instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Jeremy J. Crance
Notary Public

Jeremy P Crance
Notary Public, State of New York
Qualified in Erie County
No. 01CR6348681
Commission Expires October 3, 2024

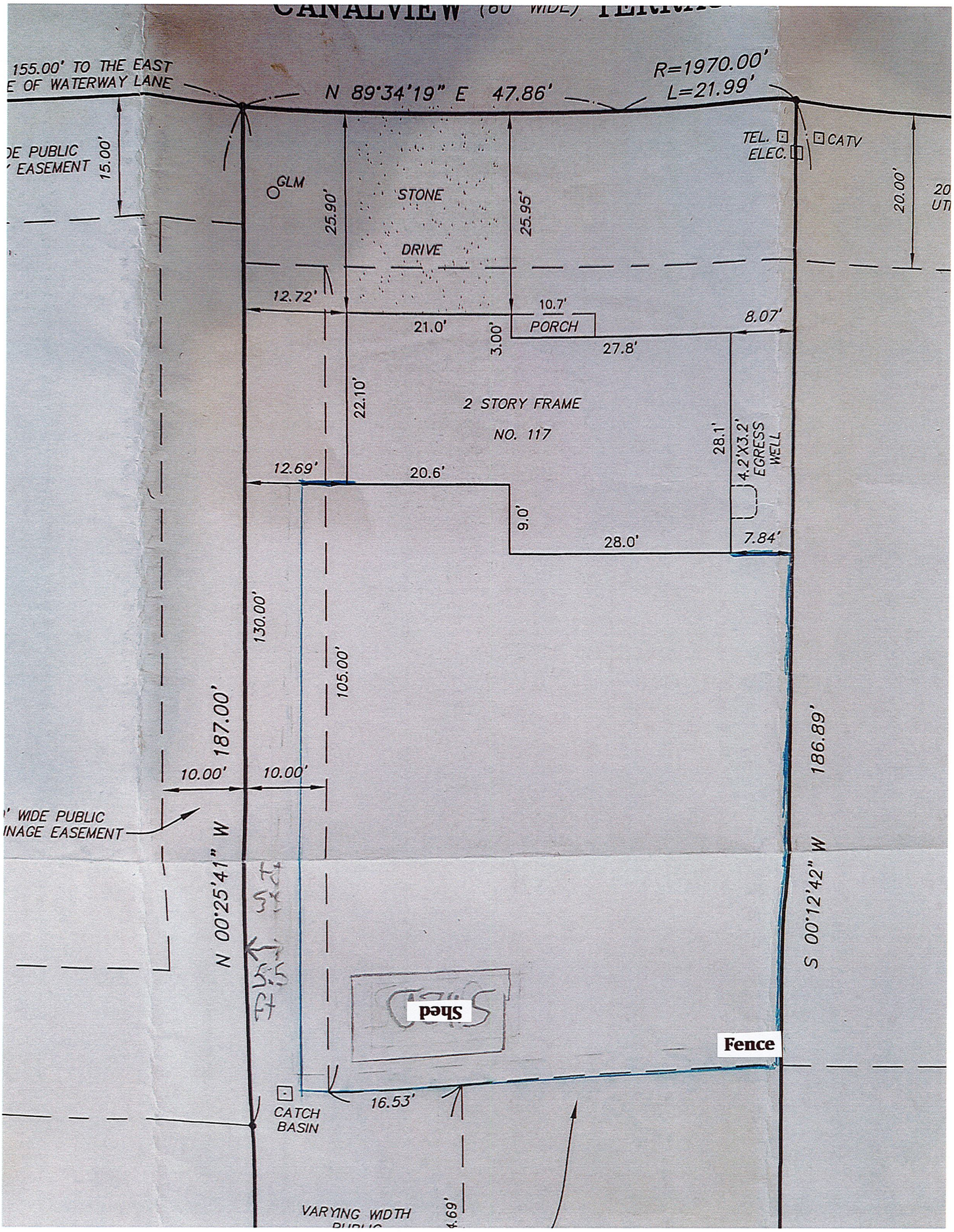
STATE OF NEW YORK }
ERIE COUNTY }SS:

On the 2nd day of April in the year 2022 before me, the undersigned, personally appeared, **Gina A. Crance**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to within the instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Jeremy J. Crance
Notary Public

Jeremy P Crance
Notary Public, State of New York
Qualified in Erie County
No. 01CR6348681
Commission Expires October 3, 2024

Attachment: LicAgr.117CanalviewTerrCrance-04042022130910 (RES-2022-359 : License Agreement - 117 Canalview Terrace (Crance) (CRS


CANALVIEW (80' WIDE) TERR
155.00' TO THE EAST
E OF WATERWAY LANE
N 89°34'19" E 47.86'
R=1970.00'
L=21.99'
DE PUBLIC
' EASEMENT
15.00'
GLM
STONE
DRIVE
25.90'
25.95'
TEL.
ELEC.
CATV
20.00'
12.72'
21.0'
3.00'
10.7'
PORCH
8.07'
27.8'
22.10'
2 STORY FRAME
NO. 117
28.1'
4.2'X3.2'
EGRESS
WELL
12.69'
20.6'
9.0'
28.0'
7.84'
130.00'
105.00'
187.00'
186.89'
10.00'
10.00'
' WIDE PUBLIC
INAGE EASEMENT
N 00°25'41" W
S 00°12'42" W
Shed
Fence
16.53'
CATCH
BASIN
VARYING WIDTH

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25623 **RESOLUTION 2022-360** **ADOPTED**

Settlement of Article 7 Matter - Uniland Partnership of Delaware LP – 33 Dodge Road

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Uniland Partnership of Delaware LP - 33 Dodge Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

STATE OF NEW YORK
SUPREME COURT: COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION UNDER
ARTICLE 7 OF THE REAL PROPERTY TAX LAW

BY

UNILAND PARTNERSHIP OF DELAWARE LP,

Petitioner,

vs.

CONSENT ORDER

DAVID MARRANO, ASSESSOR
OF THE TOWN OF AMHERST

Index No.: 810120/2021

AND

THE BOARD OF ASSESSMENT REVIEW OF
THE TOWN OF AMHERST, COUNTY OF
ERIE AND STATE OF NEW YORK,

Respondents,

AND

SWEET HOME CENTRAL SCHOOL DISTRICT,

Intervenor-Respondent.

FOR REVIEW OF THE 2021-2022 TAX
ASSESSMENT OF CERTAIN REAL PROPERTY IN
THE SAID TOWN OF AMHERST, NEW YORK

The above entitled proceedings involving tax assessment review for the premises known as 33 Dodge Road, Amherst, New York, bearing S.B.L. No. 40.08-3-12.111, for the assessment year 2021-2022 having progressed for trial, and negotiations for settlement having been conducted and said settlement having been approved and recommended by the Town Attorney for the Town of Amherst, the Attorney for the Petitioner, and the Attorney for the Sweet Home Central School District, and it further appearing that the assessment of premises in the Town of

Attachment: Uniland Partnership of Delaware - 33 Dodge consent order (RES-2022-360 : Settlement of Article 7 Matter - Uniland Partnership of

Amherst provides the basis for imposition of taxes assessed by the County of Erie, Town of Amherst, it is hereby

ORDERED, STIPULATED AND AGREED, that the above-entitled proceedings for the tax assessment review for the tax year 2021-2022 be and hereby are withdrawn and discontinued; and it is further

ORDERED, STIPULATED AND AGREED, that assessed value for the parcel known as 33 Dodge Road, Amherst, New York, bearing S.B.L. No. 40.08-3-12.111, shall be reduced from $2,850,000 to $1,150,000 for the tax year 2022-2023, and from $2,850,000 to $2,000,000 for the tax years 2023-2024, and 2024-2025 and 2025-2026; and it is further

ORDERED, STIPULATED AND AGREED, that the Assessor for the Town of Amherst shall apply such adjusted assessments to the 2022-2023, 2023-2024, 2024-2025, and 2025-2026 Final Assessment Rolls; and it is further

ORDERED, STIPULATED AND AGREED, that said Petitioner in any instrument or agreement transferring all of the subject property therein shall covenant with any grantee, transferee, and mortgagee and their respective distributees, successors and/or assigns that they shall be bound by the terms of this Stipulation and that such covenant shall be deemed to run with the land for the tax periods embraced by the terms thereof; and be it further

ORDERED, STIPULATED AND AGREED, that the provisions of Section 727 of the Real Property Tax Law shall apply to this Order, with the exception of 727 (2a) and 727 (2b); and it is further

ORDERED, STIPULATED AND AGREED, that prior to taxable status date (March 1) 2023, 2024, and 2025, Petitioner shall provide Respondent Assessor with a current rent roll depicting the occupancy of said property. In the event that said rent roll indicates an increase in occupancy of 25% or greater from the previous year, Respondent may adjust

Attachment: Uniland Partnership of Delaware - 33 Dodge consent order (RES-2022-360 : Settlement of Article 7 Matter - Uniland Partnership of

the assessment accordingly notwithstanding any other provision of this agreement; conversely, if said rent roll indicates a decrease in occupancy of greater than 25% over the previous year, Petitioner may apply for a reduction in assessment.

ORDERED, STIPULATED AND AGREED, that this Court shall retain jurisdiction over this proceeding pending the expiration of this annexed Stipulation, and that all applications to enforce any or all of the terms of the Stipulation shall be brought before this Court; and be it further

ORDERED, STIPULATED AND AGREED, that these proceedings are discontinued with prejudice, without costs or disbursements against either party.

Dated: _____

_____
Hon. Henry Nowak, J.S.C.

Uniland Partnership of Delaware LP

By: _____
Michael J. Hughes, Esq.
Attorney for Petitioner

Date: _____, 2022

Respondent Town of Amherst

By: _____
Sam Alba, Esq.
Attorney for Respondents

Date: _____, 2022

Intervenor-Respondent Sweet Home Central School District

By: _____
John K. Rottaris, Esq.
Attorney for Intervenor-Respondent

Date: _____, 2022

Attachment: Uniland Partnership of Delaware - 33 Dodge consent order (RES-2022-360 : Settlement of Article 7 Matter - Uniland Partnership of

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25626 **RESOLUTION 2022-361** **ADOPTED**

Settlement of Article 7 Matter - Uniland Partnership of Delaware LP – 115 Lawrence Bell Drive

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 5, 2022**

RE: **Settlement of Article 7 Matter**
Uniland Partnership of Delaware LP - 115 Lawrence Bell Drive

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

STATE OF NEW YORK
SUPREME COURT: COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION UNDER
ARTICLE 7 OF THE REAL PROPERTY TAX LAW

BY

UNILAND PARTNERSHIP OF DELAWARE LP,

Petitioner,

vs. **CONSENT ORDER**

DAVID MARRANO, ASSESSOR
OF THE TOWN OF AMHERST Index No.: 810134/2021

AND

THE BOARD OF ASSESSMENT REVIEW OF
THE TOWN OF AMHERST, COUNTY OF
ERIE AND STATE OF NEW YORK,

Respondents,

AND

WILLIAMSVILLE CENTRAL SCHOOL DISTRICT,

Intervenor-Respondent.

FOR REVIEW OF THE 2021-2022 TAX
ASSESSMENT OF CERTAIN REAL PROPERTY IN
THE SAID TOWN OF AMHERST, NEW YORK

The above entitled proceedings involving tax assessment review for the premises known as 115 Lawrence Bell Drive, Amherst, New York, bearing S.B.L. No. 81.02-3-46, for the assessment year 2021-2022 having progressed for trial, and negotiations for settlement having been conducted and said settlement having been approved and recommended by the Town Attorney for the Town of Amherst, the Attorney for the Petitioner, and the Attorney for the Williamsville Central School District, and it further appearing that the assessment of premises in

Attachment: Uniland Partnership of Delaware - 115 Lawrence Bell - Consent Order (RES-2022-361 : Settlement of Article 7 Matter - Uniland

the Town of Amherst provides the basis for imposition of taxes assessed by the County of Erie, Town of Amherst, it is hereby

ORDERED, STIPULATED AND AGREED, that the above-entitled proceedings for the tax assessment review for the tax year 2021-2022 be and hereby are withdrawn and discontinued; and it is further

ORDERED, STIPULATED AND AGREED, that assessed value for the parcel known as 115 Lawrence Bell Drive, Amherst, New York, bearing S.B.L. No. 81.02-3-46, shall be reduced from $3,500,000 to $2,700,000 for the tax year 2022-2023, and from $3,500,000 to $3,100,000 for the tax years 2023-2024, and 2024-2025 and 2025-2026; and it is further

ORDERED, STIPULATED AND AGREED, that the Assessor for the Town of Amherst shall apply such adjusted assessments to the 2022-2023, 2023-2024, 2024-2025, and 2025-2026 Final Assessment Rolls; and it is further

ORDERED, STIPULATED AND AGREED, that said Petitioner in any instrument or agreement transferring all of the subject property therein shall covenant with any grantee, transferee, and mortgagee and their respective distributees, successors and/or assigns that they shall be bound by the terms of this Stipulation and that such covenant shall be deemed to run with the land for the tax periods embraced by the terms thereof; and be it further

ORDERD, STIPULATED AND AGREED, that the provisions of Section 727 of the Real Property Tax Law shall apply to this Order, with the exception of 727 (2a) and 727 (2b); and it is further

ORDERED, STIPULATED AND AGREED, that prior to taxable status date (March 1) 2023, 2024, and 2025, Petitioner shall provide Respondent Assessor with a current rent roll depicting the occupancy of said property. In the event that said rent roll indicates an

Attachment: Uniland Partnership of Delaware - 115 Lawrence Bell - Consent Order (RES-2022-361 : Settlement of Article 7 Matter - Uniland

increase in occupancy of 25% or greater from the previous year, Respondent may adjust the assessment accordingly notwithstanding any other provision of this agreement; conversely, if said rent roll indicates a decrease in occupancy of greater than 25% over the previous year, Petitioner may apply for a reduction in assessment.

ORDERED, STIPULATED AND AGREED, that this Court shall retain jurisdiction over this proceeding pending the expiration of this annexed Stipulation, and that all applications to enforce any or all of the terms of the Stipulation shall be brought before this Court; and be it further

ORDERED, STIPULATED AND AGREED, that these proceedings are discontinued with prejudice, without costs or disbursements against either party.

Dated: _____

_____
Hon. Henry Nowak, J.S.C.

Uniland Partnership of Delaware LP

By: _____
Michael J. Hughes, Esq.
Attorney for Petitioner

Date: _____, 2022

Respondent Town of Amherst

By: _____
Sam Alba, Esq.
Attorney for Respondents

Date: _____, 2022

Intervenor-Respondent Williamsville Central School District

By: _____
Michael B. Risman, Esq.
Attorney for Intervenor-Respondent

Date: _____, 2022

Attachment: Uniland Partnership of Delaware - 115 Lawrence Bell - Consent Order (RES-2022-361 : Settlement of Article 7 Matter - Uniland

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25611 A **RESOLUTION 2022-362** **ADOPTED**

Settlement of Article 7 Matter - Twenty Flint Road LLC

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Twenty Flint Road LLC

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At an IAS Term of the Supreme Court of the State of New York, held for the County of Erie, Buffalo, New York on the __ day of _____ ____, 2022.

PRESENT: HON. EMILIO COLAIACOVO

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION FOR REVIEW UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW OF A TAX ASSESSMENT BY TWENTY FLINT ROAD LLC

Petitioner,

-vs.-

THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF AMHERST; THE ASSESSOR OF THE TOWN OF AMHERST; and THE TOWN OF AMHERST, NEW YORK

Respondents.

For Review of the Assessment of Certain Real Property known as 20 Flint Rd in the said Town of Amherst for the 2020-21 and 2021-22 Tax Years.

CONSENT ORDER AND JUDGMENT

Index Nos.:

807791/2020
809809/2021

WHEREAS Petitioner has heretofore commenced the within proceedings under Article 7 of the Real Property Tax Law to review the assessment of a certain parcel of real property located at and known as 20 Flint (SBL #54.04-2-31.1) in the Town of Amherst, County of Erie and State of New York for the tax years 2020-21 and 2021-22, and

WHEREAS these proceedings have duly come before an IAS Term of this Court, and Kavinoky Cook LLP, Scott C. Becker, Esq., of counsel, having appeared for the Petitioner, Samuel A. Alba, Esq., Town of Amherst Counsel, having appeared for the Respondent Town of Amherst, Gross Shuman P.C., John K. Rottaris, Esq., of Counsel, having appeared for the Intervener-Respondents Sweet Home Central School District of Amherst and Tonawanda, and Lippes, Mathias, Wexler, Friedman, LLP, Margaret A. Hurley, Esq., of Counsel, having appeared for the Intervener-

Attachment: Twenty Flint - Consent Order Unsinged (RES-2022-362 : Settlement of Article 7 Matter - Twenty Flint Road LLC)

Respondents Erie County, and the parties having agreed to a settlement of these proceedings, it is hereby

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #54.04-2-31.1 on the tax assessment roll of the Town of Amherst for the following tax years, have been as follows:

SBL #54.04-2-31.1 (20 Flint Rd)

Assessment Year	Assessment
2020-21	$3,131,200
2021-22	$3,131,200

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #54.04-2-31.1 on the tax assessment roll of the Town of Amherst for the following tax years, shall be adjusted as follows:

SBL #54.04-2-31.1 (20 Flint Rd)

Assessment Year	Assessment
2020-21	$2,000,000
2021-22	$2,000,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #54.04-2-31.1 on the tax assessment roll of the Town of Amherst for the following tax years, shall be as follows:

SBL #54.04-2-31.1 (20 Flint Rd)

Assessment Year	Assessment
2022-23	$1,368,800
2023-24	$1,368,800
2024-25	$2,500,000

Attachment: Twenty Flint - Consent Order Unsinged (RES-2022-362 : Settlement of Article 7 Matter - Twenty Flint Road LLC)

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessments as reduced, corrected and adjusted herein are fair, equitable and proper for the purposed of this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that the officer or officers having custody of the aforesaid assessment rolls and the tax rolls of the Town of Amherst shall make or cause to be made upon the proper books and records of said Town the entries, changes and corrections necessary to conform said combined assessments to such corrected and reduced valuations that the appropriate financial officers are hereby directed and authorized to calculate and disburse any resulting refunds of taxes, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner hereby waives its right to receive any refunds with respect to any tax bills relating to the 2020-21 tax assessment roll, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner hereby waives its right to receive any refunds with respect to any tax bills relating to the 2021-22 tax assessment roll, and it is further

STIPULATED, ORDERED and ADJUDGED, that the provisions of Section 727 of the Real Property Tax Law shall apply to this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that in the event that the Assessor for the Town of Amherst assesses SBL #54.04-2-31.1 for any stated year at a level higher than provided for herein, Petitioner hereby reserves the right to reinstate and reinstitute its Article 7 proceedings herein settled, and the Respondents hereby agree to waive any objection based upon Statute of Limitations Grounds, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner shall have the right to seek specific enforcement of this Stipulation, Order and Judgment by whatever means provided by law, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment

Attachment: Twenty Flint - Consent Order Unsinged (RES-2022-362 : Settlement of Article 7 Matter - Twenty Flint Road LLC)

hereby constitutes and represents the entire understanding and agreement among the parties and the full settlement of the assessment review proceeding herein, that there are no costs or disbursements awarded to, by, or against any party and that upon compliance with the terms of this Stipulation, Order and Judgment, the above proceeding shall be, and the same hereby is, settled and discontinued with prejudice, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment may be executed in multiple counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Signing and Entry of the within Order and Judgment is hereby
Consented to:

KAVINOKY COOK LLP

Dated: _____ By: _____
Scott C. Becker, Esq.
Attorneys for Petitioners
726 Exchange Street, Suite 800
Buffalo, New York 14210

AMHERST TOWN ATTORNEY

Dated:_____ By: _____
Samuel A. Alba, Esq.
Respondent, Town of Amherst
5583 Main Street
Williamsville, New York 14221

GROSS SHUMAN, P.C.

Dated:_____ By: _____
John K. Rottaris, Esq.
Attorneys for Intervener-Respondents, Sweet Home Central School District of Amherst and Tonawanda, New York
465 Main Street, Suite 600
Buffalo, New York 14203

Attachment: Twenty Flint - Consent Order Unsinged (RES-2022-362 : Settlement of Article 7 Matter - Twenty Flint Road LLC)

LIPPES, MATHIAS, WEXLER, FRIEDMAN, LLP

Dated:_____

By: _____
Margaret A. Hurley, Esq.
Attorneys for Intervener-Respondent, Erie County
50 Fountain Plaza, Suite 1700
Buffalo, New York 14202

SO ORDERED:

_____
HON. EMILIO COLAIACOVO

ENTER:

0001374/0033432/600681

Attachment: Twenty Flint - Consent Order Unsinged (RES-2022-362 : Settlement of Article 7 Matter - Twenty Flint Road LLC)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25612 **RESOLUTION 2022-363** **ADOPTED**

Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 5, 2022**

RE: **Settlement of Article 7 Matter**
Flint Road LLC - 100-120 Flint

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At a Special Term of the Supreme Court, Erie County, held at 50 Delaware Avenue, Buffalo, New York, on the ___ day of _____, 2022.

PRESENT: HON. HENRY J. NOWAK, J.S.C.
Presiding

STATE OF NEW YORK
SUPREME COURT : COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW

BY

FLINT ROAD, LLC,

Petitioner,

v.

CONSENT ORDER

TOWN OF AMHERST,

Index No.: 809563/2021

Respondent,

AND

SWEET HOME CENTRAL SCHOOL DISTRICT,

Intervenor.

FOR REVIEW OF THE 2021-2022 TAX ASSESSMENT OF CERTAIN REAL PROPERTY IN THE SAID TOWN OF AMHERST, NEW YORK

The above-entitled special proceedings involving real property tax certiorari for the premises owned by Petitioner in the Town of Amherst, New York, known as 100-120 Flint Road in Amherst, New York, S.B.L. #55.17-10-6.2 for the tax year 2021-2022 having progressed for

Attachment: Consent Crder Flint Road LLC.100-120 Flint (RES-2022-363 : Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint)

trial, and negotiations for settlement having been conducted, and said settlement having been approved and recommended by the Attorney for the Town of Amherst, the Attorney for the Sweet Home Central School District, and the Attorney for Petitioner, and it further appearing that the assessment of premises in the Town of Amherst provides the basis for the imposition of ad valorem taxes assessed by the Town of Amherst, the Sweet Home School District, and the County of Erie, it is hereby

ORDERED, STIPULATED, AND ADJUDGED that the property tax certiorari for the tax year 2021-2022 for the premises at 100-120 Flint Road be discontinued and withdrawn without costs and allowances to either party as against the other, and it is further

ORDERED, STIPULATED, AND ADJUDGED that the real property tax assessment for the tax years 2022-2023, 2023-2024, 2024-2025 and 2025-2026 for the premises at 100-120 Flint Road be set at $1,600,000 assessed value, and it is further

ORDERED, STIPULATED, AND ADJUDGED that the provisions of Section 727 of the Real Property Tax Law shall apply to the aforementioned tax years without regard to revaluation or update in the interval, and it is further

ORDERED, STIPULATED, AND ADJUDGED that said Petitioner in any instrument or agreement transferring any part or all of the subject property or any interest therein shall

Attachment: Consent Crder Flint Road LLC.100-120 Flint (RES-2022-363 : Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint)

covenant with any grantee, transferee, and mortgagee and their respective distributees, successors and/or assigns that they shall be bound by the terms of this Consent Order and that such covenant shall be deemed to run with the land for the tax periods embraced by the terms thereof, and it is further

ORDERED, STIPULATED, AND ADJUDGED that in the event that the assessment is increased for any stated year at a level higher than provided herein when there has been no assessable addition or improvement to the property, Petitioner retains the right to reinstate and reinstitute its Article 7 proceedings herein settled with respect to that parcel only, and Respondents waive any objection based upon statute of limitations grounds, and it is further

ORDERED, STIPULATED, AND ADJUDGED that the fiscal officers of the Town of Amherst, the Sweet Home Central School District, the County of Erie, and any other taxing unit affected by the above assessment reductions shall apply such adjusted assessment and determine any overpayment of taxes, and in the event of overpayment, refund the overpayment with statutory interest within 45 days by official check payable to the order of Wolfgang & Weinmann, as attorneys and agents for Petitioner, accompanied by a calculation sheet, such attorneys to hold the proceeds as trust funds for appropriate distribution, and are to remain subject to the further jurisdiction of this Court relative to their attorney's lien pursuant to Judiciary Law Section 475, or in the event that any such tax payment has not been paid, issue corrected tax bills which reflect the proper reduced assessment for the property, with a copy of

Attachment: Consent Crder Flint Road LLC.100-120 Flint (RES-2022-363 : Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint)

corrected tax bills sent to the attorneys for Petitioner, said corrected tax bills to be paid without interest or penalty if paid within 45 days of receipt of said corrected bills, with interest and/or penalties beginning to accrue on the new corrected balance after 45 days, and it is further

ORDERED, STIPULATED, AND ADJUDGED that this Court shall retain jurisdiction over this proceeding pending the expiration of the periods herein recited, and that all applications to enforce any or all of the terms of this Consent Order shall be brought by motion before this Court, and it is further

ORDERED, STIPULATED, AND ADJUDGED that Petitioner shall have the right to seek specific enforcement of this Order, Stipulation and Judgment by all means provided by law, and it is further

ORDERED, STIPULATED, AND ADJUDGED that this Order, Stipulation and Judgment hereby constitutes and represents the entire understanding and agreement amongst the parties, and the full settlement of the tax certiorari herein; there are no costs or disbursements awarded to, by or against any party, and upon compliance with the terms of this Order, Stipulation and Judgment, the proceedings herein shall be, and the same hereby are, settled and discontinued with prejudice.

_____

HON. HENRY J. NOWAK, J.S.C.

DATED:

Attachment: Consent Crder Flint Road LLC.100-120 Flint (RES-2022-363 : Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint)

The parties consent to be bound by the terms of this Court Order by subscribing hereunto their names and legal authority:

FOR PETITIONER
FLINT ROAD, LLC

By: _____
RYAN K. PARISI, ESQ.
Attorney for Petitioner

Date: _____

FOR RESPONDENT
TOWN OF AMHERST

By: _____
SAMUEL A. ALBA, ESQ.
Attorney for Respondent

Date: _____

FOR PETITIONER
FLINT ROAD, LLC

By:_____
AARON GLAZER
As Agent

Date: _____

FOR INTERVENOR SWEET HOME
CENTRAL SCHOOL DISTRICT

By: _____
JOHN K. ROTTARIS, ESQ.
Attorney for Intervenor

Date: _____

Attachment: Consent Crder Flint Road LLC.100-120 Flint (RES-2022-363 : Settlement of Article 7 Matter - Flint Road LLC – 100-120 Flint)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25628 **RESOLUTION 2022-364** **ADOPTED**

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290 Millersport Highway

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 2290 Millersport Highway

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At an IAS Term of the Supreme Court of the State of New York, held for the County of Erie, Buffalo, New York on the __ day of _____ ____, 2022.

PRESENT: HON. SHEILA A. DITULLIO

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION FOR REVIEW UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW OF A TAX ASSESSMENT BY TIM DONUT US LIMITED INC. for itself and as agent-in-fact for Amusements of WNY Inc.

Petitioner,

-vs.-

THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF AMHERST; THE ASSESSOR OF THE TOWN OF AMHERST; and THE TOWN OF AMHERST, NEW YORK

Respondents.

For Review of the Assessment of Certain Real Property known as 2290 Millersport Hwy in the said Town of Amherst for the 2021-22 Tax Year.

CONSENT ORDER AND JUDGMENT

Index No.:

809799/2021

WHEREAS Petitioner has heretofore commenced the within proceeding under Article 7 of the Real Property Tax Law to review the assessment of a certain parcel of real property located at and known as 2290 Millersport Hwy (SBL #41.03-1-36) in the Town of Amherst, County of Erie and State of New York for the tax year 2021-22, and

WHEREAS this proceeding has duly come before an IAS Term of this Court, and Kavinoky Cook LLP, Scott C. Becker, Esq., of counsel, having appeared for the Petitioner, Samuel A. Alba, Esq., Town of Amherst Counsel, having appeared for the Respondent Town of Amherst and Hodgson Russ LLP, Michael B. Risman, Esq., of Counsel, having appeared for the Intervenor-Respondent Williamsville Central School District, and the parties having agreed to a settlement of

Attachment: TIM HORTONS - CONSENT ORDER - Millersport (RES-2022-364 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290

this proceeding, it is hereby

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #41.03-1-36 on the tax assessment roll of the Town of Amherst for the following tax year, has been and shall remain as follows:

SBL #41.03-1-36 (2290 Millersport Hwy)

Assessment Year	Assessment
2021-22	$860,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #41.03-1-36 on the tax assessment roll of the Town of Amherst for the following tax years, shall be as follows:

SBL #41.03-1-36 (2290 Millersport Hwy)

Assessment Year	Assessment
2022-23	$680,000
2023-24	$680,000
2024-25	$680,000

And it is further

STIPULATED, ORDERED and ADJUDGED, that the assessments as reduced, corrected and adjusted herein are fair, equitable and proper for the purposed of this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that the officer or officers having custody of the aforesaid assessment rolls and the tax rolls of the Town of Amherst shall make or cause to be made upon the proper books and records of said Town the entries, changes and corrections necessary to conform said combined assessments to such corrected and reduced valuations that the appropriate financial officers are hereby directed and authorized to calculate and disburse any resulting refunds of taxes, and it is further

Attachment: TIM HORTONS - CONSENT ORDER - Millersport (RES-2022-364 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290

STIPULATED, ORDERED and ADJUDGED, that the provisions of Section 727 of the Real Property Tax Law shall apply to this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that in the event that the Assessor for the Town of Amherst assesses SBL #41.03-1-36 for any stated year at a level higher than provided for herein, Petitioner hereby reserves the right to reinstate and reinstitute its Article 7 proceedings herein settled, and the Respondents hereby agree to waive any objection based upon Statute of Limitations Grounds, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner shall have the right to seek specific enforcement of this Stipulation, Order and Judgment by whatever means provided by law, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment hereby constitutes and represents the entire understanding and agreement among the parties and the full settlement of the assessment review proceeding herein, that there are no costs or disbursements awarded to, by, or against any party and that upon compliance with the terms of this Stipulation, Order and Judgment, the above proceeding shall be, and the same hereby is, settled and discontinued with prejudice, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment may be executed in multiple counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Signing and Entry of the within Order and Judgment is hereby
Consented to:

KAVINOKY COOK LLP

Dated: _____

By: _____
Scott C. Becker, Esq.
Attorneys for Petitioners
726 Exchange Street, Suite 800
Buffalo, New York 14210

Attachment: TIM HORTONS - CONSENT ORDER - Millersport (RES-2022-364 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290

AMHERST TOWN ATTORNEY

Dated:_____ By: _____

Samuel A. Alba, Esq.
Respondent, Town of Amherst
5583 Main Street
Williamsville, New York 14221

HODGSON RUSS LLP

Dated:_____ By: _____

Michael B. Risman, Esq.
Attorneys for Intervenor-Respondents, Williamsville Central School District
140 Pearl Street, Suite 100
Buffalo, New York 14202-4040

SO ORDERED:

_____
HON. SHEILA A. DITULLIO

ENTER:

010952/0036979/600707

Attachment: TIM HORTONS - CONSENT ORDER - Millersport (RES-2022-364 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 2290

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25629 **RESOLUTION 2022-365** **ADOPTED**

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520 Transit Road

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 11520 Transit Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At an IAS Term of the Supreme Court of the State of New York, held for the County of Erie, Buffalo, New York on the __ day of _____ ____, 2022.

PRESENT: HON. SHEILA A. DITULLIO

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION FOR REVIEW UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW OF A TAX ASSESSMENT BY TIM DONUT US LIMITED INC

Petitioner,

-vs.-

THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF AMHERST; THE ASSESSOR OF THE TOWN OF AMHERST; and THE TOWN OF AMHERST, NEW YORK

Respondents.

For Review of the Assessment of Certain Real Property known as 11520 Transit Rd in the said Town of Amherst for the 2021-22 Tax Year.

CONSENT ORDER AND JUDGMENT

Index No.:

809795/2021

WHEREAS Petitioner has heretofore commenced the within proceeding under Article 7 of the Real Property Tax Law to review the assessment of a certain parcel of real property located at and known as 11520 Transit Rd (SBL #4.00-3-6) in the Town of Amherst, County of Erie and State of New York for the tax year 2021-22, and

WHEREAS this proceeding has duly come before an IAS Term of this Court, and Kavinoky Cook LLP, Scott C. Becker, Esq., of counsel, having appeared for the Petitioner, Samuel A. Alba, Esq., Town of Amherst Counsel, having appeared for the Respondent Town of Amherst and Hodgson Russ LLP, Michael B. Risman, Esq., of Counsel, having appeared for the Intervenor-Respondent Williamsville Central School District, and the parties having agreed to a settlement of this proceeding, it is hereby

Attachment: TIM HORTONS - TRANSIT - CONSENT ORDER (RES-2022-365 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #4.00-3-6 on the tax assessment roll of the Town of Amherst for the following tax year, has been and shall remain as follows:

SBL #4.00-3-6 (11520 Transit Rd)

Assessment Year	Assessment
2021-22	$710,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #4.00-3-6 on the tax assessment roll of the Town of Amherst for the following tax years, shall be as follows:

SBL #4.00-3-6 (11520 Transit Rd)

Assessment Year	Assessment
2022-23	$650,000
2023-24	$650,000
2024-25	$650,000

And it is further

STIPULATED, ORDERED and ADJUDGED, that the assessments as reduced, corrected and adjusted herein are fair, equitable and proper for the purposed of this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that the officer or officers having custody of the aforesaid assessment rolls and the tax rolls of the Town of Amherst shall make or cause to be made upon the proper books and records of said Town the entries, changes and corrections necessary to conform said combined assessments to such corrected and reduced valuations that the appropriate financial officers are hereby directed and authorized to calculate and disburse any resulting refunds of taxes, and it is further

STIPULATED, ORDERED and ADJUDGED, that the provisions of Section 727 of the

Attachment: TIM HORTONS - TRANSIT - CONSENT ORDER (RES-2022-365 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520

Real Property Tax Law shall apply to this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that in the event that the Assessor for the Town of Amherst assesses SBL #4.00-3-6 for any stated year at a level higher than provided for herein, Petitioner hereby reserves the right to reinstate and reinstitute its Article 7 proceedings herein settled, and the Respondents hereby agree to waive any objection based upon Statute of Limitations Grounds, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner shall have the right to seek specific enforcement of this Stipulation, Order and Judgment by whatever means provided by law, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment hereby constitutes and represents the entire understanding and agreement among the parties and the full settlement of the assessment review proceeding herein, that there are no costs or disbursements awarded to, by, or against any party and that upon compliance with the terms of this Stipulation, Order and Judgment, the above proceeding shall be, and the same hereby is, settled and discontinued with prejudice, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment may be executed in multiple counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Signing and Entry of the within Order and Judgment is hereby
Consented to:

KAVINOKY COOK LLP

Dated: _____

By: _____
Scott C. Becker, Esq.
Attorneys for Petitioners
726 Exchange Street, Suite 800
Buffalo, New York 14210

Attachment: TIM HORTONS - TRANSIT - CONSENT ORDER (RES-2022-365 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520

AMHERST TOWN ATTORNEY

Dated:_____ By: _____

Samuel A. Alba, Esq.
Respondent, Town of Amherst
5583 Main Street
Williamsville, New York 14221

HODGSON RUSS LLP

Dated:_____ By: _____

Michael B. Risman, Esq.
Attorneys for Intervenor-Respondents, Williamsville Central School District
140 Pearl Street, Suite 100
Buffalo, New York 14202-4040

SO ORDERED:

_____
HON. SHEILA A. DITULLIO

ENTER:

010952/0036977/600700

Attachment: TIM HORTONS - TRANSIT - CONSENT ORDER (RES-2022-365 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 11520

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25631 **RESOLUTION 2022-366** **ADOPTED**

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950 Sweet Home Road

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 1950 Sweet Home Road

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At an IAS Term of the Supreme Court of the State of New York, held for the County of Erie, Buffalo, New York on the __ day of _____ ____, 2022.

PRESENT: HON. SHEILA A. DITULLIO

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION FOR REVIEW UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW OF A TAX ASSESSMENT BY TIM DONUT US LIMITED INC. for itself and as agent-in-fact for Amusements of WNY Inc.

Petitioner,

-vs.-

THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF AMHERST; THE ASSESSOR OF THE TOWN OF AMHERST; and THE TOWN OF AMHERST, NEW YORK

Respondents.

For Review of the Assessment of Certain Real Property known as 1950 Sweet Home Rd in the said Town of Amherst for the 2021-22 Tax Year.

CONSENT ORDER AND JUDGMENT

Index No.:

809808/2021

WHEREAS Petitioner has heretofore commenced the within proceeding under Article 7 of the Real Property Tax Law to review the assessment of a certain parcel of real property located at and known as 1950 Sweet Home Rd (SBL #40.04-1-28) in the Town of Amherst, County of Erie and State of New York for the tax year 2021-22, and

WHEREAS this proceeding has duly come before an IAS Term of this Court, and Kavinoky Cook LLP, Scott C. Becker, Esq., of counsel, having appeared for the Petitioner, Samuel A. Alba, Esq., Town of Amherst Counsel, having appeared for the Respondent Town of Amherst and Gross Shuman P.C., John K. Rottaris, Esq., of Counsel, having appeared for the Intervener-Respondents Sweet Home Central School District of Amherst and Tonawanda, and the parties having agreed to a settlement of this proceeding, it is hereby

Attachment: Tim Hortons - Consent Order - Sweet Home (RES-2022-366 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #40.04-1-28 on the tax assessment roll of the Town of Amherst for the following tax year, has been and shall remain as follows:

SBL #40.04-1-28 (1950 Sweet Home Rd)

Assessment Year	Assessment
2021-22	$710,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #40.04-1-28 on the tax assessment roll of the Town of Amherst for the following tax years, shall be adjusted as follows:

SBL #40.04-1-28 (1950 Sweet Home Rd)

Assessment Year	Assessment
2022-23	$540,000
2023-24	$540,000
2024-25	$540,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessments as reduced, corrected and adjusted herein are fair, equitable and proper for the purposed of this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that the officer or officers having custody of the aforesaid assessment rolls and the tax rolls of the Town of Amherst shall make or cause to be made upon the proper books and records of said Town the entries, changes and corrections necessary to conform said combined assessments to such corrected and reduced valuations that the appropriate financial officers are hereby directed and authorized to calculate and disburse any resulting refunds of taxes, and it is further

STIPULATED, ORDERED and ADJUDGED, that the provisions of Section 727 of the

Attachment: Tim Hortons - Consent Order - Sweet Home (RES-2022-366 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950

Real Property Tax Law shall apply to this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that in the event that the Assessor for the Town of Amherst assesses SBL #40.04-1-28 for any stated year at a level higher than provided for herein, Petitioner hereby reserves the right to reinstate and reinstitute its Article 7 proceedings herein settled, and the Respondents hereby agree to waive any objection based upon Statute of Limitations Grounds, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner shall have the right to seek specific enforcement of this Stipulation, Order and Judgment by whatever means provided by law, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment hereby constitutes and represents the entire understanding and agreement among the parties and the full settlement of the assessment review proceeding herein, that there are no costs or disbursements awarded to, by, or against any party and that upon compliance with the terms of this Stipulation, Order and Judgment, the above proceeding shall be, and the same hereby is, settled and discontinued with prejudice, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment may be executed in multiple counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Signing and Entry of the within Order and Judgment is hereby
Consented to:

KAVINOKY COOK LLP

Dated: _____

By: _____
Scott C. Becker, Esq.
Attorneys for Petitioners
726 Exchange Street, Suite 800
Buffalo, New York 14210

Attachment: Tim Hortons - Consent Order - Sweet Home (RES-2022-366 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950

AMHERST TOWN ATTORNEY

Dated:_____ By: _____

Samuel A. Alba, Esq.
Respondent, Town of Amherst
5583 Main Street
Williamsville, New York 14221

GROSS SHUMAN, P.C.

Dated:_____ By: _____

John K. Rottaris, Esq.
Attorneys for Intervener-Respondents, Sweet Home Central School District of Amherst and Tonawanda, New York
465 Main Street, Suite 600
Buffalo, New York 14203

SO ORDERED:

_____
HON. SHEILA A. DITULLIO

ENTER:

010952/0036978/600701

Attachment: Tim Hortons - Consent Order - Sweet Home (RES-2022-366 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1950

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Attorney
Initiated by: **Samuel A Alba**
Co-Sponsored by:

DOC ID: 25632 **RESOLUTION 2022-367** **ADOPTED**

Settlement of Article 7 Matter - Tim Donut US Limited Inc. – 1705 Niagara Falls Boulevard

AGENDA ITEM : APRIL 11TH, 2022

TO: **Town Board**

FROM: **Samuel A. Alba, Esq., Senior Deputy Town Attorney**

DATE: **April 6, 2022**

RE: **Settlement of Article 7 Matter**
Tim Donut US Limited Inc. - 1705 Niagara Falls Boulevard

Kindly adopt a resolution authorizing the following:

(1) Settlement of the above matter as detailed in the attached Consent Order and Judgment; and

(2) Authorizing Senior Deputy Town Attorney Samuel A. Alba, Esq. to sign the attached Consent Order and Judgment as the Attorney for the Respondent, Town of Amherst.

Thank you.

Attachment
SAA:nmb
c: Tim Koller, Deputy Town Clerk
(*w/attachment,* **Agenda Item : April 11, 2022**)
Emily Murphy, Town Assessor

4/11/2022
Consent

FINANCIAL IMPACT:

Assessment

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

At an IAS Term of the Supreme Court of the State of New York, held for the County of Erie, Buffalo, New York on the __ day of _____ ____, 2022.

PRESENT: HON. SHEILA A. DITULLIO

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF ERIE

IN THE MATTER OF THE APPLICATION FOR REVIEW UNDER ARTICLE 7 OF THE REAL PROPERTY TAX LAW OF A TAX ASSESSMENT BY TIM DONUT US LIMITED INC. for itself and as agent-in-fact for Springbank Develops Inc.

Petitioner,

-vs.-

THE BOARD OF ASSESSMENT REVIEW FOR THE TOWN OF AMHERST; THE ASSESSOR OF THE TOWN OF AMHERST; and THE TOWN OF AMHERST, NEW YORK

Respondents.

For Review of the Assessment of Certain Real Property known as 1705 Niagara Falls Blvd in the said Town of Amherst for the 2021-22 Tax Year.

CONSENT ORDER AND JUDGMENT

Index No.:

809793/2021

WHEREAS Petitioner has heretofore commenced the within proceeding under Article 7 of the Real Property Tax Law to review the assessment of a certain parcel of real property located at and known as 1705 Niagara Falls Blvd (SBL #54.01-2-14.1) in the Town of Amherst, County of Erie and State of New York for the tax year 2021-22, and

WHEREAS this proceeding has duly come before an IAS Term of this Court, and Kavinoky Cook LLP, Scott C. Becker, Esq., of counsel, having appeared for the Petitioner, Samuel A. Alba, Esq., Town of Amherst Counsel, having appeared for the Respondent Town of Amherst and Gross Shuman P.C., John K. Rottaris, Esq., of Counsel, having appeared for the Intervener-Respondents Sweet Home Central School District of Amherst and Tonawanda, and the parties having agreed to a settlement of this proceeding, it is hereby

Attachment: TIM HORTONS SPRINGBANK - CONSENT ORDER (RES-2022-367 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. –

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #54.01-2-14.1 on the tax assessment roll of the Town of Amherst for the following tax year, has been and shall remain as follows:

SBL #54.01-2-14.1 (1705 Niagara Falls Blvd)

Assessment Year	Assessment
2021-22	$510,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessment on the property designated as SBL #54.01-2-14.1 on the tax assessment roll of the Town of Amherst for the following tax years, shall be adjusted as follows:

SBL #54.01-2-14.1 (1705 Niagara Falls Blvd)

Assessment Year	Assessment
2022-23	$375,000
2023-24	$375,000
2024-25	$375,000

and it is further

STIPULATED, ORDERED and ADJUDGED, that the assessments as reduced, corrected and adjusted herein are fair, equitable and proper for the purposed of this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that the officer or officers having custody of the aforesaid assessment rolls and the tax rolls of the Town of Amherst shall make or cause to be made upon the proper books and records of said Town the entries, changes and corrections necessary to conform said combined assessments to such corrected and reduced valuations that the appropriate financial officers are hereby directed and authorized to calculate and disburse any resulting refunds of taxes, and it is further

STIPULATED, ORDERED and ADJUDGED, that the provisions of Section 727 of the

Attachment: TIM HORTONS SPRINGBANK - CONSENT ORDER (RES-2022-367 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. –

Real Property Tax Law shall apply to this settlement, and it is further

STIPULATED, ORDERED and ADJUDGED, that in the event that the Assessor for the Town of Amherst assesses SBL #54.01-2-14.1 for any stated year at a level higher than provided for herein, Petitioner hereby reserves the right to reinstate and reinstitute its Article 7 proceedings herein settled, and the Respondents hereby agree to waive any objection based upon Statute of Limitations Grounds, and it is further

STIPULATED, ORDERED and ADJUDGED, that Petitioner shall have the right to seek specific enforcement of this Stipulation, Order and Judgment by whatever means provided by law, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment hereby constitutes and represents the entire understanding and agreement among the parties and the full settlement of the assessment review proceeding herein, that there are no costs or disbursements awarded to, by, or against any party and that upon compliance with the terms of this Stipulation, Order and Judgment, the above proceeding shall be, and the same hereby is, settled and discontinued with prejudice, and it is further

STIPULATED, ORDERED and ADJUDGED, that this Stipulation, Order and Judgment may be executed in multiple counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

Signing and Entry of the within Order and Judgment is hereby
Consented to:

KAVINOKY COOK LLP

Dated: _____

By: _____
Scott C. Becker, Esq.
Attorneys for Petitioners
726 Exchange Street, Suite 800
Buffalo, New York 14210

Attachment: TIM HORTONS SPRINGBANK - CONSENT ORDER (RES-2022-367 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. –

AMHERST TOWN ATTORNEY

Dated:_____ By: _____
Samuel A. Alba, Esq.
Respondent, Town of Amherst
5583 Main Street
Williamsville, New York 14221

GROSS SHUMAN, P.C.

Dated:_____ By: _____
John K. Rottaris, Esq.
Attorneys for Intervener-Respondents, Sweet Home Central School District of Amherst and Tonawanda, New York
465 Main Street, Suite 600
Buffalo, New York 14203

SO ORDERED:

_____
HON. SHEILA A. DITULLIO

ENTER:

010952/0036983/600713

Attachment: TIM HORTONS SPRINGBANK - CONSENT ORDER (RES-2022-367 : Settlement of Article 7 Matter - Tim Donut US Limited Inc. –

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25614 **RESOLUTION 2022-368** **ADOPTED**

New Firefighter for Main-Transit Fire Department

New firefighter for the Main-Transit Fire Department lives in the Town of Amherst and resides within the Main-Transit Fire District.

Kristin Haines
74 Fruitwood Terrace Apt 3
Williamsville, NY 14221

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TOWN OF AMHERST
VOLUNTEER FIRE DEPARTMENT MEMBERSHIP
RESIDENCY VERIFICATION FORM

Applicant Name: Kristin Haines

Applicant Home Address: 74 Fruitwood Terrace Apt 3

Under penalty of perjury I, Kristin Haines affirm I am an applicant to be a member of the, Main-Transit (fire dept.) and my address of residence is listed above.

☒ My address is in the fire distract I've applied to or territory which is afforded protection by the fire department of the fire district or fire company pursuant to contract.

☐ My address is outside the district or territory that provides protection by the fire district or company, but is in the vicinity of my occupation, in which I will be able to render active service as a volunteer. My occupation address is:

_____

Signature of Applicant: Kristin Haines

I have verified the applicant's address or employment, where applicable, by examining their driver's license or other suitable document such as a utility bill, lease or pay stub.

Signature: [signature]

Title: SENIOR CAPTAIN

Date: 3.29.22

Submit this completed form to:
Amherst Town Clerk
5583 Main Street
Williamsville, NY 14221

Attachment: MTFD Haines Residency Form (RES-2022-368 : New Firefighter for Main-Transit Fire Department)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
Initiated by: **Timothy Koller**
Co-Sponsored by:

DOC ID: 25642 **RESOLUTION 2022-369** **ADOPTED**

New Firefighter's for East Amherst Fire Department

New firefighter's for the East Amherst Fire Department. Richard Tate lives in the Town of Amherst and resides in the fire district and John Redenbach lives in the Town of Clarence and works in the fire district.

Richard Tate
645 Casey Road
E. Amherst, NY 14051

John Redenbach
7029 Transit Road, Apt 5
E. Amherst, NY 14051

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TOWN OF AMHERST
VOLUNTEER FIRE DEPARTMENT MEMBERSHIP
RESIDENCY VERIFICATION FORM

Applicant Name: Richard Tate

Applicant Home Address: 645 Casey Road

Under penalty of perjury I, Richard Tate affirm I am an applicant to be a member of the, East Amherst Fire Department (fire dept.) and my address of residence is listed above.

☒ My address is in the fire distract I've applied to or territory which is afforded protection by the fire department of the fire district or fire company pursuant to contract.

☐ My address is outside the district or territory that provides protection by the fire district or company, but is in the vicinity of my occupation, in which I will be able to render active service as a volunteer. My occupation address is:

_____

Signature of Applicant: _____

I have verified the applicant's address or employment, where applicable, by examining their driver's license or other suitable document such as a utility bill, lease or pay stub.

Signature: Ken Rusin

Title: President

Date: April 4th, 2022

Submit this completed form to:
Amherst Town Clerk
5583 Main Street
Williamsville, NY 14221

Attachment: Tate residency 4.4.22 (RES-2022-369 : New Firefighter's for East Amherst Fire Department)

TOWN OF AMHERST
VOLUNTEER FIRE DEPARTMENT MEMBERSHIP
RESIDENCY VERIFICATION FORM

Applicant Name: John Redenbach

Applicant Home Address: 7029 Transit Road apt 5 East Amherst, NY 14051

Under penalty of perjury I, John Redenbach affirm I am an applicant to be a member of the, East Amherst Fire Department (fire dept.) and my address of residence is listed above.

☐ My address is in the fire distract I've applied to or territory which is afforded protection by the fire department of the fire district or fire company pursuant to contract.

☒ My address is outside the district or territory that provides protection by the fire district or company, but is in the vicinity of my occupation, in which I will be able to render active service as a volunteer. My occupation address is:

_____

Signature of Applicant: John Redenbach

I have verified the applicant's address or employment, where applicable, by examining their driver's license or other suitable document such as a utility bill, lease or pay stub.

Signature: Ken Rusin

Title: President

Date: April 4th, 2022

Submit this completed form to:
Amherst Town Clerk
5583 Main Street
Williamsville, NY 14221

Attachment: Redenbach residency 4.4.22 (RES-2022-369 : New Firefighter's for East Amherst Fire Department)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Comptroller
Initiated by: **Daryl Bramer**
Co-Sponsored by:

DOC ID: 25635 **RESOLUTION 2022-370** **ADOPTED**

Budget Transfers and Amendments

For April 11, 2022 Town Board Agenda

To: Town Board
From: Office of Town Comptroller
Date: 4/5/2022
Re: Various Department Budget Transfers / Amendments

I have received the following request(s) requiring budget transfers and / or amendments. Based on my review, I ask that the Town Board approve the following list;

BUDGET TRANSFERS - 2022

FROM:	***TO:***
A1440.1000 Personal Services $78,185.15	A1620.1000 Personal Services $78,185.15
A1440.8030 FICA $5,981.16	A1620.8030 FICA $5,981.16
A1440.8050 Health Insurance $8,215.80	A1620.8050 Health Insurance $8,215.80
A1440.8051 Dental $370.00	A1620.8051 Dental $370.00
A1440.8052 Vision $41.80	A1620.8052 Vision $41.80

To transfer funds from Engineering to Building Maintenance for transfer of employee.

A1620.1000 Personal Services $69,100.57	A7145.1000 Personal Services $69,100.57
A1620.8030 FICA $5,286.19	A7145.8030 FICA $5,286.19
A1620.8050 Health Insurance $8,215.80	A7145.8050 Health Insurance $8,215.80
A1620.8051 Dental $370.00	A7145.8051 Dental $370.00
A1620.8052 Vision $41.80	A7145.8052 Vision $41.80

To transfer funds from Building Maintenance to Recreation for transfer of employee.

A1110.4020 Town Justice - Postage $4,000.00	A1420.4020 Town Attorney - Postage $4,000.00

BUDGET AMENDMENTS - 2022

INCREASE:	***INCREASE:***
A3649.2150 ARPA- Fed Revenue $345.00	A3649.2150 ARPA- Bldg. Impr. & Equip $345.00

To increase the budget for APD Emergency Generator installation using American Rescue Plan Act funds for PO #22114370.

N2155.02785 Amherst HOME Rental- PI $1,895.40	N2155.4000 Contractual $1,895.40
N2154.02785 Amherst Admin- PI $210.60	N2154.4003 Admin $210.60

To recognize Community Development program income from 274 Stevenson, Amherst.

N1042.05002 Em'ee Health Ins. Contribution $1,902.96	N1042.8050 Health Insurance $1,902.96

To recognize Community Development 1st quarter employee health insurance contributions.

N2123.02785 CDBG & VG PI $8,272.00	N2123.4000 Admin $8,272.00
N2125.02785 CDBG & VG Admin $2,068.00	N2125.1000 Personal Services $1,921.04
	N2125.8030 FICA $146.96

To recognize Community Development program income from 177 Buckeye, Amherst.

N2123.02785 CDBG & VG PI $26,088.00	N2123.4000 Admin $26,088.00

N2125.02785 CDBG & VG Admin $6,522.00 N2125.1000 Personal Services $6,058.52
N2125.8030 FICA $463.48
To recognize Community Development program income from 239 Hunters Lane, Amherst.

KP2116.02770 Knox Box - Other Revenue $5,382.50 KP2116.1000 Personal Services $5,000.00
KP2116.8030 FICA $382.50
To increase personal services and FICA for the Knox Box Project installation.

N2155.02785 Amherst HOME Rental- PI $4,500.00 N2155.4000 Contractual $4,500.00
N2154.02785 Amherst Admin- PI $500.00 N2154.4003 Admin $500.00
To recognize Community Development program income from 156 Delta, Amherst.

N2155.02785 Amherst HOME Rental- PI $6,184.00 N2155.4000 Contractual $6,184.00
To recognize Community Development program income from 66 B Foxberry, Amherst.

4/11/2022
Consent

FINANCIAL IMPACT:

See Descriptions.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Contract Compliance
Initiated by: **Lynda Juul**
Co-Sponsored by: **Supervisor Brian J. Kulpa**

DOC ID: 25523 **RESOLUTION 2022-371** **ADOPTED**

Extension of Bid #2020015 - Town Wide Dumpster Service - CRS #3204 & #3240 (Original CRS #2003 & #1994)

WHEREAS, Bid #2020015 for Town Wide Dumpster Service was awarded to Waste Management for the small container portion and Modern Disposal for roll off containers on April 20, 2020 (Town Board Resolution 2020-420); and

WHEREAS, Waste Management and Modern Disposal Services have both agreed to extend their respective contract for the initial two-year extension period;

NOW, THEREFORE, BE IT RESOLVED, the Town Board approves the extension of the contracts with Waste Management and Modern Disposal for the period June 1, 2022 thru May 31, 2024; and

BE IT FURTHER RESOLVED, the Town Board authorizes the Supervisor to sign the two-year contract extensions with Waste Management and Modern Disposal.

4/11/2022
Consent

FINANCIAL IMPACT:

Town Wide; Various; Amount TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TOWN OF AMHERST

Erie County, New York

SUPERVISOR
Brian J. Kulpa
716-631-7032

DEPUTY SUPERVISOR/COUNCILMEMBER
Jacqualine Berger

COUNCILMEMBERS
Deborah Bruch Bucki, RN, PhD
Shawn Lavin
Michael Szukala

EXTENSION AGREEMENT

Waste Management of New York, LLC agrees to hold prices and extend the current contract with the Town of Amherst for Town Wide Dumpster Service (small container portion of Bid #2020015 CRS/CMS #2003/2120).

This contract shall be dated June 1, 2022 through May 31, 2024.

Agreed to and Accepted by:

Waste Management of New York, LLC

By:_____
Signature

Chris Leaper
Printed Name

Public Sector Representative
Title

Date: 3/8/22

Agreed to and Accepted by:

TOWN OF AMHERST

By:_____
Brian J. Kulpa, Supervisor

Date:_____

Attachment: Waste Management signed Extension Agreement (RES-2022-371 : Extension of Bid #2020015 - Town Wide Dumpster Service - CRS

Attachment: Extension Agreement Modern Disposal (RES-2022-371 : Extension of Bid #2020015 - Town Wide Dumpster Service - CRS #3204 &

TOWN OF AMHERST
Erie County, New York

SUPERVISOR
Brian J. Kulpa
716-631-7032

DEPUTY SUPERVISOR/COUNCILMEMBER
Jacqualine Berger

COUNCILMEMBERS
Deborah Bruch Bucki, RN, PhD
Shawn Lavin
Michael Szukala

EXTENSION AGREEMENT

Modern Disposal Services, Inc. agrees to hold prices and extend the current contract with the Town of Amherst for Town Wide Dumpster Service (roll off portion of Bid #2020015 CRS/CMS #1994/2119).

This contract shall be dated June 1, 2022 through May 31, 2024.

Agreed to and Accepted by:

Modern Disposal Services, Inc.

By: Jack Manley
Signature

Jack Manley
Printed Name

Director of Sales + Marketing
Title

Date: 3/10/22

Agreed to and Accepted by:

TOWN OF AMHERST

By: _____
Brian J. Kulpa, Supervisor

Date: _____

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Contract Compliance
Initiated by: **Lynda Juul**
Co-Sponsored by: **Supervisor Brian J. Kulpa**

DOC ID: 25615 A **RESOLUTION 2022-372** **ADOPTED**

Award Bid #2022006 - Police Vehicles - CRS #3262

WHEREAS, the Contract Compliance and Administration Department received bids on March 3, 2022 for Bid #2022006 Police Vehicles; and

WHEREAS, the bid process resulted in responses from two (2) vendors, as per the attached bid tabulation form;

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award the bid to Van Bortel Ford; and

BE IT FURTHER RESOLVED, the Town Board authorizes a waiver of insurance as Van Bortel employees will not be on Town property; and

BE IT FURTHER RESOLVED, that the Town Board authorizes the transfer of $23,400 from A 3120.2200 into KP2209.2200. These funds will cover the remaining cost of one of the police cars purchased under the 2022 Police Vehicle bond; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Van Bortel Ford, pending successful completion of the contract routing process; and

BE IT FURTHER RESOLVED, the Police Department is requesting approval to trade in the following vehicles;

CAR #	YEAR	MAKE	MODEL	VIN#	MILEAGE
POLICE DEPARTMENT VEHICLES					
104	2020	FORD	SUV HYBRID	1FM5K8AW8LGD01978	66,735
108	2020	FORD	SUV HYBRID	1FM5K8AW9LGA71366	80,130
112	2020	FORD	SUV HYBRID	1FM5K8AWXLGA71361	75,062
113	2020	FORD	SUV HYBRID	1FM5K8AW1LGA71359	76,600
115	2018	FORD	TAURUS	1FAHP2MK0JG133894	75,500
118	2018	FORD	SUV	1FM5K8AR3JGC18756	85,200
119	2016	FORD	SUV	1FM5K8AR3GGC91697	102,600
161	2013	FORD	EXPLORER	1FM5K8AR9DGA09042	70,400
126	2014	FORD	TAURUS	1FAHP2MK4EG185535	88,350
128	2013	FORD	TAURUS	1FAHP2M85DG230291	63,000
185	1999	CHEV.	TAHOE	1GNEK13R8XR150273	132,800
EMERGENCY SERVICES VEHICLE					
301	2012	CHEV.	TAHOE	1GNSK2E0XCR171983	56,747

4/11/2022
Consent

FINANCIAL IMPACT:

A3641.2250: $31,750.00

KP2209.2200: $277,125.00

A3120.2200: $161,975.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Bid #2022006 Police Vehicles							
		Low Bidder		Van Bortel		DeLacy	
			Vendor Name:				
Item #	QTY	U/M		Unit Price	Total Price	Unit Price	Total Price
1	4	EA	2022 or Newer Ford Police Responder Hybrid Utility (Dark Blue -LK)	$34,500.00	$138,000.00	$34,667.00	$138,668.00
2	2	EA	2022 or Newer Ford Police Responder	$35,625.00	$71,250.00	$35,689.00	$71,378.00
3	1	EA	2022 or Newer Ford Utility Police Interceptor AWD (NON-Hybrid) (Agate Black – UM)	$35,850.00	$35,850.00	$35,908.00	$35,908.00
4	3	EA	**2022 or Newer Ford Utility Police**	$34,700.00	$104,100.00	$34,739.00	$104,217.00
5	1	EA	2022 or Newer Ford Police Responder Hybrid Utility (Oxford White-YZ)	$35,250.00	$35,250.00	$35,315.00	$35,315.00
			Total of Items 1-4		$384,450.00		$385,486.00
5			Total Trade-In Value		$86,500.00		$87,300.00
			(Enter individual trade-in values in the table on page 9 and the total trade-in value here)				
			Total Net Bid		$297,950.00		$298,186.00
			(Total of Items 1-4 minus Total Trade-In Value)				
			Estimated lead time between order and delivery:		180-360		4-6 Months
NOTES:							
Van Bortel referenced Onondaga Contract 8771							

Attachment: Bid Analysis 2022006 Police Vehicles (RES-2022-372 : Award Bid #2022006 - Police Vehicles

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Contract Compliance
Initiated by: **Lynda Juul**
Co-Sponsored by: **Supervisor Brian J. Kulpa**

DOC ID: 25617 **RESOLUTION 2022-373** **ADOPTED**

Award Bid #2022007 - Sludge Disposal & Transportation - CRS #3264

WHEREAS, the Contract Compliance and Administration Department received bids on March 31, 2022 for Bid #2022007 Sludge Disposal and Transportation; and

WHEREAS, the bid process resulted in responses from two (2) vendors, as per the attached bid tabulation form; and

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award a 3-year contract for Items 1 & 1A of this bid to Modern Disposal Services, Inc.; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Modern Disposal, Inc., pending successful completion of the contract routing process.

4/11/2022
Consent

FINANCIAL IMPACT:

G9916-4950; Amount TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Bid #2022007 Sludge Hauling and Disposal

		Low Bidder		Cragco		Modern		Modern 3-Year Term		Denali	
			Vendor Name:								
Item #	QTY	U/M		Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
			Disposal Only							NO BID	NO BID
1	16,100	Net Ton	Disposal or reuse fee for acceptance of sludge	NO BID	NO BID	$96.00	$1,545,600.00	$85.00	$1,368,500.00	NO BID	NO BID
1A	250	Net Ton	Disposal or reuse fee for acceptance of grit and screenings	NO BID	NO BID	$96.00	$24,000.00	$85.00	$21,250.00	NO BID	NO BID
			Transportation and Disposal								
2	16,100	Net Ton	**Transportation and disposal or reuse fee for sludge**	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
2A	250	Net Ton	Transportation and disposal or reuse fee for grit and screening	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
			Transportation Only - Sludge								
3	1	Trip	Transportation service for sludge, up to 40 miles round trip	$375.00	$375.00	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
3A	1	Trip	Transportation service for sludge, up to 90 miles round trip	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
3B	1	Trip	Transportation service for sludge, up to 140 miles round trip	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
			Transportation Only - Grit and Screenings								
4	1	Trip	Transportation service for grit and screenings, up to 40 miles round trip	$375.00	$375.00	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
4A	1	Trip	Transportation service for grit and screenings, up to 90 miles round trip	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
4B	1	Trip	Transportation service for grit and screenings, up to 140 miles round trip	NO BID	NO BID	NO BID`	NO BID	NO BID`	NO BID	NO BID	NO BID
			No Additional Charges Will Be Allowed								

NOTES:

Cragco, Inc. attached a letter with additional terms.

Modern - attached a letter with additional terms. 3-Year contract price per ton for sludge and grit $85

Attachment: Bid Tab 2022007 Sludge Disposal and Transportation (RES-2022-373 : Award Bid #2022007 -

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Contract Compliance
Initiated by: **Lynda Juul**
Co-Sponsored by: **Supervisor Brian J. Kulpa**

DOC ID: 25621 **RESOLUTION 2022-374** **ADOPTED**

Award Bid #2022005 - Organic Polymer Flocculant - CRS #3269

WHEREAS, the Contract Compliance and Administration Department received bids on March 10, 2022 for Bid #2022005 Organic Polymer Flocculant; and

WHEREAS, the bid process resulted in responses from three (3) vendors, as per the attached bid tabulation form;

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Contract Compliance and Administration Department to award this bid to Solenis LLC; and

BE IT FURTHER RESOLVED, the Supervisor is authorized to sign the contract with Solenis LLC, pending successful completion of the contract routing process.

4/11/2022
Consent

FINANCIAL IMPACT:

G9916.4810; Amount TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Bid #2022005 Organic Polymer Flocculant

		Low Bidder	Vendor Name:	Marubeni America			Polydyne			Solenis LLC		
Item #	QTY	U/M		Packaging Info.	Unit Price	Total Price	Packaging Info.	Unit Price	Total Price	Packaging Info.	Unit Price	Total Price
1	90,000	Net Lbs.	Blend 1 – BESFLOC RA-8534	750KG Super Sack	$2.13	$191,700.00	1650 Lb. Bags	$2.24	$201,600.00	700KG Super Sacks	$2.12	$190,800.00
1A	1,000	Net Lbs.	Blend 1A – BESFLOC RA-8534	25KG Bags	$2.13	$2,130.00	55 Lb. Bags	$2.24	$2,240.00	50 Lb. Bags	$2.29	$2,290.00
2	10,000	Net Lbs.	Blend 2 – DIAFLOC KP7000	15KG Bags	$8.35	$83,500.00	55 Lb. Bags	$2.24	$22,400.00	50 Lb. Bags	$2.37	$23,700.00
			Total Net Bid			$277,330.00			$226,240.00			$216,790.00

NOTES:

Polydine - Bid Item #1 product was listed as CLARIFLOC NE-2164; Bid Item 1A product was listed as CLARIFLOC NE-2164; Bid Item #2 product was listed as CLARIFLOC NE-2212.

Solenis - Included a "Statement of Exception" with the bid; Town Attorney is reviewing. Item #1 Product was listed as Praestol 857 BS; Item #1A product was listed as Praestol 857BS and Item #2 product was listed as Zetag 8190.

All Bids were priced per pound.

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Emergency Services
Initiated by: **Jim Zymanek**
Co-Sponsored by:

DOC ID: 25639 **RESOLUTION 2022-375** **ADOPTED**

Authorization to Adopt the 2022 Erie County, NY Hazard Mitigation Plan

WHEREAS, all jurisdictions within Erie County have exposure to hazards that increase the risk to life, property, environment, and the County and local economy; and

WHEREAS, pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS, a coalition of Erie County municipalities with like planning objectives has been formed to pool resources and create consistent mitigation strategies within Erie County; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising this strategy;

NOW, THEREFORE, BE IT RESOLVED that the Town of Amherst:

1) Adopts in its entirety, the 2022 Erie County Hazard Mitigation Plan (the "Plan") as the jurisdiction's Hazard Mitigation Plan, and resolves to execute the actions identified in the Plan that pertain to this jurisdiction.

2) Will use the adopted and approved portions of the Plan to guide pre- and post-disaster mitigation of the hazards identified.

3) Will coordinate the strategies identified in the Plan with other planning programs and mechanisms under its jurisdictional authority.

4) Will continue its support of the Planning Partnership as described within the Plan.

5) Will help to promote and support the mitigation successes of all participants in this Plan.

6) Will incorporate mitigation planning as an integral component of government and partner operations.

7) Will provide an update of the Plan in conjunction with the County no less than every five years.

4/11/2022
Consent

FINANCIAL IMPACT:

none

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Hazard Mitigation Plan

Erie County, New York

September 2021

Volume I

Prepared by:
Tetra Tech, Inc.
2000 Linglestown Road, Suite 203 | Harrisburg, PA 17110

Attachment: 01-Volume-I-Cover-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

EXECUTIVE SUMMARY

Hazard mitigation is an action to help reduce long-term risks caused by hazards or disasters, such as flooding, earthquakes, or wildfires. The purpose of hazard mitigation is to protect people and structures, and minimize the costs of disaster response and recovery. Hazard mitigation can take many forms: capital projects, policies, education, and environmental protection. A hazard mitigation plan (HMP) documents a local government's evaluation of hazards and the strategies to mitigate those hazards.

Hazard Mitigation is any sustained action taken to reduce or eliminate the long-term risk and effects that can result from specific hazards.

FEMA defines a ***Hazard Mitigation Plan*** as the documentation of a state or local government evaluation of natural hazards and the strategies to mitigate such hazards.

Erie County and 46 jurisdictions actively participated in the HMP update process. Table ES-1 lists the participating jurisdictions.

Table ES-1. Participating Jurisdictions in the 2022 Erie County HMP Update

Jurisdictions	
Erie County	Gowanda, Village of
Erie County Water Authority	Grand Island, Town of
Akron, Village of	Hamburg, Town of
Alden, Town of	Hamburg, Village of
Alden, Village of	Holland, Town of
Amherst, Town of	Kenmore, Village of
Angola, Village of	Lackawanna, City of
Aurora, Town of	Lancaster, Town of
Blasdell, Village of	Lancaster, Village of
Boston, Town of	Marilla, Town of
Brant, Town of	Newstead, Town of
Buffalo, City of	North Collins, Town of
Cheektowaga, Town of	North Collins, Village of
Clarence, Town of	Orchard Park, Town of
Colden, Town of	Orchard Park, Village of
Collins, Town of	Sardinia, Town of
Concord, Town of	Sloan, Village of
Depew, Village of	Springville, Village of
East Aurora, Village of	Tonawanda, City of
Eden, Town of	Tonawanda, Town of
Elma, Town of	Wales, Town of
Evans, Town of	West Seneca, Town of
Farnham, Village of	Williamsville, Village of

During the Erie County HMP planning process, the nation, the State of New York, and Erie County were facing the COVID-19 pandemic. The COVID-19 pandemic was declared a major disaster on March 20, 2020 (DR-

Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4480). The Governor issued a stay-at-home Executive Order beginning March 22, 2020, which has since been revoked.

The Erie County Office of Emergency Services, Department of Public Works, the Steering Committee members, and the planning partners were addressing the COVID-19 pandemic concurrent with completing the update to the HMP. Erie County and all planning partners made their best effort to work through this unprecedented time to complete the HMP update and meet FEMA and state requirements. Unfortunately, in-person public meetings were canceled for the safety of residents and planning partners. However, Steering Committee, Planning Partnership, jurisdiction-specific, and public meetings continued virtually. More targeted stakeholder and public involvement was initiated to ensure a broad audience was reached, described further below.

During this HMP update process, Erie County and the participating jurisdictions accomplished the following:

- Developed a Steering Committee and Planning Partnership
- Reviewed and updated the hazards of concern
- Profiled and prioritized these hazards
- Estimated inventory at risk and potential losses associated with these hazards
- Reviewed and updated hazard mitigation goals and objectives
- Reviewed and updated County and local mitigation strategies to address identified risks and vulnerabilities

ERIE COUNTY MULTI-JURISDICTIONAL PLANNING PROCESS

Erie County developed and adopted the original Erie County HMP in 2007 and updated the plan in 2015. The DMA 2000 regulations require that local plans be formally updated and adopted every five (5) years, reassessing risk and updating local strategies to manage and mitigate those risks. To comply, Erie County and its inclusive jurisdictions actively participated in the 2022 update of the HMP. Extensive outreach efforts by the Erie County Department of Homeland Security and Emergency Services resulted in participation from all 46 jurisdictions. Upon completion and approval of the HMP, participating jurisdictions will continue to address and implement the findings and recommendations of this HMP.

As required by the DMA 2000, the participating jurisdictions and Erie County have informed the public about HMP update efforts and have provided opportunities for public comment and input regarding the planning process. In addition, numerous agencies and stakeholders have participated as core or support members to provide input and expertise to the planning process. This HMP documents the process and outcomes of the jurisdictions' mitigation planning efforts.

Erie County and the participating jurisdictions incorporate mitigation planning as an integral component of daily government operations through existing processes and programs. A public outreach campaign was initiated to commence the HMP update. A citizen survey to gauge hazard preparedness was developed. The survey asked quantifiable questions about citizen perception of risk, knowledge of mitigation, and support of community programs. Stakeholder surveys across multiple sectors was distributed to obtain input. The citizen survey was posted on the County's mitigation plan website (https://www.eriecountynyhmp.com/). The stakeholder surveys were sent by the Erie County Department of Homeland Security and Emergency Services to applicable stakeholder groups. Updates to the HMP will be announced on the County website and via municipal outreach after annual plan reviews and 5-year updates. The County HMP Coordinator and local planning partnership representatives will be responsible for receiving, tracking, and filing public comments regarding this HMP when posted for draft public review and throughout the plan's period of performance.

Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

ERIE COUNTY HAZARD MITIGATION PLAN ADOPTION

Following formal Federal Emergency Management Agency (FEMA) approval of this HMP update, Erie County and all participating jurisdictions will be required to formally adopt the updated HMP. A sample of an adoption resolution is included in Appendix A (Adoption Resolutions). Of the 46 participating planning partners listed in Table ES-1, all fully met the participation requirements specified by the Steering Committee.

ERIE COUNTY PROFILE

Development increases population and structures and therefore can increase the impact of hazards on a community.
For example, heavy development planned for a flood-prone area would likely increase the impact of the flood events as time progresses.

According to the 2018 American Community Survey (ACS) Census data, Erie County had a population of 919,355. Erie County is located in southwest New York State, north of the Commonwealth of Pennsylvania. The County is bordered by Chautauqua County to the west, Erie and Wyoming Counties to the north, Allegany County to the east, and the Commonwealth of Pennsylvania to the south.

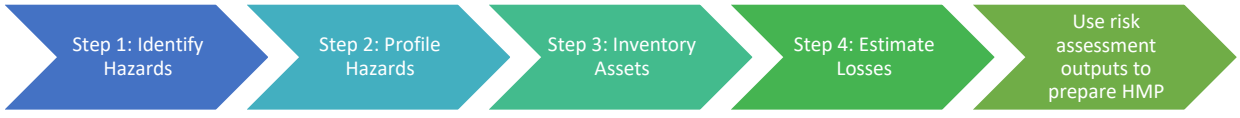
Erie County is located in the northwest portion of the Allegheny Plateau region of New York State. The northern part of the County is generally flat, while steeper slopes are found in the central and southern parts of the County. The southern region of the County – characterized by hills and valleys – is the only unglaciated portion of western New York State. Cuba Lake, Lime Lake, Crystal Lake, Quaker Lake, Rainbow Lake, Red House Lake, Science Lake, and Timber Lake are within the County.

Land use in Erie County is influenced by natural resources, topographic constraints, water lines, sewers, and roads. The county has a relatively compact development pattern and is made up of rural, suburban, and urban areas. Agriculture remains a large land use. Although the number of farms is decreasing slightly, the size of farms is increasing. This trend toward fewer but larger farm operations parallels statewide trends (Erie County Department of Economic Development, Planning & Tourism 2015).

The Erie County HMP provides a general overview of current and anticipated population and land use within the study area. This information provides a basis for making decisions regarding the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support decisions regarding future development in vulnerable areas. For potential increases in vulnerability, the County and jurisdictions can then plan ahead to mitigate those vulnerabilities early in the development process or can direct development to areas of lower risk. The Planning Partnership will revisit the HMP regularly to ensure that mitigation actions support sustainability to minimize increased risk, and to also ensure implementation and targeting of specific mitigation actions will address the potential impacts of development over time.

RISK ASSESSMENT

A key component of an HMP is accurate identification of risks posed by hazards and corresponding impacts on the community. The process of identifying hazards of concern, profiling hazard events, and conducting a vulnerability assessment is known as a risk assessment. The risk assessment portion of the mitigation planning process included the steps shown and summarized below.



Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Step 1: Identify hazards of concern. Erie County considered the full range of natural and non-natural hazards that could impact the County and then identified and ranked hazards of greatest concern. The following list of 13 hazards of concern was selected for further evaluation in the HMP:

- Coastal Erosion
- Cyber Security
- Earthquake
- Expansive Soils
- Extreme Temperature
- Flood
- Hazardous Materials
- Landslide
- Pandemic
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

Step 2: Prepare a profile for each hazard of concern. These profiles assist jurisdictions in evaluating and comparing hazards that can impact their areas. Each type of hazard has unique characteristics that differ from event to event. That is, impacts associated with a specific hazard can vary depending on the magnitude and location of each event (a hazard event is a specific, uninterrupted occurrence of a particular type of hazard). Further, probability of occurrence of a hazard at a given location affects the priority assigned to that hazard. Finally, each hazard impacts different communities in different ways, depending on geography, local development, population distribution, age of buildings, and mitigation measures already implemented.

Steps 3 and 4: Evaluate assets of jurisdictions and identify assets exposed or vulnerable to the hazards of concern. Hazard profile information, combined with data regarding population, demographics, general building stock, and critical facilities at risk, prepares the community to develop risk scenarios and estimate potential damages and losses from each hazard.

Once the risk assessment was completed, the County and participating jurisdictions evaluated the risk and vulnerability to each hazard for their community. This served as a starting point in identifying and prioritizing mitigation strategies.

ERIE COUNTY MITIGATION STRATEGY

Outcomes of the risk assessment, supplemented by community input, provided a basis for reviewing past mitigation actions, future goals, and appropriate local mitigation actions.

Goals and Objectives

The 2015 HMP specified overarching mitigation goals with corresponding objectives that summarized hazard reduction outcomes the County and participating jurisdictions want to achieve. During the 2022 plan update process, the Steering Committee reviewed the goals and objectives established in the 2015 HMP. These goals and objectives were reviewed in consideration of the hazard events and losses since the 2015 plan; the updated hazard profiles and vulnerability assessment; the goals and objectives established in the 2019 NYS HMP, county and local risk management plans; and direct input from the County and jurisdictions for how to meet their needs to advance and best manage their hazard risk. Amendments include additions/edits to goals and objectives to

Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

express the planning partnership's interests in integrating this plan with other planning mechanisms/programs and to support mitigation through the protection and preservation of natural systems (refer to Section 6 – Mitigation Strategies). The following summarizes the three (3) updated goals for the 2022 HMP.

1. Protect life, property, and critical infrastructure from hazard impacts.
2. Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.
3. Reduce the risk of hazards on life, property, and the environment.

Capability Assessment

The Capability Assessment section of Section 6 (Mitigation Strategy) provides a summary and description of the existing plans, programs and regulatory mechanisms at all levels of government (federal state, county, and local) that support hazard mitigation within the county. Within each jurisdictional annex in Section 9 (Jurisdictional Annexes), the county and each participating jurisdiction identified how they have integrated hazard risk management into their existing planning, regulatory and operational/administrative framework ("existing integration"), and how they intend to promote this integration ("opportunities for future integration").

By completing these assessments, Erie County and participating jurisdictions learned how or whether they would be able to implement certain mitigation actions by determining the following:

- Types of mitigation actions that may be prohibited by law
- Limitations that may hinder mitigation actions
- The range of local and state administrative, programmatic, regulatory, financial, and technical resources available to assist in implementing their mitigation actions

Identification, Prioritization, Analysis, and Implementation of Mitigation Actions

As part of the planning process for this HMP update, all participating jurisdictions evaluated their risks and known or anticipated losses to the hazards of concern, assessed their capabilities to manage hazard risk, reviewed progress on past mitigation efforts, and identified a comprehensive range of mitigation alternatives and actions they endeavor to implement as resources are identified and available. The HMP identifies all proposed mitigation actions relevant to achievement of the goals and objectives presented above. The county and participating jurisdictions have identified appropriate local mitigation actions, along with hazards mitigated, goals and objectives met, lead agencies, estimated costs, potential funding sources, and proposed timeline. These actions are identified in Volume II, Section 9, which consists of annexes for the County and each participating jurisdiction.

PLAN MAINTENANCE PROCEDURES

Hazard mitigation planning is an ongoing process. Section 7 (Plan Maintenance) of this plan presents procedures for how the County will monitor, integrate, evaluate, and update the HMP over the next five years. The Planning Partnership will continue ongoing mitigation efforts to implement the HMP and revise and update the HMP, as necessary.

To monitor implementation of the HMP, Planning Partnership members will meet annually to discuss the status of HMP implementation and will prepare a report summarizing the status of the HMP and any needed updates. The mitigation evaluation will address changes as new hazard events occur, as the area develops, and as more is learned about hazards and their impacts. The evaluation will include an assessment of whether the planning process and actions have been effective, whether development or other issues warrant changes to the HMP or its

Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

priorities, progress toward achievement of the communities' goals, and whether changes are warranted. The HMP will be updated, at a minimum, within the 5-year cycle specified by the DMA 2000.

POINT OF CONTACT

To request information or provide comments regarding this HMP, please contact the Erie County HMP Coordinator:

Mailing Address:	Erie County Department of Homeland Security and Emergency Services 42 Elm Street Buffalo, NY 14203
Contact Name:	Greg Butcher, Deputy Commissioner
E-mail Address:	gregory.butcher@erie.gov
Telephone:	(716) 858-6578

Attachment: 02-Executive-Summary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

TABLE OF CONTENTS

VOLUME I

SECTION 1 INTRODUCTION 1-1

SECTION 2 PLAN ADOPTION 2-1

SECTION 3 PLANNING PROCESS 3-1

SECTION 4 COUNTY PROFILE 4-1

SECTION 5 RISK ASSESSMENT 5-1

5.1 METHODOLOGY AND TOOLS 5.1-1
5.2 IDENTIFICATION OF HAZARDS OF CONCERN 5.2-1
5.3 HAZARD RANKING 5.3-1
5.4 HAZARD PROFILES AND VULNERABILITY ASSESSMENT 5.4-1
5.4.1 Coastal Erosion 5.4.1-1
5.4.2 Cyber Attack 5.4.2-1
5.4.3 Earthquake 5.4.3-1
5.4.4 Expansive Soils 5.4.4-1
5.4.5 Extreme Temperatures 5.4.5-1
5.4.6 Flood 5.4.6-1
5.4.7 Hazardous Materials 5.4.7-1
5.4.8 Landslide 5.4.8-1
5.4.9 Pandemic 5.4.9-1
5.4.10 Severe Storm 5.4.10-1
5.4.11 Severe Winter Storm 5.4.11-1
5.4.12 Utility Failure 5.4.12-1
5.4.13 Wildfire 5.4.13-1

SECTION 6 MITIGATION STRATEGY 6-1

SECTION 7 PLAN MAINTENANCE PROCEDURES 7-1

REFERENCES R-1

ACRONYMS AND ABBREVIATIONS AC-1

GLOSSARY G-1

APPENDICES

Appendix A Resolution of Plan Adoption
Appendix B Participation Matrix
Appendix C Meeting Documentation
Appendix D Public and Stakeholder Outreach Documentation
Appendix E Risk Assessment Supplementary Data
Appendix F Critical Facilities

Attachment: 03-Table-of-Contents-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Appendix G: Coastal Area Hazard Maps
Appendix H: FEMA Plan Review Tools
Appendix I: Plan Review Matrix

VOLUME II

SECTION 8 PLANNING PARTNERSHIP 6-1

SECTION 9 JURISDICTIONAL ANNEXES 9-1

9.1 Erie County 9.1-1
9.2 Erie County Water Authority 9.2-1
9.3 Akron, Village of 9.3-1
9.4 Alden, Town of 9.4-1
9.5 Alden, Village of 9.5-1
9.6 Amherst, Town of 9.6-1
9.7 Angola, Village of 9.7-1
9.8 Aurora, Town of 9.8-1
9.9 Blasdell, Village of 9.9-1
9.10 Boston, Town of 9.10-1
9.11 Brant, Town of 9.11-1
9.12 Buffalo, City of 9.12-1
9.13 Cheektowaga, Town of 9.13-1
9.14 Clarence, Town of 9.14-1
9.15 Colden, Town of 9.15-1
9.16 Collins, Town of 9.16-1
9.17 Concord, Town of 9.17-1
9.18 Depew, Village of 9.18-1
9.19 East Aurora, Village of 9.19-1
9.20 Eden, Town of 9.20-1
9.21 Elma, Town of 9.21-1
9.22 Evans, Town of 9.22-1
9.23 Farnham, Village of 9.23-1
9.24 Gowanda, Village of 9.24-1
9.25 Grand Island, Town of 9.25-1
9.26 Hamburg, Town of 9.26-1
9.27 Hamburg, Village of 9.27-1
9.28 Holland, Town of 9.28-1
9.29 Kenmore, Village of 9.29-1
9.30 Lackawanna, City of 9.30-1
9.31 Lancaster, Town of 9.31-1
9.32 Lancaster, Village of 9.32-1
9.33 Marilla, Town of 9.33-1
9.34 Newstead, Town of 9.34-1
9.35 North Collins, Town of 9.35-1
9.36 North Collins, Village of 9.36-1
9.37 Orchard Park, Town 9.37-1
9.38 Orchard Park, Village of 9.38-1
9.39 Sardinia, Town of 9.39-1
9.40 Sloan, Village of 9.40-1
9.41 Springville, Village of 9.41-1
9.42 Tonawanda, City of 9.42-1
9.43 Tonawanda, Town of 9.43-1

Attachment: 03-Table-of-Contents-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.44 Wales, Town of 9.44-1
9.45 West Seneca, Town of 9.45-1
9.46 Williamsville, Village of 9.46-1

Attachment: 03-Table-of-Contents-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 1. INTRODUCTION

1.1 PURPOSE

Erie County and its jurisdictions have prepared this multi-hazard mitigation plan to better protect the residents and property throughout the County from the effects of hazard events. This plan demonstrates the County's and each jurisdiction's commitment to reducing risk from hazards, increasing resilience overall, and provide a tool to help decision makers integrate mitigation in their day-to-day processes. This plan was also developed to position Erie County and its participating jurisdictions for eligibility of pre- and post-disaster Federal Emergency Management Agency (FEMA) grants, including: Hazard Mitigation Assistance grant programs (HMA), which include Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), and Flood Mitigation Assistance (FMA). This plan also aligns with the planning elements of the National Flood Insurance Program's Community Rating System (CRS) which provides for lower flood insurance premiums in CRS communities.

1.2 BACKGROUND

A Hazard Mitigation Plan (HMP) is a living document that communities use to reduce their vulnerability to hazards. It forms the foundation for a community's long-term strategy to reduce disaster losses and creates a framework for decision making to reduce damages to lives, property, and the economy from future disasters. Examples of mitigation projects include home acquisitions or elevations to remove structures from high-risk areas, upgrades to critical public facilities, and infrastructure improvements. Ultimately, these actions reduce vulnerability, and communities are able to recover more quickly from disasters. Erie County has demonstrated its commitment to reducing disaster losses by initially developing its multi-jurisdictional HMP in 2005 and updating information upon which to base a successful mitigation strategy to reduce the impacts of natural disasters and to increase the resiliency of its communities.

Hazard Mitigation is any sustained action taken to reduce or eliminate the long-term risk and effects that can result from specific hazards.

FEMA defines a *Hazard Mitigation Plan* as the documentation of a state or local government evaluation of natural hazards and the strategies to mitigate such hazards.

In response to the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), Erie County and the jurisdictions located therein have developed this hazard mitigation plan, which represents a regulatory update to the *2015 Erie County Multi-Jurisdictional All-Hazards Mitigation Plan* (HMP; also referred herein as the *Hazard Mitigation Plan* or *the plan*). The DMA 2000 amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) and is designed to improve planning for, response to, and recovery from disasters by requiring state and local entities to implement pre-disaster mitigation planning and develop HMPs. The Federal Emergency Management Agency (FEMA) has issued guidelines for HMPs. The New York State Division of Homeland Security and Emergency Services (NYS DHSES), formerly the New York State Office of Emergency Management (NYSOEM), also supports plan development for jurisdictions in New York and issued the NYS DHSES Hazard Mitigation Planning Standards for HMPs developed with NYS DHSES-administered funds.

Specifically, the DMA 2000 requires that states, with support from local governmental agencies, develop and update HMPs on a five-year basis to prepare for and reduce the potential impacts of natural hazards. The DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. This enhanced planning better enables local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

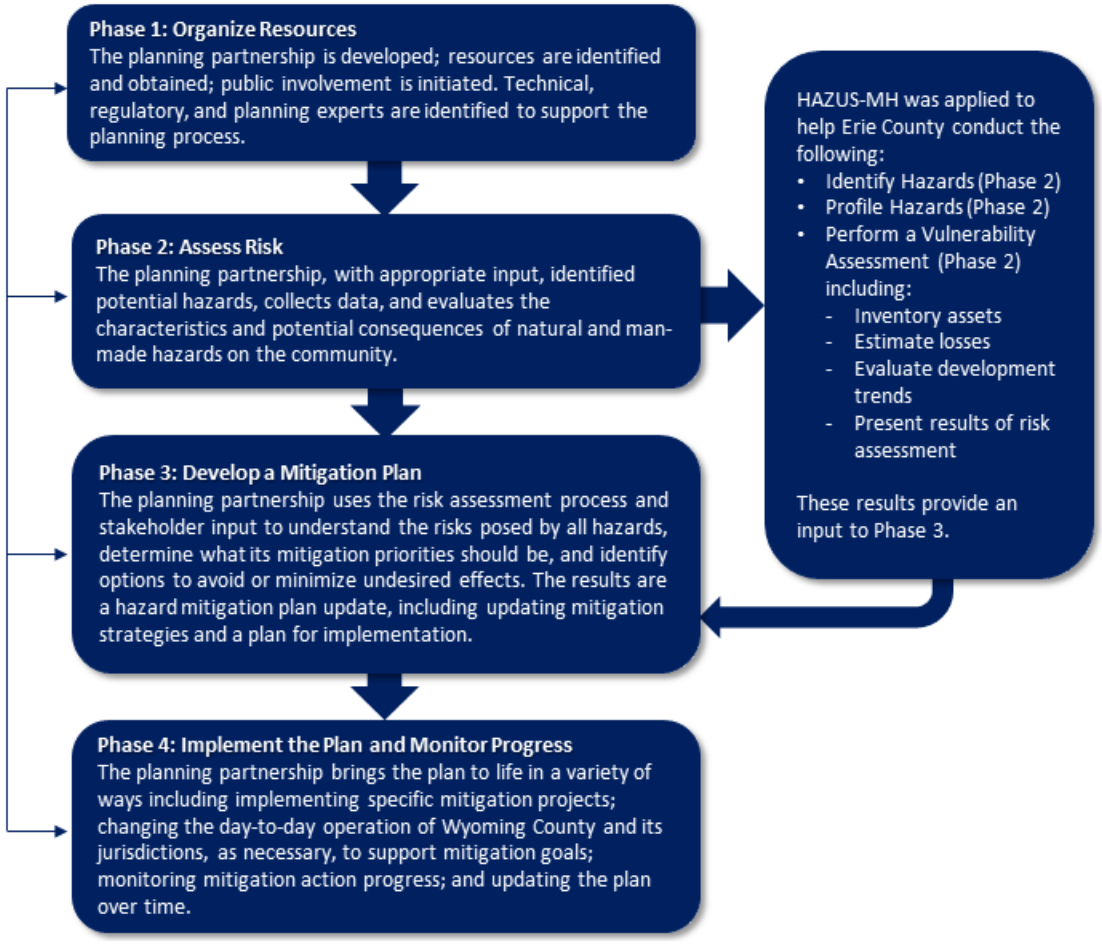
1.3 PLAN ORGANIZATION

The Erie County Hazard Mitigation Plan 2022 Update is organized as a two-volume plan and is in alignment with the DMA planning requirements, the 2013 FEMA *Local Mitigation Planning Handbook,* and the FEMA *Local Mitigation Plan Review Tool*.

Volume I provides information on the overall planning process and hazard profiling and vulnerability assessments, which serves as a basis for understanding risk and identifying mitigation actions. As such, Volume I is intended for use as a resource for on-going mitigation analysis.

Volume II provides an annex dedicated to each participating jurisdiction. Each annex summarizes the jurisdiction's legal, regulatory, and fiscal capabilities; identifies vulnerabilities to hazards; documents mitigation plan integration with other planning efforts; records status of past mitigation actions; and presents an individualized mitigation strategy. The annexes are intended to provide a useful resource for each jurisdiction for implementation of mitigation projects and future grant opportunities, as well as a place for each jurisdiction to record and maintain their local aspect of the countywide plan.

Figure 1-1. Erie County Hazard Mitigation Planning Process



The HMP is organized into two volumes: Volume I includes all information that applies to the entire planning area (Erie County) and Volume II includes participating jurisdiction-specific information.

Volume I of this plan includes the following sections:

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Section 1: Introduction: Overview of participants and planning process.

Section 2: Plan Adoption: Information regarding the adoption of the HMP by Erie County and each participating jurisdiction.

Section 3: Planning Process: Description of the HMP methodology and development process; Steering Committee, Planning Committee, and stakeholder involvement efforts; and a description of how this HMP will be incorporated into existing programs.

Section 4: County Profile: Overview of Erie County, including: (1) general information, (2) economy, (3) land use trends, (4) population and demographics, (5) general building stock inventory, and (6) critical facilities.

Section 5: Risk Assessment: Documentation of the hazard identification and hazard risk ranking process, hazard profiles, and findings of the vulnerability assessment (estimates of the impact of hazard events on life, safety, health, general building stock, critical facilities, the economy); description of the status of local data; and planned steps to improve local data to support mitigation planning.

Section 6: Mitigation Strategies: Information regarding the mitigation goals and objectives identified by the Steering Committee in response to priority hazards of concern and the process by which Erie County and local mitigation strategies have been developed or updated.

Section 7: Plan Maintenance Procedures: System established by the Steering Committee to continue to monitor, evaluate, maintain, and update the HMP.

Volume II of this plan includes the following sections:

Section 8: Planning Partnership: Description of the planning partnership, their responsibilities, and description of jurisdictional annexes.

Section 9: Jurisdictional Annexes: Jurisdiction-specific annex for Erie County and each participating jurisdiction containing their hazards of concern, hazard risk ranking, capability assessments, mitigation actions, action prioritization specific only to Erie County or that jurisdiction, progress on prior mitigation activities (as applicable), and a discussion of prior local HMP integration into local planning processes.

Appendices include the following:

Appendix A: Resolution of Plan Adoption: Resolutions from the county and each jurisdiction included as each formally adopts the HMP update.

Appendix B: Participation Matrix: Matrix to give a broad overview of who attended meetings and when input was provided to the HMP update, as well as Letters of Intent to Participate as described in Section 3.

Appendix C: Meeting Documentation: Agendas, attendance sheets, minutes, and other documentation (as available and applicable) of planning meetings convened during the development of the plan.

Appendix D: Public and Stakeholder Outreach Documentation: Documentation of the public and stakeholder outreach effort including webpages, informational materials, public and stakeholder meetings

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

and presentations, surveys, and other methods used to receive and incorporate public and stakeholder comment and input to the plan process.

Appendix E: Risk Assessment Supplementary Data: Expanded explanation of community lifelines; and the previous hazard events from the 2015 HMP.

Appendix F: Critical Facilities: Critical facilities included in the risk assessment.

Appendix G: Coastal Hazard Area maps

Appendix H: FEMA Plan Review Tools: Examples of plan review templates available to support annual plan review.

Appendix I: Plan Review Matrix: Summary of plans reviewed, including documentation of content relevant to the mitigation planning process.

1.4 THE UPDATED PLAN – WHAT IS DIFFERENT?

Due to the success of the 2015 plan, no major changes were made to the format or function of the 2022 update. The 2022 update has been enhanced using best available data and technology, especially in the risk assessment portion of the plan in Section 5 (Risk Assessment). The updated plan differs from the initial plan in a variety of ways:

- Updated NYS DHSES guidance existed at the time of its development. The 2017 New York State Hazard Mitigation Planning Standards and Guide were used to develop the 2022 update.
- Newly available data provided for a more detailed and accurate risk assessment. The updated plan is based on new data including FEMA's countywide Digital Flood Insurance Rate Maps (DFIRMs).
- User-friendly tone to cater to the strong desire for this plan to be understandable to the general public and not overly technical.
- Actions are identified, rather than strategies. Strategies provide direction, but actions are fundable under grant programs. The identified actions meet multiple measurable objectives so that each planning partner can measure the effectiveness of their mitigation actions.
- Identification and priority for numerous actions to be implemented by the planning partnership. The status of these actions will be monitored over the plan performance period by a plan maintenance strategy identified in Section 7 (Plan Maintenance) that included annual progress reporting.

Table 1-3 indicates the major changes between the two plans as they relate to 44 CFR planning requirements.

Table 1-1. Plan Changes Crosswalk

44 CFR Requirement	2015 Plan	2022Updated Plan
Requirement §201.6(b): In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: *(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;* *(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate*	The 2015 plan followed an outreach strategy utilizing multiple media developed and approved by the Steering Committee. This strategy involved the following: • Public participation on an oversight Steering Committee. • Establishment of a plan informational website. • Press releases. Use of a public information survey.	Building upon the success of the 2015 plan, the 2022 planning effort deployed the same public engagement methodology. The plan included the following enhancements: • Using social media. • HMP project website. • Web-deployed survey. • Informational brochure. As with the 2015 plan, the 2022 planning process identified key stakeholders and coordinated with

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

44 CFR Requirement	2015 Plan	2022Updated Plan
development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and *(3) Review and incorporation, if appropriate, of existing plans, studies, reports and technical information.*	Stakeholders were identified and coordinated with throughout the process. A comprehensive review of relevant plans and programs was performed by the planning team.	them throughout the process. The planning team performed a comprehensive review of relevant plans and programs.
§201.6(c)(2): The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.	The 2015 plan included a comprehensive risk assessment of hazards of concern. Risk was defined as (probability x impact), where impact is the impact on people, property, and economy of the planning area. All planning partners ranked risk as it pertains to their jurisdiction. The potential impacts of climate change are discussed for each hazard.	The same methodology, using new, updated data, was deployed for the 2022 plan update.
§201.6(c)(2)(i): [The risk assessment] shall include a] description of the … location and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.	The 2015 plan presented a risk assessment of each hazard of concern. Each section included the following: • Hazard profile, including maps of extent and location, previous occurrences, and probability of future events. • Climate change impacts on future probability. • Impact and vulnerability on life, health, safety, general building stock, critical facilities, and economy. • Impact on people, property, critical facilities, and environment. • Future growth and development. • Additional data and next steps. • Overall vulnerability assessment.	The same format, using new and updated data, was used for the 2022 plan update. Each section of the risk assessment includes the following: • Hazard profile, including maps of extent and location, previous occurrences, and probability of future events. • Climate change impacts on future probability using the best available data for New York State. • Vulnerability assessment includes: impact on life, safety, and health, general building stock, critical facilities, and the economy, as well as future changes that could impact vulnerability. • The vulnerability assessment also includes changes in vulnerability since the 2022 plan. • Identified issues have been documented in each hazard profile.
§201.6(c)(2)(ii): [The risk assessment] shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i). This description shall include an overall summary of each hazard and its impact on the community.	Vulnerability was assessed for all hazards of concern. The HAZUS-MH-MH computer model was used for the severe storm, earthquake, and flood hazards. These were Level 2 analyses using county data. Site-specific data on county-identified critical facilities were entered into the HAZUS-MH model. HAZUS-MH outputs were generated for other hazards by applying an estimated damage function to an asset inventory extracted from HAZUS-MH-MH.	The same methodology was deployed for the 2022 plan update, using new and updated data. Additional hazards of concern include the following: • Cybersecurity (distinct from Terrorism hazard) • Hazardous Materials • Pandemic • Utility Failure
§201.6(c)(2)(ii): [The risk assessment] must also address National Flood Insurance Program insured structures that have been repetitively damaged floods.	A summary of NFIP insured properties including an analysis of repetitive loss property locations was included in the plan.	The same methodology was deployed for the 2022 plan update using new and updated data.

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

44 CFR Requirement	2015 Plan	2022Updated Plan
Requirement §201.6(c)(2)(ii)(A): The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure and critical facilities located in the identified hazard area.	A complete inventory of the numbers and types of buildings exposed was generated for each hazard of concern. The Steering Committee defined "critical facilities" for the planning area, and these were inventoried by exposure. Each hazard chapter provides a discussion on future development trends.	The same methodology was deployed for the 2022 plan update using new and updated data.
Requirement §201.6(c)(2)(ii)(B): [The plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) and a description of the methodology used to prepare the estimate.	Loss estimates were generated for all hazards of concern. These were generated by HAZUS-MH-MH for the severe storm, earthquake, and flood hazards. For the other hazards, loss estimates were generated by applying a regionally relevant damage function to the exposed inventory. In all cases, a damage function was applied to an asset inventory. The asset inventory was the same for all hazards and was generated in HAZUS-MH.	The same methodology was deployed for the 2022 plan update using new and updated data.
Requirement §201.6(c)(2)(ii)(C): [The plan should describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.	There is a summary of anticipated development in the county profile, as well as in each individual annex.	The same methodology was deployed for the 2022 plan update using new and updated data.
§201.6(c)(3):[The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.]	The 2015 plan contained a mission statement, goals, objectives and actions. The guiding principal, goals and objectives were regional and covered all planning partners. Each planning partner identified actions that could be implemented within their capabilities. The actions were jurisdiction-specific and strove to meet multiple objectives. All objectives met multiple goals and stand alone as components of the plan. Each planning partner completed an assessment of its regulatory, technical, and financial capabilities.	The same methodology for setting goals, objectives, and actions was applied to the 2022 plan update. The Steering Committee reviewed and reconfirmed the mission statement, goals, and objectives for the plan. Each planning partner used the progress reporting from the plan maintenance and evaluated the status of actions identified in the 2015 plan. Actions that were completed or no longer considered to be feasible were removed. The balance of the actions was carried over to the 2022 plan, and in some cases, new actions were added to the action plan.
Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.	The Steering Committee identified a mission statement, goals, and objectives targeted specifically for this HMP. These planning components supported the actions identified in the plan.	The same methodology for setting goals, objectives, and actions was applied to the 2022 plan update. The Steering Committee reviewed and updated the mission statement, goals, and objectives for the plan to include a focus on increased resiliency. This resulted in the finalization of six goals and 30 objectives to frame the plan.
Requirement §201.6(c)(3)(ii): [The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.	The 2015 plan includes a hazard mitigation catalog that was developed through a facilitated process. This catalog identifies actions that manipulate the hazard, reduce exposure to the hazard, reduce vulnerability, or increase mitigation capability. The catalog further	The mitigation catalog was reviewed and updated by the Steering Committee for the 2022 update. As with the 2015 plan, the catalog has been included in the 2022 plan to represent the comprehensive range of alternatives considered by each planning partner. The table with the

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

44 CFR Requirement	2015 Plan	2022Updated Plan
	segregates actions by scale of implementation. A table in the action plan section analyzes each action by mitigation type to illustrate the range of actions selected.	analysis of mitigation actions was used in jurisdictional annexes to the plan.
Requirement: §201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program, and continued compliance with the program's requirements, as appropriate.	All municipal planning partners that participate in the National Flood Insurance Program identified an action stating their commitment to maintain compliance and good standing under the program.	The same methodology was deployed for the 2022 plan update, using new and updated data.
Requirement: §201.6(c)(3)(iii): [The mitigation strategy shall describe] how the actions identified in section (c)(3)(ii) will be prioritized, implemented and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.	Each recommended action was prioritized using a qualitative methodology based on the objectives the project will meet, the timeline for completion, how the project will be funded, the impact of the project, the benefits of the project, and the costs of the project.	A revised methodology based on the STAPLEE criteria and using new and updated data was used for the 2022 plan update.
Requirement §201.6(c)(4)(i): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.	The 2015 plan outlined a detailed maintenance strategy.	The 2022 plan details a plan maintenance strategy similar to that of the initial plan.
Requirement §201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.	The 2015 plan details recommendations for incorporating the plan into other planning mechanisms.	The 2022 plan details recommendations for incorporating the plan into other planning mechanisms such as the following: • Comprehensive Plan • Emergency Response Plan • Capital Improvement Programs • Municipal Code
Requirement §201.6(c)(4)(iii): [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.	The 2015 plan details a strategy for continuing public involvement.	The 2015 plan maintenance strategy was carried over to the 2022 plan. In addition, the county will use a proprietary online tool to support the annual progress reporting of mitigation actions.
Requirement §201.6(c)(5): [The local hazard mitigation plan shall include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).	46 planning partners participated in the 2015 planning process.	The 2022 plan achieves DMA compliance for 46 planning partners. Resolutions for each partner adopting the plan can be found in Appendix A of this volume.

Attachment: 04-Section-1-Introduction-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 2. PLAN ADOPTION

2.1 OVERVIEW

This section contains information regarding adoption of the plan by Erie County and each participating jurisdiction.

2.1.1 Plan Adoption by Local Governing Bodies

Adoption by the local governing bodies such as the County Legislature, City Council, or Town/Village Board demonstrates the commitment of Erie County and each participating jurisdiction to fulfill the mitigation goals and strategies outlined in the plan. Adoption of the plan via a municipal resolution legitimizes the Hazard Mitigation Plan (HMP) and authorizes responsible agencies to execute their responsibilities.

The County and all participating jurisdictions will proceed with formal adoption proceedings when the Federal Emergency Management Agency (FEMA) has completed review of the plan and provides conditional approval of this HMP update, known as Approval Pending Adoption (APA).

Following adoption or formal action on the plan, the jurisdiction must submit a copy of the resolution or other legal instrument showing formal adoption (acceptance) of the plan to the Erie County Hazard Mitigation Coordinator in the Erie County Department of Homeland Security and Emergency Services. Erie County will forward the executed resolutions to the New York State Division of Homeland Security & Emergency Services (NYS DHSES), after which they will be forwarded to FEMA for the record. The jurisdictions understand that FEMA will transmit acknowledgement of verification of formal plan adoption and the official approval of the plan to the Erie County Hazard Mitigation Plan Coordinator.

The resolutions issued by each jurisdiction to support adoption of the plan will be included in Appendix A.

In addition to being required by DMA 2000, adoption of the plan is necessary because:

- It lends authority to the plan to serve as a guiding document for all local and state government officials.
- It gives legal status to the plan in the event it is challenged in court.
- It certifies to the program and grant administrators that the plan's recommendations have been properly considered and approved by the governing authority and jurisdictions' citizens.
- It helps to ensure the continuity of mitigation programs and policies over time because elected officials, staff, and other community decision-makers can refer to the official document when making decisions about the community's future.

Source: FEMA. 2003. H*ow to Series: Bringing the Plan to Life* (FEMA 386-4).

Attachment: 05-Section-2-Plan-Adoption-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 3. PLANNING PROCESS

3.1 INTRODUCTION

This section includes a description of the planning process used to update the 2015 Erie County Hazard Mitigation Plan (HMP), including how it was prepared, who was involved in the process, and how the public was included. To ensure that the plan meets requirements of the Disaster Mitigation Act (DMA) of 2000 and that the planning process would have the broad and effective support of the participating jurisdictions, regional and local stakeholders, and the public, an approach to the planning process and plan documentation was developed to achieve the following:

- The plan will be multi-jurisdictional, with the intention of including all municipalities in the county. Erie County invited all the towns and villages, and a variety of stakeholders, to join them in the planning process. The county, Erie County Water Authority, and all 44 local municipal governments in the county participated in the 2022 planning process, as indicated in Table 3-1. The plan considers ten natural hazards and three non-natural hazards of concern facing the county, thereby satisfying the natural hazard mitigation planning requirements specified in DMA 2000.
- The plan was developed following the process outlined by DMA 2000, Federal Emergency Management Agency (FEMA) regulations, prevailing FEMA guidance, and the 2017 New York State Division of Homeland Security and Emergency Services (NYS DHSES) hazard mitigation planning standard. Following this process ensured that all the requirements are met and support HMP review.

Table 3-1. Participating Erie County Jurisdictions

Jurisdictions			
Erie County	Cheektowaga, Town of	Grand Island, Town of	Orchard Park, Town of
Erie County Water Authority	Clarence, Town of	Hamburg, Town of	Orchard Park, Village of
Akron, Village of	Colden, Town of	Hamburg, Village of	Sardinia, Town of
Alden, Town of	Collins, Town of	Holland, Town of	Sloan, Village of
Alden, Village of	Concord, Town of	Kenmore, Village of	Springville, Village of
Amherst, Town of	Depew, Village of	Lackawanna, City of	Tonawanda, City of
Angola, Village of	East Aurora, Village of	Lancaster, Town of	Tonawanda, Town of
Aurora, Town of	Eden, Town of	Lancaster, Village of	Wales, Town of
Blasdell, Village of	Elma, Town of	Marilla, Town of	West Seneca, Town of
Boston, Town of	Evans, Town of	Newstead, Town of	Williamsville, Village of
Brant, Town of	Farnham, Village of	North Collins, Town of	
Buffalo, City of	Gowanda, Village of	North Collins, Village of	

Note: T = Town; V = Village C = City

The Erie County HMP was updated using the best available information obtained from a wide variety of sources. Throughout the HMP update process, a concerted effort was made to gather information from municipal and regional agencies and staff as well as stakeholders, federal and state agencies, and the residents of the county. The HMP Steering Committee solicited information from local agencies and individuals with specific knowledge of certain hazards and past historical events. In addition, the Steering Committee and Planning Partnership took into consideration planning and zoning codes, ordinances, and recent land use planning decisions. The hazard mitigation strategies identified in this HMP were developed through an extensive planning process involving local; county; and regional agencies, residents, and stakeholders.

This section of the plan describes the mitigation planning process, including (1) Organization of the Planning Process; (2) Stakeholder Outreach and Involvement; (3) Integration of Existing Data, Plans, and Technical

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Information; (4) Integration with Existing Planning Mechanisms and Programs; and (5) Continued Public Involvement.

3.2 ORGANIZATION OF THE PLANNING PROCESS

This section of the plan identifies how the planning process was organized with the many planning partners involved and outlines the major activities conducted during the development of this HMP update.

3.2.1 Organization of Planning Partnership

Erie County applied for and was awarded a multi-jurisdictional planning grant under the FEMA Fiscal Year 2018 Pre-Disaster Mitigation Program, which supported the development of this multi-jurisdictional HMP update.

Project management and grant administration have been the responsibility of the Erie County Department of Planning and Development. A contract planning consultant (Tetra Tech, Inc., referred to herein as Tetra Tech) was selected to guide the county and participating jurisdictions through the HMP update process. A contract between Tetra Tech and Erie County was executed in November 2020. Specifically, Tetra Tech was tasked with the following:

- Assisting with the organization of a Steering Committee and the Planning Partnership
- Assisting with the development and implementation of a public and stakeholder outreach program
- Collecting data
- Facilitating and attending meetings (Steering Committee, Planning Partnership, municipal, stakeholder, public, and other)
- Reviewing and updating the hazards of concern, hazard profiling, and risk assessment
- Assisting with the review and update of mitigation planning goals and objectives
- Assisting with the review of past mitigation strategies progress
- Assisting with the screening of mitigation actions and the identification of appropriate actions
- Assisting with the prioritization of mitigation actions
- Authoring the draft and final plan documents

In February 2020, Erie County notified all municipalities within the county of the pending planning process and invited them to formally participate. Jurisdictions were asked to identify planning points of contact (POC) for facilitating municipal participation and representing the interests of their respective communities.

To facilitate plan development, Erie County developed a Steering Committee to provide guidance and direction to the HMP update effort and to ensure the resulting document will be embraced by the constituencies within the planning area (refer to Table 3-2). Specifically, the Steering Committee was charged with the following:

- Providing guidance and oversight of the planning process on behalf of the general Planning Partnership
- Attending and participating in Steering Committee meetings
- Assisting with the development and completion of certain planning elements, including:
  - Reviewing and updating the hazards of concern
  - Developing a public and stakeholder outreach program
  - Ensuring that the data and information used in the plan update process are the best available
  - Reviewing and updating the hazard mitigation goals
  - Identifying and screening of appropriate mitigation strategies and activities
- Reviewing and commenting on plan documents prior to submittal to NYS DHSES and FEMA

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The Steering Committee provided guidance and leadership, oversight of the planning process, and acted as the point of contact for all participating jurisdictions and the various interest groups in the county.

Table 3-2. Erie County Hazard Mitigation Steering Committee Members

Affiliation	Name	Title
Erie County Department of Homeland Security and Emergency Services (DHSES)	Greg Butcher	Deputy Commissioner
	Melissa Calhoun	Special Assistant
	Daniel Neaverth	Commissioner
	Ryan Sheedy	Senior Medical Emergency Radio System (MERS) Coordinator
Erie County Department of Environment and Planning	Josh Wilson	Coordinator - Pollution Prevention Program
	Daniel Castle	Deputy Commissioner
Erie County Water Authority	Matthew W. Barrett	Security Officer
City of Buffalo	Don Poleto	Senior Operations Engineer
New York State Division of Homeland Security and Emergency Services (NYS/DHSES)	Kevin Clapp	Planning Manager, Mitigation Programs
Village of Depew	R.J. Nieman	Emergency Manager
Town of Hamburg	Sean Crotty	Emergency Manager Chair, Erie County Emergency Managers Association

Table 3-3 lists the current municipal members of the Planning Partnership at the time of this HMP update. It is noted that the Steering Committee members also are part of the overall project Planning Partnership, fulfilling these responsibilities on behalf of Erie County. This Planning Partnership was charged with the following:

- Representing their jurisdiction throughout the planning process
- Ensuring participation of all departments and functions within their jurisdiction that have a stake in mitigation (e.g., planning, engineering, code enforcement, police and emergency services, public works)
- Assisting in gathering information for inclusion in the HMP update, including the use of previously developed reports and data
- Supporting and promoting the public involvement process
- Reporting on progress of mitigation actions identified in prior or existing HMPs, as applicable
- Identifying, developing, and prioritizing appropriate mitigation initiatives
- Reporting on progress of integration of prior or existing HMPs into other planning processes and municipal operations
- Supporting and developing a jurisdictional annex
- Reviewing, amending, and approving all sections of the plan update
- Adopting, implementing, and maintaining the plan update

Table 3-3. Erie County Hazard Mitigation Planning Partnership Members

Jurisdiction	Primary Point of Contact	Title	Alternate Point of Contact	Title
Erie County	Gregory Butcher	Deputy Commissioner Address: Department of Homeland Security and Emergency Services	Melissa Calhoun	Special Assistant, Department of Homeland Security and Emergency Services
Erie County Water Authority	Matt Barrett	Security	Russell Stoll	COO
Akron (V)	Carl Patterson	Mayor	Daniel Kowalik	Emergency Manager
Alden (T)	Dean Adamski	Town Supervisor	Colleen Rogers	Deputy Supervisor

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Primary Point of Contact	Title	Alternate Point of Contact	Title
Alden (V)	Mark Pruitt	Office of Emergency Management Coordinator	Michael Manicki,	Mayor
Amherst (T)	James Zymanek	Director of Emergency Services and Safety	Dominic Creamer	Emergency Services and Safety
Angola (V)	Howard Frawley	Mayor	Nicole Milks	Clerk-Treasurer
Aurora (T)	James J Bach	Town Supervisor	Elizabeth Cassidy	Code Enforcement Officer
Blasdell (V)	Janet L. Plarr	Village Administrator	Joseph Fox Sr.	Emergency Manager
Boston (T)	Gene Wieckowski	Emergency Manager	Jason Keding	Supervisor
Brant (T)	Mark J. DeCarlo	Supervisor	Connie Miner	Grants Consultant
Buffalo (C)	Michael Tuberdyke	Buffalo Fire Department Division Chief	Michael Finn	Commissioner Department of Public Works
Cheektowaga (T)	Mike Mazurowski	Emergency Services Manager	Patrick Bowen	Town Engineer
Clarence (T)	David Bissonette	Emergency Manager	David Baumler	Deputy Emergency Manager
Colden (T)	James P. DePasquale	Supervisor	Patricia A. Zubrick	Deputy Town Supervisor
Collins (T)	Kenneth E. Martin	Supervisor	Ron Paluch	Emergency Manager
Concord (T)	Michael Willibey	Emergency Manager	Clyde Drake	Supervisor
Depew (V)	RJ Nieman	Emergency Manager	Kevin Patterson	Mayor
East Aurora (V)	Cathryn Thomas	Village Administrator	Matthew Hoeh	Supt. Public Works
Eden (T)	Brian Burgstahler	Emergency Manager	Melissa Hartman	Town Supervisor
Elma (T)	Wayne A. Clark	Supervisor	Michael Nolan	Deputy Supervisor/ Councilman
Evans (T)	William Smith	Director of Planning & Community Development	Corey Baskerville	Supervising Code Enforcement Officer & MS4 Officer
Farnham (V)	Jere R. Hoisington	Mayor	Jackie Hoisington	Clerk
Gowanda (V)	Carol Sheibley	Deputy Mayor	Nicholas Crassi	Disaster Coordinator
Grand Island (T)	John Whitney, P.E.	Town Supervisor	Richard Crawford	Highway Superintendent
Hamburg (T)	Sean Crotty	Emergency Manager	Nicholas Budney	Deputy Emergency Manager
Hamburg (V)	Ric Dimpfl Jr.	Emergency Manager	Sean Crotty	Emergency Manager
Holland (T)	Michael Kasprzyk	Supervisor	Geoff Hack	Councilman - disaster coordinator
Kenmore (V)	Kathleen Johnson	Clerk/Treasurer	AJ Kiefer	Captain, Kenmore Police
Lackawanna (C)	Annette Iafallo	Mayor	Anthony DeSantis	Public Works Commissioner
Lancaster (T)	Ronald Rozler	Disaster Coordinator	Ronald Ruffino Sr	Supervisor
Lancaster (V)	Scott M. Kuhlmey	Director of Emergency Management	Scott M. Robinson	Assistant Disaster Coordinator
Marilla (T)	Brian Nolan	Emergency Manager	Earl Gingerich, Jr	Supervisor
Newstead (T)	David Cummings	Supervisor	Dawn Izydorczak	Town Clerk
North Collins (T)	John M. Tobia	Supervisor	None identified	
North Collins (V)	Vincent George	Mayor	Jan Hutchinson	Clerk/Treasurer
Orchard Park (T)	Rich Murgalski	Emergency Manager	Wayne Bieler	Town Engineer
Orchard Park (V)	Rich Murgalski	Emergency Manager	John Gullo	Code and Building Inspector

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Primary Point of Contact	Title	Alternate Point of Contact	Title
Sardinia (T)	Gerard Whittington	Emergency Manager	Beverly Gambino	Supervisor
Sloan (V)	Debra Smith	Clerk, Treasurer	Karen M. Gold	Deputy Clerk
Springville (V)	Liz Melock	Village Administrator	Bill Krebs	Mayor
Tonawanda (C)	Mark Banks	Deputy Director Office of Emergency Management	Chuck Stuart	Fire Chief and Co-Director of Emergency Management
Tonawanda (T)	Robert Lutz	Emergency Services Coordinator, Town Police Department	James Stauffiger	Chief of Police
Wales (T)	Walter Raichel	Emergency Manager	Ellen M. Bapst	Deputy Emergency Manager
West Seneca (T)	Eric Conley	Emergency Manager	James Unger	Captain West Seneca Police Department/ OEM
Williamsville (V)	James Zymanek	Director of Emergency Services and Safety	Dominic Creamer	Emergency Services and Safety

Notes: T = Town; V = Village C = City

The jurisdictions in Erie County have differing levels of capabilities and resources available to apply to the plan update process, and further, have differing exposure and vulnerability to the hazards being considered in this plan. Erie County's intent was to encourage participation by all jurisdictions and to accommodate their specific needs and limitations while still meeting the intents and purpose of plan update participation. Such accommodations have included the establishment of a Steering Committee, engaging a contract consultant to assume certain elements of the plan update process on behalf of the jurisdictions, and the provision of additional and alternative mechanisms to meet the purposes and intent of mitigation planning.

Ultimately, jurisdictional participation is evidenced by a completed municipal annex to the HMP (Section 9) wherein jurisdictions have individually identified their planning POCs; evaluated their risk to the hazards of concern; identified their capabilities to provide effective mitigation in their community; identified and prioritized an appropriate suite of mitigation initiatives, actions, and projects to mitigate their hazard risk; and eventually, adopted the updated plan via resolution.

Appendix B (Participation Matrix) identifies those individuals who represented the municipalities during this planning effort and indicates how they contributed to the planning process.

Neither the Town of North Collins nor the Village of North Collins participate in the National Flood Insurance Program (NFIP). As such, 42 of the county's 44 municipalities participate in the NFIP and have a designated NFIP Floodplain Administrator (FPA). All known FPAs were informed of the planning process, reviewed the plan documents, and provided direct input to the plan update. Local FPAs are identified in the Points of Contact and Administrative and Technical portions of Section 9 (Jurisdictional Annexes).

3.2.2 Planning Activities

Members of the Planning Partnership (individually and as a whole), as well as key stakeholders, convened and/or communicated regularly to share information and participate in workshops to identify hazards; assess risks; review existing inventories and identify new critical facilities; assist in updating and developing new mitigation goals and strategies; and provide continuity through the process to ensure that natural hazard vulnerability information and appropriate mitigation strategies were incorporated. All members of the Steering Committee and Planning Partnership had the opportunity to review the draft plan, to support interaction with other stakeholders, and to assist with public involvement efforts.

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

A summary of Steering Committee and Planning Partnership meetings held and key milestones met during the development of the HMP update is included in Table 3-4, which also identifies the DMA 2000 requirements satisfied. Documentation of meetings (e.g., agendas, sign-in sheets, minutes) are provided in Appendix C (Meeting Documentation). Table 3-4 identifies only the formal meetings held during plan development and does not reflect the planning activities conducted by individuals and groups throughout the planning process. In addition to these meetings, a great deal of communication was conducted between the county, committee members, and the contract consultant through individual local meetings, electronic mail (email), and by phone.

After completion of the HMP update, implementation and ongoing maintenance will become a function of the Planning Partnership, as described in Section 7 (Plan Maintenance). The Planning Partnership will be responsible for reviewing the HMP and soliciting and considering public comment as part of the 5-year mitigation plan update.

The table below summarizes a list of mitigation planning activities and meetings and their respective participants. A more detailed list of participants for each meeting is provided in Appendix B (Participation Matrix) and Appendix C (Meeting Documentation). DMA 2000 (Public Law 106-390) includes details on each of the planning requirements.

Table 3-4. Summary of Mitigation Planning Activities/Efforts

Date	DMA 2000 Requirement	Description of Activity	Participants
November 2, 2020	1b, 2	Steering Committee Kick-Off Meeting (Data Collection, Review of Mission Statement and Goals, Hazards of Concern Identification, Public Outreach Strategy)	Erie County Department of Homeland Security and Emergency Services (DHSES), Erie County Department of Environment and Planning, Erie County Water Authority, City of Buffalo, New York State Division of Homeland Security and Emergency Services (NYS/DHSES), Village of Depew, Town of Hamburg; Chair, Erie County Emergency Managers Association
November 18, 2020	1b, 2, 3a	Planning Partnership Kick-Off Meeting (Municipal Kick-Off Meeting and Planning Overview)	Erie County Department of Environment and Planning, Erie County Department of Homeland Security and Emergency Services, Erie County Department of Public Works Division of Highways, Board of Cooperative Extension Services, Erie County Emergency Managers Association, Holland Central School District, New York State Department of Environmental Conservation Albert Cheverie, Hospital Emergency Preparedness Representative, New York State Department of Health; Department of Geography, State University at Buffalo/Erie County Local Emergency Planning Association, Town of Akron, Town of Newstead, Village of Blasdell, Town of Clarence, Town of Collins, Town of Eden, City of Tonawanda, Town of West Seneca

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Date	DMA 2000 Requirement	Description of Activity	Participants
January and February 2021 (6 different meetings)	1b, 2, 3a, 4a, 4b, 4c	Municipal Support Meetings (Discuss information gathering worksheets, municipal problem areas, status of past mitigation actions)	Erie County Department of Homeland Security and Emergency Services, Buffalo Fire Department, Town of Cheektowaga, Town of Newstead, Village of North Collins, Village of North Collins, Town of Sardinia, City of Tonawanda, Town of Tonawanda, Erie County Water Authority, Town of Aurora, Village of Blasdell, Town of Boston, City of Buffalo Department of Public Works, Town of Concord, Village of East Aurora, Erie County Department of Public Works, Town of Aurora, Town of Amherst, Village of Williamsville, Village of Akron, Town of Aurora, Village of East Aurora, Town of Evans, Village of Farnham, Village of Hamburg, Town of Holland, Town of Lancaster, Village of Springville, Erie County Department of Environment and Planning, Town of Brant, Town of Collins, Town of Eden, Town of North Collins, Town of West Seneca, Village of Alden, Town of Colden, Village of Depew, Town of Hamburg, Village of Lancaster, Village of Orchard Park, Town Orchard Park, Village of Sloan, Town of West Seneca
January 25 and January 28, 2021	1b	Public Information Meetings (Offered to provide information on hazard mitigation, the planning process, and the Erie County HMP update)	Erie County Department of Homeland Security and Emergency Services, Erie County Department of Environment and Planning, WBFO, NYS Division of Homeland Security and Emergency Services
May 19, 2021	1b, 2, 3, 4am 4b, 2, 4a, 4b, 4c	Risk Assessment Review Meeting (Presentation of risk assessment overview, development of hazard problem statements by community) and Strengths, Weaknesses, Obstacles, and Opportunities (SWOO) Meeting	Erie County Department of Environment and Planning, Erie County Department of Homeland Security and Emergency Services, Erie County Water Authority, Village of Depew, Village of East Aurora, Village of Akron, Town of Newstead, Town of Orchard Park, Town Orchard Park, Village Orchard Park, Village of Springville, City of Tonawanda, Town of Tonawanda, Lake Erie Watershed Protection Alliance, National Fuel Gas, National Weather Service, Niagara Frontier Transportation Authority
June 9, 2021	1b, 2, 4a, 4b, 4c	Mitigation Strategy Workshops (Guidance on developing mitigation actions for inclusion in the HMP)	Erie County Department of Environment and Planning, Erie County Department of Homeland Security and Emergency Services, Erie County Department of Public Works, Erie County Water Authority, Village of Akron, Town of Amherst, Town of Aurora, Town of Cheektowaga, Town of Collins, Town of Concord, Village of East Aurora, Town of Eden, Town of Hamburg, Town of Holland, Town of Lancaster, Town of Newstead, Town of Orchard Park, Village of Springville, Town of Tonawanda, Town of West Seneca, Village of Williamsville
September 8, 2021	1b, 2, 3, 4, 5	Draft Plan Review Meeting (Receive comments from the public on the draft plan)	Erie County Department of Environment and Planning, Erie County Department of Homeland Security and Emergency Services, Town of Aurora, Town of Boston, Town of Cheektowaga, Town of Clarence, Town of Collins, Town of Concord, Village of East Aurora, Town of Grand Island, Town of Holland, City of Lackawanna, Town of Newstead, Town of North Collins, Town of Orchard Park, Village of Orchard Park, Town of Sardinia, City of Tonawanda, Town of Tonawanda, Town of West Seneca, National Fuel Gas, NYS DHSES
TBD	N/A	Submit draft to NYS DHSES for formal review	Erie County NYS DHSES

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Date	DMA 2000 Requirement	Description of Activity	Participants
TBD	1b, 2, 3, 4, 5	NYS DHSES Draft Plan Review	NYS DHSES
TBD	N/A	Revise draft and submit to FEMA Region II for formal review	Erie County FEMA Region II
TBD	1b, 2, 3, 4, 5	FEMA Review	FEMA Region II
TBD	1, 2, 3, 4, 5	Approvable Pending Adoption status granted	Erie County FEMA Region II

Note: TBD = to be determined.
Each number in column 2 identifies specific DMA 2000 requirements, as follows:
1a – Prerequisite – Adoption by the Local Governing Body
1b – Public Participation
2 – Planning Process – Documentation of the Planning Process
3a – Risk Assessment – Identifying Hazards
3b – Risk Assessment – Profiling Hazard Events
3c – Risk Assessment – Assessing Vulnerability: Identifying Assets
3d – Risk Assessment – Assessing Vulnerability: Estimating Potential Losses
3e – Risk Assessment – Assessing Vulnerability: Analyzing Development Trends
4a – Mitigation Strategy – Local Hazard Mitigation Goals
4b – Mitigation Strategy – Identification and Analysis of Mitigation Measures
4c – Mitigation Strategy – Implementation of Mitigation Measures
5a – Plan Maintenance Procedures – Monitoring, Evaluating, and Updating the Plan
5b – Plan Maintenance Procedures – Implementation through Existing Programs
5c – Plan Maintenance Procedures – Continued Public Involvement

3.3 STAKEHOLDER OUTREACH AND INVOLVEMENT

Stakeholders are the individuals, agencies, and jurisdictions with a vested interest in the recommendations of the HMP and include all planning partners.

Diligent efforts were made to ensure broad regional, county, and local representation in this planning process. To that end, a comprehensive list of stakeholders was developed with the support of the Steering Committee and Planning Partnership. Stakeholder outreach was performed early and throughout the planning process. This HMP includes information and input provided by these stakeholders, where appropriate, as identified in the references.

The following is a list of the various stakeholders that were invited to participate in the development of this plan, along with a summary of how t they participated and contributed. This summary listing does not represent every stakeholder that was aware of and contributed to this HMP update, as outreach efforts were being made, both formally and informally, throughout the process by the many planning partners involved in the effort, and documentation of all such efforts is impossible. Instead, this summary is intended to demonstrate the scope and breadth of the stakeholder outreach efforts made during the plan update process.

3.3.1 Federal Agencies

Cybersecurity and Infrastructure Security Agency: A representative of the Cybersecurity and Infrastructure Security Agency attended a Planning Partnership Kickoff Meeting.

FEMA Region II: Provided updated planning guidance, provided summary and detailed data from the NFIP (including repetitive loss information), and conducted plan review.

National Weather Service: Attended the Planning Partnership Kickoff Meeting.

Information regarding hazard identification and the risk assessment for this HMP update was requested and received or incorporated by reference from the following agencies and organizations:

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- National Centers for Environmental Information (NCEI)
- National Hurricane Center (NHC)
- National Oceanic and Atmospheric Administration (NOAA)
- National Weather Service (NWS)
- Storm Prediction Center (SPC)
- U.S. Army Corps of Engineers (USACE)
- U.S. Census Bureau

3.3.2 State Agencies

NYS DHSES: Administered planning grant and facilitated FEMA review, provided updated planning guidance, attended meetings, and provided review of draft and final HMP.

New York State Department of Environmental Conservation (NYSDEC): Provided data and information, attended the Planning Partnership Kickoff Meetings. A representative of the Buffalo Regional Office Division of Water completed the stakeholder survey.

New York State Department of Health (NYS DOH): Attended the Planning Partnership Kickoff Meeting.

SUNY-Buffalo: Attended the Planning Partnership Kickoff Meeting.

SUNY-Erie: Provided information by completing the stakeholder survey.

3.3.3 Erie County Departments

Several county departments were represented on the Steering Committee and involved in the HMP update planning process. Appendix B (Participation Matrix) provides further details regarding regional and local stakeholder agencies.

Erie County Department of Homeland Security and Emergency Services: The Department's Deputy Commissioner served on the Steering Committee, attended all meetings, provided information and data, reviewed documents, and reached out to stakeholders. The Department assisted with distribution of project information via social media. Images of posts are included in Appendix D (Public and Stakeholder Outreach Documentation).

Erie County Department of Planning and Development: The Erie County Department of Environment and Planning was represented by its Deputy Director serving on the HMP Steering Committee and by other staff participating in the Planning Partnership meetings. Planning and Development provided critical data, assisted with the update of events and losses in the county, updated the previous mitigation strategy, facilitated outreach to jurisdictions and stakeholders, contributed to the county's capability assessment and updated mitigation strategy, and reviewed draft sections of the HMP.

Erie County Department of Public Health: Tracy Chalmers from the Department participated in the Planning Partnership.

Erie County Department of Public Works: A Senior Civil Engineer from the Department participated in the Planning Partnership.

Erie County Water Authority: The Water Authority's Security Officer participated in several meetings and provided important data about critical facilities.

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

3.3.4 Regional and Local Stakeholders

Appendix B (Participation Matrix) provides further details regarding regional and local stakeholder agencies. The stakeholders listed below were directly contacted by Erie County to provide information, identify specific mitigation strategies, and/or review the draft HMP. Results of information gathering surveys are provided in Appendix D (Public and Stakeholder Outreach Documentation). Feedback was reviewed by the Steering Committee and Planning Partnership and integrated, where appropriate, in the plan.

Academia

All school districts in the county were invited via email to provide input and attend meetings and were notified of the draft HMP review period. The Erie 1 BOCES and the Holland Central School were represented at the Planning Partnership Kickoff Meeting. The following academic organizations completed the stakeholder survey:

- Akron Central School District
- Alden Central School District
- Eden Central School District
- Iroquois Central School District
- Kenmore-Town of Tonawanda Union Free School District
- Lake Shore Central School District
- Springville-Griffith Institute Central School District
- Tonawanda City School District
- West Seneca Central School District

Business and Commercial Interests

Businesses and commercial industries in Erie County were invited to provide input on the draft HMP. National Fuel Gas attended the Planning Partnership Kickoff Meeting and the Risk Assessment Review Meeting. The following organizations completed the stakeholder survey:

- Akron Music Studios
- Alternative Care Services of WNY/ Alden's Meals on Wheels
- Boston Youth Soccer League
- DuPont
- Evonik
- Fiddlers Green Manor
- Greater Buffalo Niagara Regional Transportation Council
- Moog Incorporated
- Niagara Frontier Transportation Authority
- NOCO Energy Corporation
- Snap Fitness
- Sumitomo Rubber USA
- Unifrax

Emergency Services

All state, county, and local emergency service providers (police, fire, EMS) were notified of the planning process and invited to attend meetings and provide input on the draft HMP. Response organizations were contacted via email and telephone by the Erie County DHSES. The following organizations provided information through completing the stakeholder survey:

- Alden Fire Department
- City of Tonawanda Office of Emergency Management
- North Amherst Fire Company
- Swormville Fire

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- AMR Walden Fire District (Cheektowaga)
- Brighton Fire Company
- Brighton Fire District No. 5
- Buffalo Police Department
- Chaffee-Sardinia Fire Company
- Cheektowaga Police Department
- Clarence Center Fire Company
- East Concord Fire Department
- Elma Fire Company
- Erie Community College, EMT Department
- Harris Hill Volunteer Fire Company
- Marilla Fire Company
- Orchard Park Fire Company
- Orchard Park Fire District
- Orchard Park Fire District EMS
- Rescue Hose #1
- Sheridan Park Fire
- Spring Brook Fire District
- Town of Lancaster OEM
- Town of Sardinia OEM
- Town of Tonawanda Paramedics
- Twin District Volunteer Fire Company
- Village of Hamburg Department of Emergency Services
- Windom Volunteer Fire Company

Highway and Public Works

All local highway and public works departments were invited to provide input on the draft HMP and attend all planning meetings. In addition, many of the participating municipalities had representatives from their highway and public works departments representing them on the Planning Partnership. The Town of Lancaster Highway Department, Town of Sardinia Highway Department, Town of Tonawanda Highway Department, and the Town of Tonawanda Water Plant completed the stakeholder survey.

Additional Stakeholders

Catholic Health, Chemical Distributors, Inc., the Erie County Medical Center, Kaleida Health, Mount Saint Mary's Hospital, the Sisters of Charity Hospital, the Niagara Frontier Transportation Authority, and the WNY Healthcare Association were represented at a Planning Partnership Kickoff Meeting.

3.3.5 Adjacent Counties

Erie County has tried to keep surrounding counties and municipalities apprised of the project and has given them the opportunity to provide input to this planning process. Specifically, the following adjoining and nearby county representatives were contacted via email in March 2020 to inform them about the availability of the project website, draft plan documents, and surveys, and to invite them to attend planning meetings or otherwise provide input to the planning process.

- Niagara County, New York
- Genesee County, New York
- Monroe County, New York

The neighboring counties of Niagara, Genesee, Wyoming, Cattaraugus, and Chautauqua were invited to all planning meetings. In addition, an electronic survey was distributed to officials in these counties in January 2021 to invite them to provide input into the planning process. No responses on this survey were received. Documentation of outreach to adjacent counties can be found in Appendix D.

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

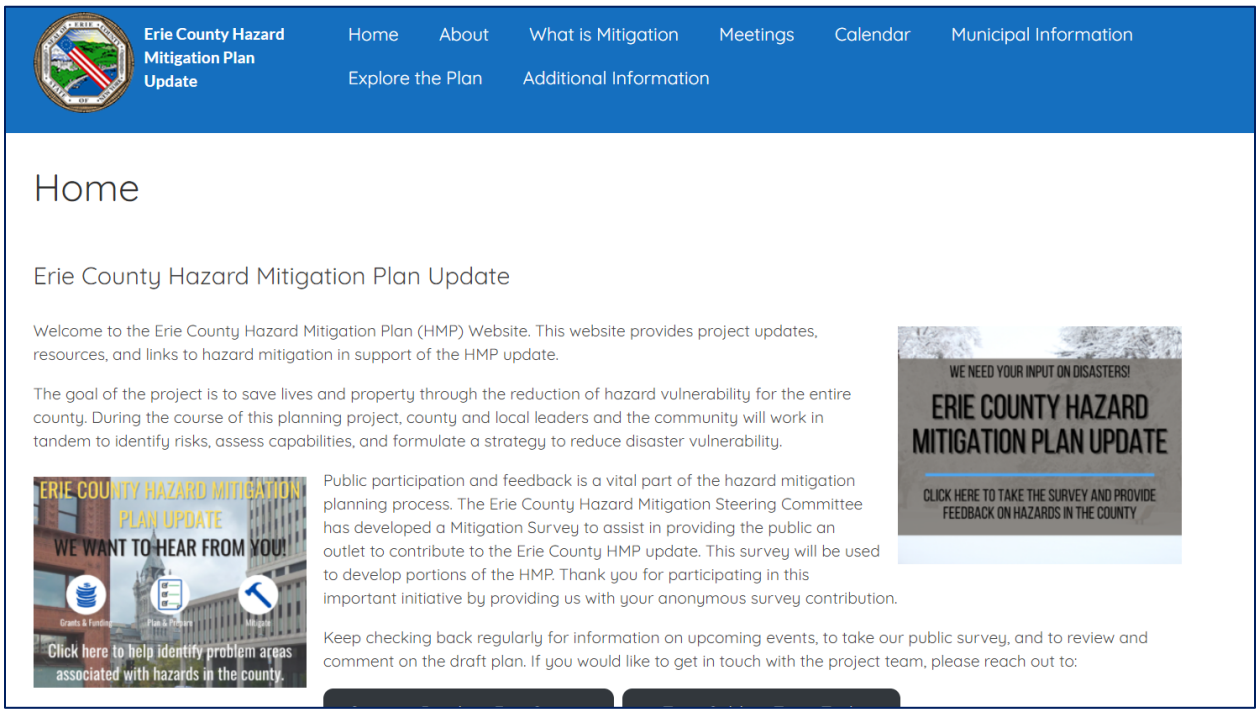
3.3.6 Public Outreach

The Steering Committee and Planning Partnership made the following efforts toward public participation in the development and review of the HMP:

- A public project website was developed and is being maintained to facilitate communication between the Steering Committee, Planning Partnership, public, and stakeholders. The public website provided a project overview, county and local contact information, access to the citizen's survey, and sections of the HMP for public review and comment. Figure 3-1 provides a screenshot of the current website homepage (https://www.eriecountynyhmp.com/). http://www.ongov.net/planning/haz.html
- A pair of public information webinars were conducted in January 2021. Two members of the general public, a reporter, and 17 representatives of other planning partners attended the webinars. Copies of meeting materials are provided in Appendix C.
- All hazard mitigation planning meetings open to the public were advertised on the Erie County Department of Homeland Security and Emergency Services website and the project website.
- A public online mapping tool to identify problem areas created by hazards was made available in January 2021. Fourteen people responded and identified problem areas. This information was incorporated into the jurisdictional annexes (in their lists of problem statements and mitigation actions developed to solve those problems) for the following municipalities:
    - City of Buffalo
    - Town of Hamburg
    - Town of Orchard Park
    - Village of Orchard Park
    - Village of Springville
    - Town of Tonawanda
- All participating municipalities were encouraged to post the links to the project webpage and citizen and stakeholder surveys. In addition, all participating municipalities were requested to advertise the availability of the project website via local homepage links, and other available public announcement methods (e.g., Facebook, Twitter, email blasts).
- Starting in April 2021, draft sections of the plan were posted on the project website for public review and comment. In addition, links were provided to the participating jurisdictions to post on their respective websites.
- Once approved by NYS DHSES/FEMA, the final HMP will be available on the county and municipal websites.

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 3-1. Erie County HMP Website Homepage



3.4 INCORPORATION OF EXISTING PLANS, STUDIES, REPORTS, AND TECHNICAL INFORMATION

The Erie County HMP strives to use the best available technical information, plans, studies, and reports throughout the planning process to support hazard profiling; risk and vulnerability assessment; review and evaluation of mitigation capabilities; and the identification, development, and prioritization of county and local mitigation strategies.

The asset and inventory data used for the risk and vulnerability assessment are presented in the County Profile (Section 4). Details of the source of this data, along with technical information on how the data was used to develop the risk and vulnerability assessment, are presented in the Hazard Profiling and Risk Assessment Section (Section 5), specifically within Section 5.3 (Data and Methodology) as well as throughout Section 5.4 (Hazard Profiles). Further, the source of technical data and information used can be found within Volume I under *References*.

Plans, reports, and other technical information were identified and provided directly by the county, participating jurisdictions, and numerous stakeholders involved in the planning effort as well as through independent research by the planning consultant. The county and participating jurisdictions were tasked with updating the inventory of their planning and regulatory capabilities in Section 9 (Jurisdictional Annexes) and providing relevant planning and regulatory documents, as applicable. Relevant documents, including plans, reports, and ordinances, were reviewed to identify the following:

- Existing municipal capabilities
- Needs and opportunities to develop or enhance capabilities, which may be identified within the county or local mitigation strategies

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Mitigation-related goals or objectives considered in the review and update of the overall Goals and Objectives in Section 6 (Mitigation Strategy)
- Proposed, in-progress, or potential mitigation projects, actions, and initiatives to be incorporated into the updated county and local mitigation strategies

The following local regulations, codes, ordinances, and plans were reviewed during this process to develop mitigation planning goals, objectives, and strategies that are consistent across local and regional planning and regulatory mechanisms to accomplish complementary and mutually supportive strategies:

- New York State Standard Multi-Hazard Mitigation Plans of 2014 and 2019
- Erie County Comprehensive Emergency Management Plan (CEMP)
- Local plans and regulations (Appendix G includes a list and description of the local documents reviewed for each jurisdiction)
    - Comprehensive/Master Plans
    - Building Codes
    - Zoning and Subdivision Ordinances
    - NFIP Flood Damage Prevention Ordinances
    - Site Plan Requirements
    - Local Waterfront Revitalization Plans
    - Stormwater Management Plans
    - Emergency Management and Response Plans
    - Land Use and Open Space Plans
    - Capital Plans

3.5 INTEGRATION WITH EXISTING PLANNING MECHANISMS AND PROGRAMS

Effective mitigation is achieved when hazard awareness and risk management approaches and strategies become an integral part of public activities and decision-making. Within Erie County, many existing plans and programs support hazard risk management, and thus it is critical that this HMP integrates, coordinates with, and complements existing plans and programs.

The Capability Assessment portion of Section 6 (Mitigation Strategy) provides a summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, county, and local) that support hazard mitigation within the county. Within each jurisdictional annex in Section 9 (Jurisdictional Annexes), the county and each participating jurisdiction identified how they integrated hazard risk management into their existing planning, regulatory, and operational/administrative framework (*integration capabilities*), and how they intend to promote this integration (*integration actions*).

A further summary of these continued efforts to develop and promote a comprehensive and holistic approach to hazard risk management and mitigation is presented in Section 7 (Plan Maintenance).

3.6 CONTINUED PUBLIC INVOLVEMENT

Erie County and participating jurisdictions are committed to the continued involvement of the public in the hazard mitigation process. This HMP update will be posted online at https://www2.erie.gov/disaster/index.php?q=The%20Plan and municipalities will be encouraged to maintain links to the plan website. The county will also make hard copies of the HMP available for review at public locations, as identified on the website.

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

A notice regarding updates of the plan and the location of plan copies will be publicized after the Planning Partnership's annual evaluation and posted on the public website at https://www2.erie.gov/disaster/index.php?q=The%20Plan.

Each jurisdiction's governing body will be responsible for receiving, tracking, and filing public comments regarding this plan.

The public will have an opportunity to comment on the plan as a part of the annual mitigation planning evaluation process and the next 5-year mitigation plan update. The HMP Coordinator is responsible for coordinating the plan evaluation portion of the meeting, soliciting feedback, collecting and reviewing the comments, and ensuring their incorporation in the 5-year plan update, as appropriate; however, members of the Planning Partnership will assist the HMP Coordinator. Additional meetings may be held as deemed necessary by the Planning Committee to provide the public an opportunity to express concerns, opinions, and ideas about the plan.

Further details regarding continued public involvement are provided in Section 7 (Plan Maintenance).

After completion of this plan, implementation and ongoing maintenance will continue to be a function of the Planning Partnership. The Planning Partnership will review the plan and accept public comments as part of an annual review and as part of 5-year mitigation plan updates.

A notice regarding updates of the plan and the location of plan copies will be publicized after the HMP Committee's annual evaluation and posted on the public website.

Mr. Gregory Butcher is identified as the Erie County HMP Coordinator in Section 7 (Plan Maintenance) and will be responsible for receiving, tracking, and filing public comments regarding this plan. Contact information is:

Greg Butcher, Deputy Commissioner
Erie County Department of Homeland Security and Emergency Services
716-858-2944
45 Elm Street
Buffalo, NY 14203
Email: Gregory.Butcher@erie.gov

Attachment: 06-Section-3-Planning-Process-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 4 COUNTY PROFILE

This profile describes the general information of the county (physical setting, population and demographics, general building stock, and land use and population trends) as well as critical facilities located within Erie County. In Section 5 (Risk Assessment), specific profile information is presented and analyzed to develop an understanding of the study area, including the economic, structural, and population assets at risk and the particular concerns that may be present related to hazards analyzed (for example, a high percentage of vulnerable persons in an area).

4.1 GENERAL INFORMATION

Erie County is located in Western New York and is bordered by Niagara County on the north, Wyoming and Genesee counties to the east, Cattaraugus and Chautauqua county to the south and Lake Erie to the west. The county's area is 1,227 square miles. The County makes up part of the international border with Canada. Buffalo is the County seat.

Erie County is home to 44 incorporated municipalities (25 towns, 16 villages and three cities). They are the Towns of Alden, Amherst, Aurora, Boston, Brant, Cheektowaga, Clarence, Colden, Collins, Concord, Eden, Elma, Evans, Grand Island, Hamburg, Holland, Lancaster, Marilla, Newstead, North Collins, Orchard Park, Sardinia, Tonawanda, Wales and West Seneca; Villages of Akron, Alden, Angola, Blasdell, Depew, East Aurora, Farnham, Gowanda, Hamburg, Kenmore, Lancaster, North Collins, Orchard Park, Sloan, Springville and Williamsville; and Cities of Buffalo, Lackawanna, and Tonawanda.

The county is named after the early native group the Erie Indians. During French and then English colonial rule, Erie County was occupied by Iroquoian speaking peoples who succeeded the Erie. White settlers began to arrive in the area after the American Revolutionary War. Native peoples had been forced to cede most of their lands. Erie County was incorporated in 1821. The county included only two towns; Willink and Clarence, which, over time were split to form the current 42 towns, villages and cities within Erie County. The county also contains portions of the Cattaraugus and Tonawanda Indian Reservations. I-90 runs through the county and spur highways connect to urban centers. Four US Routes and 14 New York State Routes traverse the county. (Britannica online, accessed December 2020).

According to the U.S. Census, the 2010 population for Erie County was 919,040 The estimated 2019 population was 919,355, a nearly zero percent change from the 2010 Census. The total population of the county is projected to increase out to 2040 to 945,891 residents (Cornell University, 2017). Data from the 2019 U.S. Census American Community Survey indicate that 5.5 percent of the population is 5 years of age or younger and 17.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

According to the U.S. Census Bureau, Erie County is the seventh most populated county in New York State (U.S.

4.2 MAJOR PAST HAZARD EVENTS

Presidential disaster declarations are typically issued for hazard events that cause more damage than state and local governments can handle without assistance from the federal government, although no specific dollar loss threshold has been established for these declarations. A presidential disaster declaration puts federal recovery programs into motion to help disaster victims, businesses, and public entities. Some of the programs are matched by state programs. Review of presidential disaster declarations helps establish the probability of reoccurrence

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

for each hazard and identify targets for risk reduction. Table 4-1 shows FEMA disaster declarations that included Erie County through 2020 (records date back to 1954).

Table 4-1. History of Hazard Events in Erie County, New York

Disaster Number	Date of Event	Declaration Date	Incident Type	Title
494	1976-03-19T00:00:00.000Z	1976	Severe Ice Storm	ICE STORM,SEVERE STORMS & FLOODING
3027	1977-01-29T00:00:00.000Z	1977	Snow	SNOWSTORMS
527	1977-02-05T00:00:00.000Z	1977	Snow	SNOWSTORMS
734	1985-03-22T00:00:00.000Z	1985	Snow	SNOW MELT & ICE JAMS
3107	1993-03-13T00:00:00.000Z	1993	Snow	SEVERE BLIZZARD
1233	1998-06-25T00:00:00.000Z	1998	Severe Storm(s)	SEVERE STORMS AND FLOODING
3136	1999-01-01T13:38:00.000Z	1999	Snow	SNOW
1335	2000-05-03T00:00:00.000Z	2000	Severe Storm(s)	SEVERE STORMS AND FLOODING
3155	2000-05-22T00:00:00.000Z	2001	Other	WEST NILE VIRUS
3157	2000-11-19T00:00:00.000Z	2001	Snow	SNOW
1391	2001-09-11T09:00:00.000Z	2001	Fire	FIRES AND EXPLOSIONS
3170	2001-12-24T00:00:00.000Z	2002	Snow	SNOW
1404	2001-12-24T00:00:00.000Z	2002	Snow	SEVERE WINTER STORM
3186	2003-08-14T16:10:56.000Z	2003	Other	POWER OUTAGE
1534	2004-05-13T00:00:00.000Z	2004	Severe Storm(s)	SEVERE STORMS AND FLOODING
3262	2005-08-29T00:00:00.000Z	2005	Hurricane	HURRICANE KATRINA EVACUATION
3268	2006-10-12T16:00:00.000Z	2007	Snow	LAKE EFFECT SNOWSTORM
1665	2006-10-12T18:00:00.000Z	2007	Severe Storm(s)	SEVERE STORMS AND FLOODING
1857	2009-08-08T00:20:00.000Z	2009	Severe Storm(s)	SEVERE STORMS AND FLOODING
3351	2012-10-27T00:00:00.000Z	2013	Hurricane	HURRICANE SANDY
4204	2014-11-17T12:00:00.000Z	2015	Snow	SEVERE WINTER STORM, SNOWSTORM, AND FLOODING
4472	2019-10-31T15:30:00.000Z	2020	Severe Storm(s)	SEVERE STORMS, STRAIGHT-LINE WINDS, AND FLOODING
4480	January 20, 2020 and continuing	January 20, 2020 and continuing	COVID-19 Pandemic	New York COVID-19 Pandemic

Source: FEMA 2021

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.3 PHYSICAL SETTING

This section presents topography and geology, hydrology and hydrography, and climate information for Erie County.

4.3.1 Topography and Geology

Erie County's northern half is relatively flat and rises gently up from Lake Erie. The Southtowns are much hillier, containing the northernmost foothills of the Appalachian Mountains. The county's highest point is at 1,940 feet above sea level in the Town of Sardinia. is located in two physiographic regions: the Allegany Plateau, characterized by the upland, sloping topography to the south and the Erie-Ontario Lowlands of lake plain to the north. Glaciers have covered this area several times leaving deposits of glacial till as they receded. (FEMA, Town of Orchard Park, 1982). Surface soils within the County are nonsorted rock materials; imbedded sand and gravel, as well as imbedded clay, silt and fine sand. They reflect the texture of the glacial till, outwash and lake deposits from which they come. Generally, soils are shallow and fairly well-drained (FEMA, Village of Depew, 1981). Soils for a thin mantle over the bedrock, which is generally found at depths greater than five feet. Heavy wooded areas can be found along steep hillsides and farming occurs on the gently rolling hilltop areas and n the broad valleys. Many farms are now overgrown, as a once agricultural area has rapidly become urbanized (FEMA, Town of West Seneca, 1992).

4.3.2 Hydrography and Hydrology

The county is bordered by large watercourses – the Cattaraugus and Tonawanda Creeks, the Erie Canal and the Niagara River. Large creeks that flow through the county include Ellicott, Cayuga, Buffalo, and Eighteenmile Creeks. The County contains Evangola, Beaver Island, and Buckhorn Island state parks.

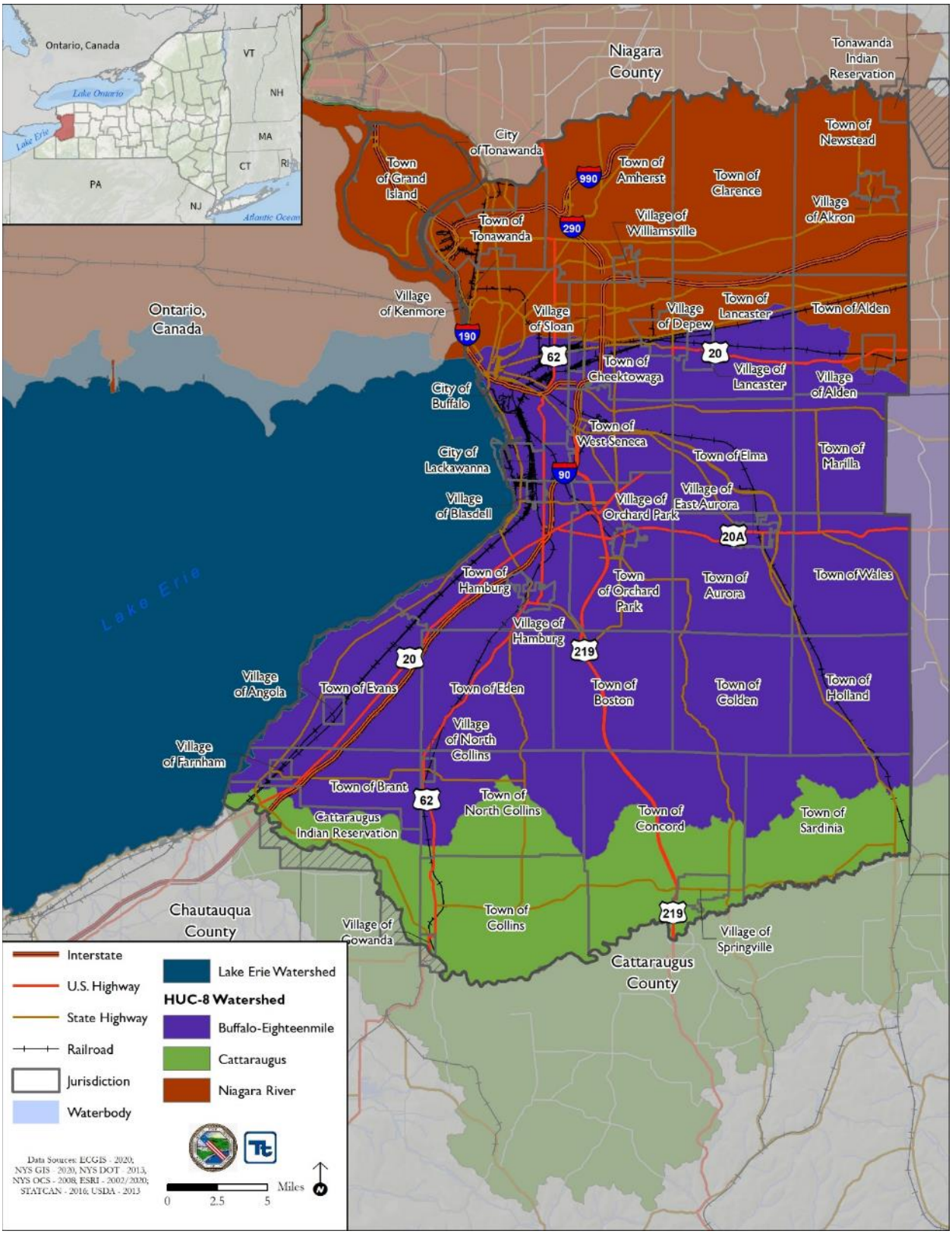
Flooding can occur in Erie County during any season of the year, but it most likely occurs in the late winter – early spring months when melting snow may combine with intense rainfall to produce increased runoff. Ice jams and debris have often increased flood heights by impeding water flow at bridges and culverts. Floods can result from collusion over the watershed of a large mass of warm moisture-laden air from the north; from sharp rises in temperature in the spring that melt the snow cover of the basin and are followed by rains; and from localized thunderstorms

Drainage Basins and Watersheds

A watershed is the area of land that drains into a body of water, such as a river, lake, stream, or bay. It is separated from other systems by high points in the area, such as hills or slopes. It includes not only the waterway itself but also the entire land area that drains to it. For example, the watershed of a lake would include not only the streams entering the lake but also the land area that drains into those streams and eventually the lake. Drainage basins generally refer to large watersheds that encompass the watersheds of many smaller rivers and streams. Erie County is part of three drainage basins: the Niagara River basin, the Buffalo-Eighteenmile Creek basin and the Niagara River Basin and the Cattaraugus Creek basin.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-1. Watersheds Located Within Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.3.3 Climate

The climate of New York State is very similar to most of the Northeast U.S. and is classified as Humid Continental. Differences in latitude, character of topography, and proximity to large bodies of water all have an effect on the climate across New York State. Precipitation during the warm, growing season (April through September) is characterized by convective storms that generally form in advance of an eastward-moving cold front or during periods of local atmospheric instability. Occasionally, tropical cyclones will move up from southern coastal areas and produce large quantities of rain. Both types of storms are typically characterized by relatively short periods of intense precipitation that produce large amounts of surface runoff and little recharge

The cool season (October through March) is characterized by large, low-pressure systems that move northeastward along the Atlantic coast or the western side of the Appalachian Mountains. Storms that form in these systems are characterized by long periods of steady precipitation in the form of rain, snow, or ice, and tend to produce less surface runoff and more recharge than the summer storms because they have a longer duration and occasionally result in snowmelt (NYS Hazard Mitigation Plan, 2019)

Erie County experiences a fairly humid, continental-type climate, but with a definite "maritime" flavor due to strong modification from the Great Lakes. Winters are generally cloudy, cold and snowy. The lake snow machine can start as early as mid-November. The average date of the last frost is near the end of April in the City of Buffalo and in midMay inland. Spring comes slowly to the Buffalo area; the ice pack on Lake Erie does not 14disappear until mid-April. Summers are pleasant, sunshine is plentiful, temperatures are warm and humidity levels are moderate. Autumn is pleasant, but rather brief. The first frost can be expected in late September inland and mid-October in the City of Buffalo (Erie County Flood Insurance Study, 2019).

4.4 POPULATION AND DEMOGRAPHICS

An understanding of the planning area population characteristics provides a foundation for deciphering the impacts of natural hazards in the county. As noted in Section 5 (Methodology) of this plan, modeling of the impacts of natural hazards on the population was performed using FEMA's Hazards U.S. Multi-Hazard (Hazus) including the available population information from the 2010 U.S. Decennial Census data indicating a county population 919,040. However, according to U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Population Estimates, the county contains a population of approximately of 919,355, or a slight increase in population (American Community Survey, 2021). A detailed population table for the 2019 American Community Survey population statistics is shown below in Table 4-2. Figure 4-2. shows the distribution of the general population density (persons per square mile) in 2019 by Census block. For the purposes of this plan, the best available data was referenced to support the analysis, i.e., 2015-2019 American Community Survey 5-Year Population Estimates.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 4-2. Erie County Population Statistics (2019 American Community Survey 5-Year Estimates)

Jurisdiction	Population (2015-2019 American Community Survey Estimates)											
	Total	Percent of County Total	Over 65	Percent of Jurisdiction Total	Under 5	Percent of Jurisdiction Total	Non-English Speaking	Percent of Jurisdiction Total	Disability	Percent of Jurisdiction Total	Poverty Level	Percent of Jurisdiction Total
Akron (V)	2,871	0.3%	563	19.6%	172	6.0%	31	1.1%	331	11.5%	152	5.3%
Alden (T)	7,418	0.8%	1,249	16.8%	209	2.8%	58	0.8%	493	6.6%	233	3.1%
Alden (V)	2,577	0.3%	451	17.5%	121	4.7%	4	0.2%	392	15.2%	142	5.5%
Amherst (T)	120,276	13.1%	24,201	20.1%	5,976	5.0%	5,706	4.7%	12,332	10.3%	10,671	8.9%
Angola (V)	2,373	0.3%	390	16.4%	129	5.4%	0	0.0%	421	17.7%	297	12.5%
Aurora (T)	7,599	0.8%	1,383	18.2%	240	3.2%	24	0.3%	822	10.8%	351	4.6%
Blasdell (V)	2,645	0.3%	460	17.4%	167	6.3%	2	0.1%	309	11.7%	353	13.3%
Boston (T)	8,042	0.9%	1,716	21.3%	343	4.3%	66	0.8%	920	11.4%	366	4.6%
Brant (T)	1,541	0.2%	352	22.8%	39	2.5%	26	1.7%	216	14.0%	117	7.6%
Buffalo (C)	256,480	27.9%	31,818	12.4%	16,941	6.6%	19,369	7.6%	41,485	16.2%	74,552	29.1%
Cheektowaga (T)	73,129	8.0%	14,394	19.7%	3,737	5.1%	2,151	2.9%	9,838	13.5%	7,746	10.6%
Clarence (T)	32,440	3.5%	6,124	18.9%	1,651	5.1%	372	1.1%	2,989	9.2%	1,067	3.3%
Colden (T)	3,328	0.4%	633	19.0%	107	3.2%	6	0.2%	257	7.7%	60	1.8%
Collins (T)	5,418	0.6%	609	11.2%	180	3.3%	332	6.1%	487	9.0%	257	4.8%
Concord (T)	4,186	0.5%	728	17.4%	338	8.1%	5	0.1%	381	9.1%	297	7.1%
Depew (V)	15,102	1.6%	2,954	19.6%	910	6.0%	146	1.0%	1,919	12.7%	967	6.4%
East Aurora (V)	6,184	0.7%	1,446	23.4%	249	4.0%	22	0.4%	537	8.7%	342	5.5%
Eden (T)	7,631	0.8%	1,387	18.2%	430	5.6%	68	0.9%	847	11.1%	334	4.4%
Elma (T)	11,732	1.3%	2,719	23.2%	519	4.4%	65	0.6%	1,066	9.1%	483	4.1%
Evans (T)	13,782	1.5%	2,959	21.5%	574	4.2%	204	1.5%	2,473	17.9%	1,564	11.3%
Farnham (V)	459	0.0%	55	12.0%	32	7.0%	1	0.2%	67	14.6%	80	17.4%
Gowanda (V)	1,043	0.1%	193	18.5%	99	9.5%	21	2.0%	174	16.7%	184	17.6%
Grand Island (T)	21,047	2.3%	3,698	17.6%	1,143	5.4%	235	1.1%	1,732	8.2%	1,259	6.0%
Hamburg (T)	45,985	5.0%	9,136	19.9%	2,265	4.9%	369	0.8%	5,327	11.6%	3,113	6.8%
Hamburg (V)	9,636	1.0%	1,863	19.3%	653	6.8%	101	1.0%	955	9.9%	734	7.6%
Holland (T)	3,355	0.4%	540	16.1%	143	4.3%	8	0.2%	520	15.5%	263	7.8%
Kenmore (V)	15,132	1.6%	2,627	17.4%	491	3.2%	223	1.5%	2,003	13.2%	971	6.4%
Lackawanna (C)	17,831	1.9%	2,948	16.5%	1,479	8.3%	1,409	7.9%	3,006	16.9%	3,983	22.3%
Lancaster (T)	27,625	3.0%	4,907	17.8%	1,428	5.2%	200	0.7%	2,036	7.4%	743	2.7%
Lancaster (V)	10,144	1.1%	1,714	16.9%	683	6.7%	147	1.4%	1,150	11.3%	885	8.7%

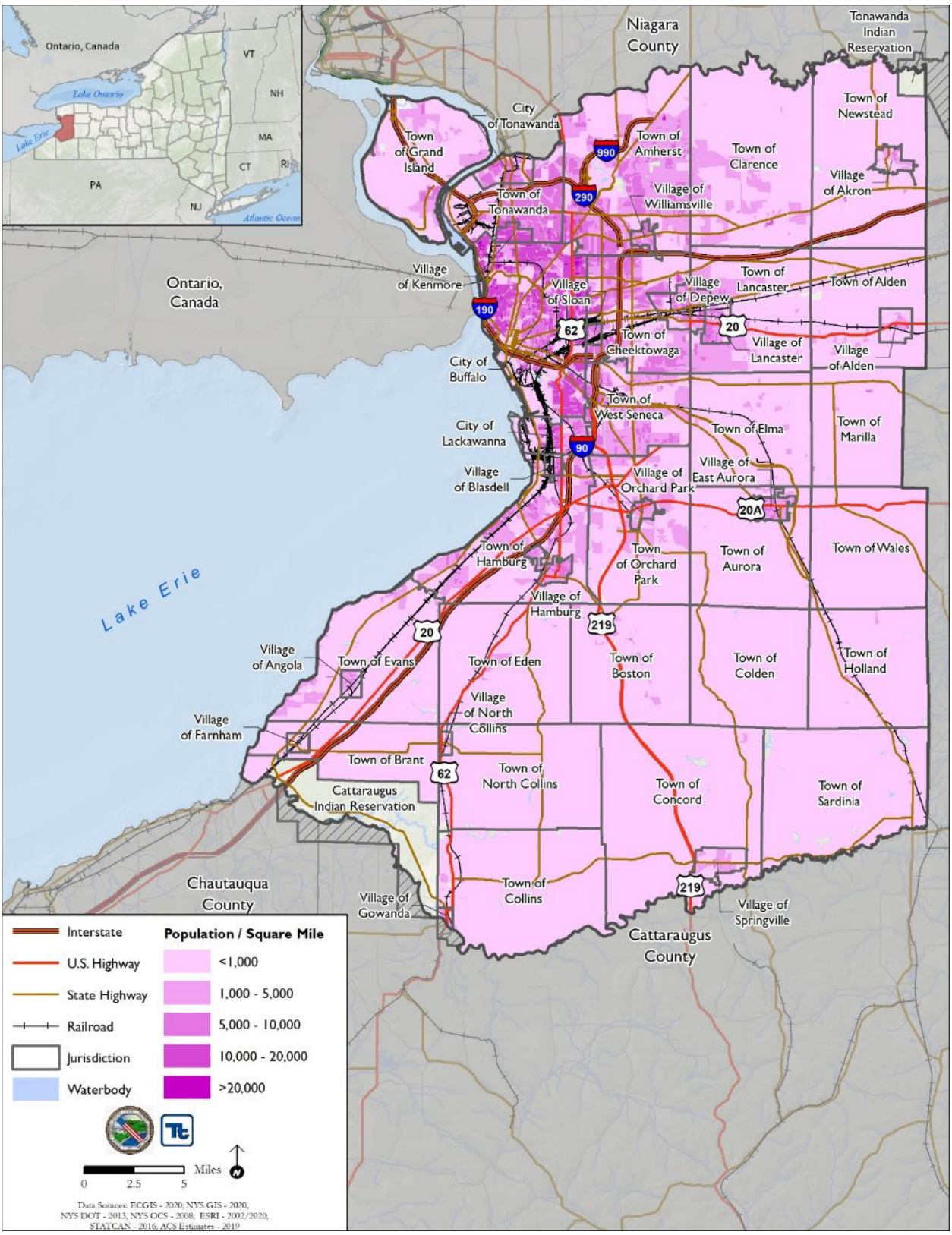
Jurisdiction	Population (2015-2019 American Community Survey Estimates)											
	Total	Percent of County Total	Over 65	Percent of Jurisdiction Total	Under 5	Percent of Jurisdiction Total	Non-English Speaking	Percent of Jurisdiction Total	Disability	Percent of Jurisdiction Total	Poverty Level	Percent of Jurisdiction Total
Marilla (T)	5,378	0.6%	1,133	21.1%	221	4.1%	46	0.9%	542	10.1%	115	2.1%
Newstead (T)	5,804	0.6%	1,092	18.8%	201	3.5%	0	0.0%	1,087	18.7%	148	2.5%
North Collins (T)	2,130	0.2%	321	15.1%	110	5.2%	0	0.0%	258	12.1%	192	9.0%
North Collins (V)	1,370	0.1%	176	12.8%	113	8.2%	13	0.9%	218	15.9%	157	11.5%
Orchard Park (T)	26,361	2.9%	5,858	22.2%	1,289	4.9%	436	1.7%	2,731	10.4%	1,289	4.9%
Orchard Park (V)	3,148	0.3%	650	20.6%	100	3.2%	26	0.8%	357	11.3%	72	2.3%
Sardinia (T)	2,780	0.3%	549	19.7%	164	5.9%	22	0.8%	454	16.3%	267	9.6%
Sloan (V)	3,562	0.4%	549	15.4%	166	4.7%	126	3.5%	490	13.8%	476	13.4%
Springville (V)	4,298	0.5%	855	19.9%	225	5.2%	26	0.6%	898	20.9%	643	15.0%
Tonawanda (C)	14,830	1.6%	2,870	19.4%	736	5.0%	183	1.2%	2,375	16.0%	1,733	11.7%
Tonawanda (T)	57,027	6.2%	11,911	20.9%	2,944	5.2%	1,177	2.1%	8,290	14.5%	5,026	8.8%
Wales (T)	3,020	0.3%	495	16.4%	179	5.9%	0	0.0%	249	8.2%	131	4.3%
West Seneca (T)	45,344	4.9%	9,574	21.1%	1,974	4.4%	293	0.6%	5,992	13.2%	2,734	6.0%
Williamsville (V)	5,233	0.6%	1,248	23.8%	319	6.1%	106	2.0%	486	9.3%	492	9.4%
Cattaraugus Tribal Territory	2,045	0.2%	246	12.0%	161	7.9%	55	2.7%	332	16.2%	765	37.4%
Tonawanda Tribal Territory	14	0.0%	0	0.0%	0	0.0%	4	28.6%	2	14.3%	0	0.0%
Erie County Total	919,355	100.0%	161,744	17.6%	50,350	5.5%	33,884	3.7%	120,246	13.1%	126,806	13.8%

Source: *American Community Survey 2019*

Note: *Individuals below poverty level (Census poverty threshold for a 3-person family unit is approximately $20,335). Refer to Poverty Thresholds by the Census Bureau of more information.*
V = Village, T = Town, C = City, % - Percent
Cattaraugus Tribal Territory and Tonawanda Tribal Territory are included in the above population totals, but did not participate in this HMP update.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Figure 4-2. 2019 American Community Survey 5-Year Estimates Population Distribution and Density of General Population for Erie County, New York



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.4.1 Vulnerable Populations

The DMA 2000 requires that HMPs consider socially vulnerable populations. These populations can be more susceptible to hazard events based on a number of factors, including their physical and financial ability to react or respond to a hazard and the location and construction quality of their housing. For the purposes of this study, vulnerable populations shall include (1) the elderly (persons aged 65 and over) and (2) those living in low-income households.

Identifying concentrations of vulnerable populations can assist communities in targeting preparedness, response, and mitigation actions. Populations with a higher level of vulnerability may be more seriously affected during the course of an emergency or disaster. Vulnerable populations have unique needs that should be taken into consideration by public officials to help ensure the safety of demographics with a higher level of risk. For the purposes of this planning process, vulnerable populations in Erie County include children, elderly, low-income, the physically or mentally disabled, and non-English speakers.

Age

Children are considered vulnerable to hazard events because they are dependent on others to safely access resources during emergencies and may experience increased health risks from hazard exposure. The elderly are more apt to lack the physical and economic resources necessary to respond to hazard events and are more likely to suffer health-related consequences. Those living on their own may have more difficulty evacuating their homes. The elderly are also more likely to live in senior care and living facilities (described in Section 4.6.1) where emergency preparedness occurs at the discretion of facility operators.

According to the 2015-2019 American Community Survey 5-Year Estimates, the median age in Erie County was 42 years. Hazus-MH reports 5.5 percent of the 2018 Erie County population is under the age of 5. Of the 2019 population, 17.6 percent of the county's population is age 65 and older. Figure 4-3. shows the distribution of persons over age 65 and the distribution of population under 5 in Erie County.

Income

The 2015-2019 American Community Survey 5-Year Estimates indicate that median household income in Erie County was $58,121 and the poverty rate is 14.2% The U.S. Census Bureau identifies households with two adults and two children with an annual household income below $24,339 per year as "low income" (U.S. Census 2018). Figure 4-3 below illustrates the low-income population density in Erie County.

Physically or Mentally Disabled

"Persons with a disability include those who have physical, sensory, or cognitive impairment that might limit a major life activity (Center for Disease Control, 2015)." These impairments may increase the level of difficulty that individuals may face during an emergency. Cognitive impairments may reduce an individual's capacity to receive, process, and respond to emergency information or warnings. Individuals with a physical or sensory disability may face issues of mobility, sight, hearing, or reliance on specialized medical equipment. According to the 2014-2018 American Community Survey, 13.1 percent residents of Erie County are living with a disability. Figure 4-3 shows the geographic distribution of disabled individuals throughout Erie County, including individuals with: hearing, vision, cognitive, ambulatory, self-care, and independent living difficulties.

Non-English Speakers

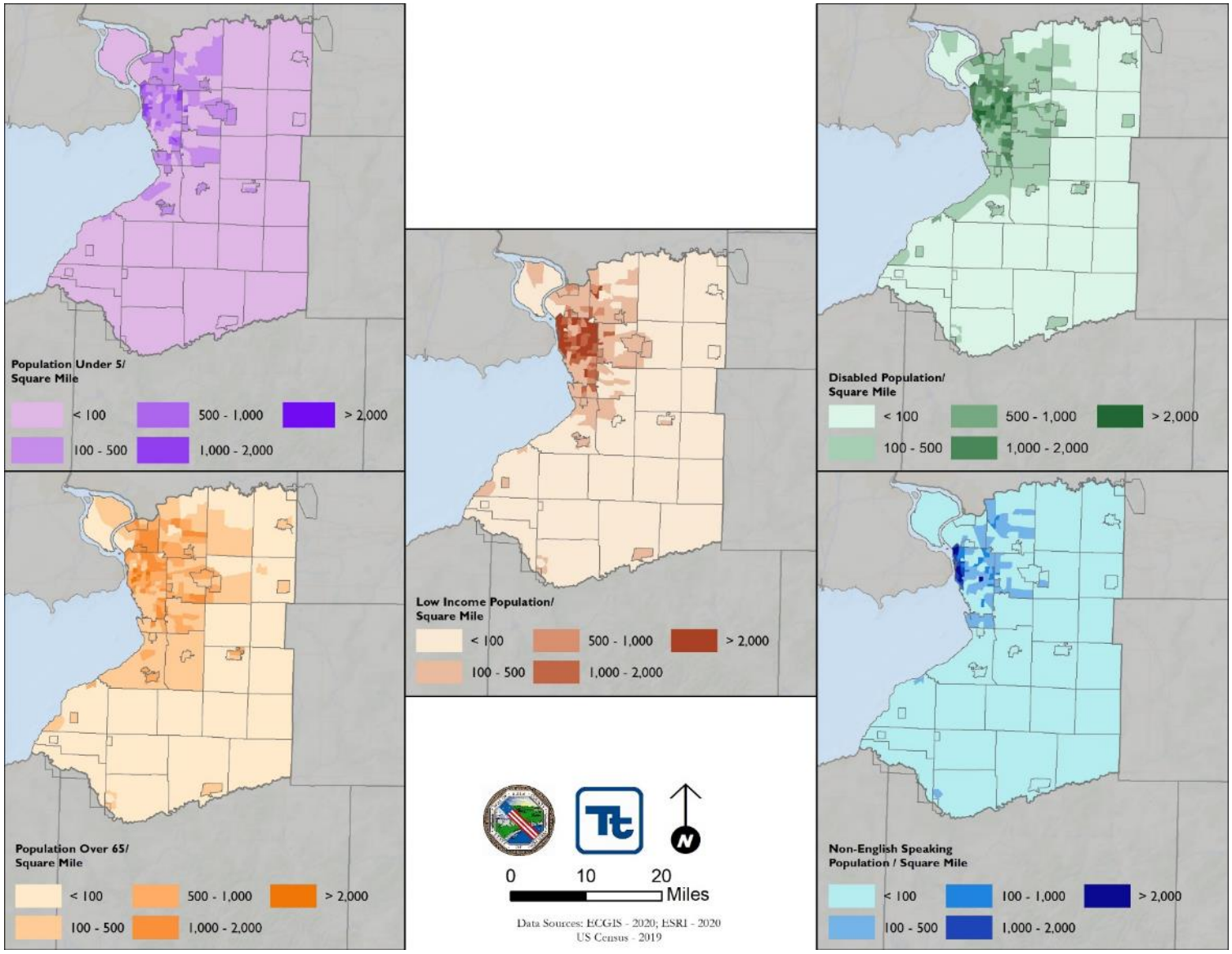
Individuals who are not fluent or do not possess a working proficiency in English are vulnerable because they may have difficulty understanding information being conveyed to them. Cultural differences can also add complexity to how information is being conveyed to populations with limited proficiency of English (Centers

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

for Disease Control, 2015). According to the 2014-2018 American Community Survey, 11 percent of residents over the age of 5 primarily speak a language other than English at home; of those 95,713 individuals who reported to speak English less than "very well", 32,704 speak Spanish, 31,453 percent speak other Indo-European languages, 15,833 percent speak Asian and Pacific Island Languages, and 15,723 percent speak other languages. Figure 4-3 below shows the geographic distribution of individuals who speak English less than "very well."

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-3. 2019 Distribution and Density of Persons - Vulnerable Populations in Erie County, New York



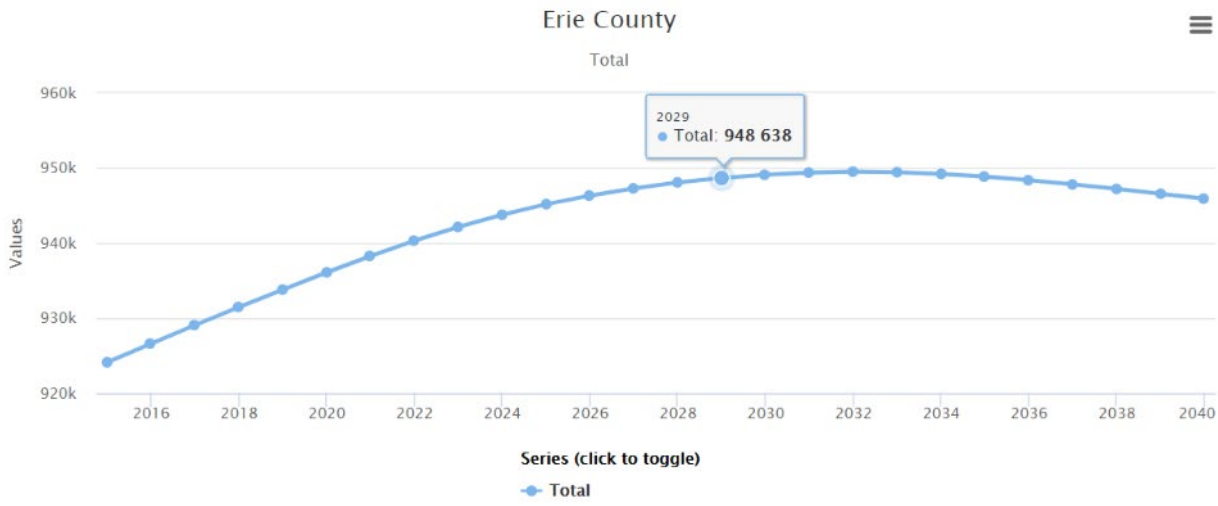
Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Population and Demographic Trends

This section discusses population trends to use as a basis for estimating future changes that could result from the seasonal character of the population and significantly change the character of the area. Population trends can provide a basis for making decisions on the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support planning decisions regarding future development in vulnerable areas. Various Census Bureau products were used as sources for the population trends section. The Decennial Census is the official population count taken every 10 years. American Community Survey 5-Year Estimates are used to show annual population changes, but it is not an official population count. 5-Year Estimates are used because they are the most accurate form of American Community Survey with the largest sample size which allows for greater accuracy at smaller geographic areas. The American Community Survey 5-Year Estimate products were used to establish annual changes in population. The numbers provided are not official census counts, but are official estimates provided to communities so that they may have a greater understanding in population changes within their jurisdictions.

Cornell University's Program on Applied Demographics produced population projections by county and by age and sex for New York State. The projections were completed in 2011 and are in 5-year intervals up to the year 2040. The projections are based upon rates of change estimated from historic data. The projections have been combined with historical census information to illustrate population trends within Erie County over a longer study period. Erie County experienced population growth from 1940 until 1980. There has been a slight decrease in population each decade since 1980. This population decrease is projected to continue through the year 2040. Figure 4-4 shows the observed and projected population change in Erie County from 1940 through 2040.

Figure 4-4. Erie County Population Change, 2014 to 2040



Source: U.S. Census Bureau, 2020; Cornell 2017

Population changes at the municipal level are also important to capture to better understand changing populations within the county and where the concentration of population resides. Section 9 (Jurisdictional Annexes) discusses recent changes in population for each municipality.

The 2015-2019 American Community Survey 5-Year Estimates reported 430,732 housing units in Erie County The U.S. Census defines a household as all the persons who occupy a housing unit; and defines a housing unit as a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

intended for occupancy) as separate living quarters. Therefore, you may have more than one household per housing unit. The median value of an owner-occupied housing unit in Erie County was estimated at $165,500 (U.S. Census 2019).

For this update, a custom-building inventory was created for Erie County. The general building stock was updated countywide with a custom-building inventory using the 2018 Microsoft building stock inventory data set. The building inventory attributes were updated using parcel tax assessor information provided by Erie County GIS. Attributes provided in the spatial files were used to further define each structure, such as year built, number of stories, basement type, occupancy class, and square footage. The centroid of each building footprint was used to estimate the building location. Structural and content replacement cost values (RCV) were calculated for each building using the available assessor data, the building footprint, and RS Means 2020 values. The updated building inventory (360,925 buildings with a total building replacement value [structure and content] of greater than $222.5 billion) was incorporated into Hazus at the structure and aggregate level. Approximately 92.7-percent of the buildings (334,595 buildings) and 57.6-percent of the building stock replacement value are associated with residential housing. Refer to Section 5.1 (Methodology and Tools) for a more detailed description of the general building stock inventory.

Generally, contents for residential structures are valued at about 50 percent of the building's value. For non-residential facilities, the value of the content is about equal to the building's structural value. Actual content value varies widely depending on the usage of the structure.

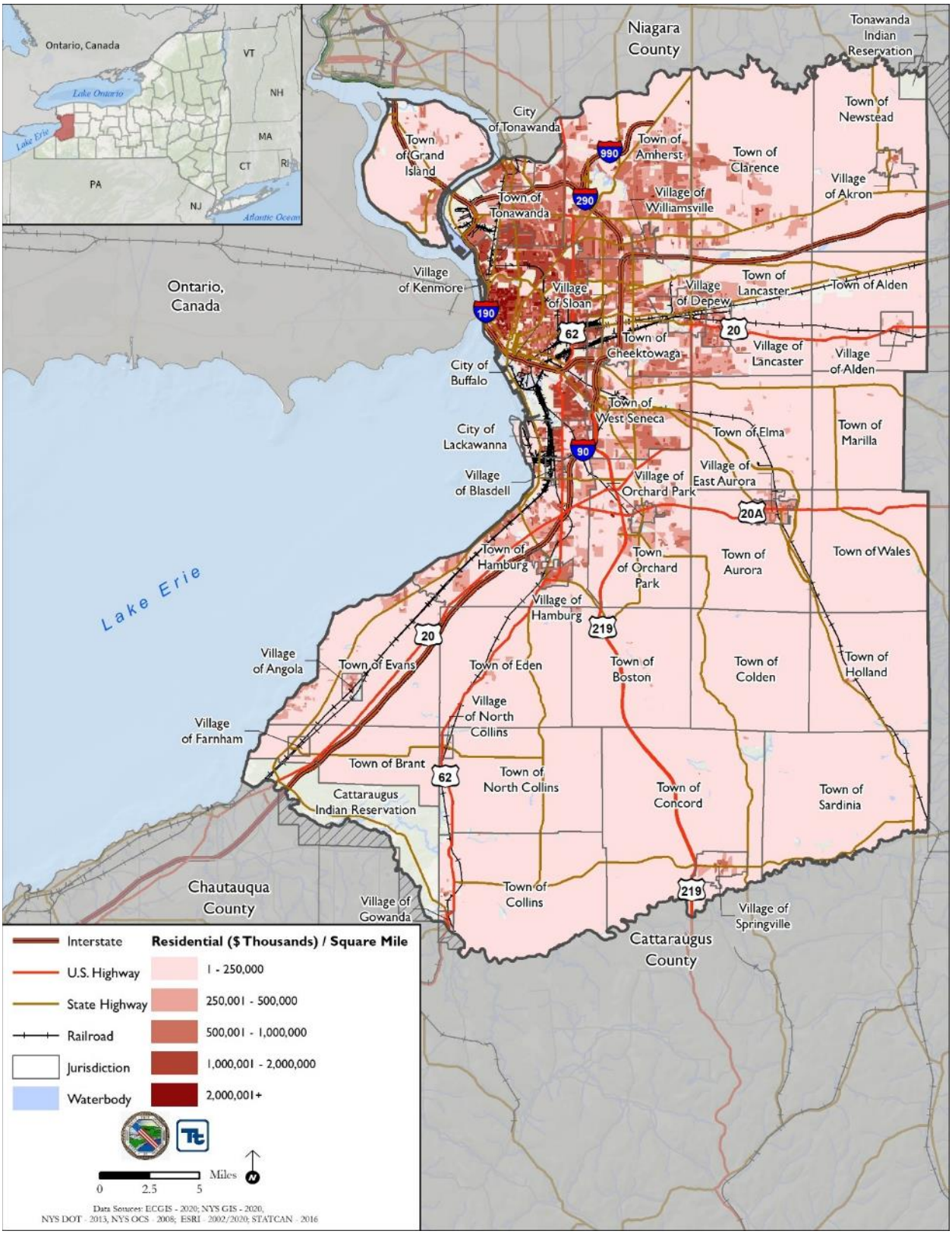
The 2014-2018 American Community Survey data identified that the majority of housing units (66.5 percent or 27,593 units) in Erie County are single-family detached units. The 2017 U.S. Census Bureau's County Business Patterns data identified 1,608 business establishments employing 21,775 people in Erie County. The retail trade industry has the highest number of establishments in the county, with 311 establishments. This is followed by the accommodation and food services industry with 209 establishments and the other services sector (except public administration) with 206 establishments (U.S. Census, 2017).

Figure 4-5, Figure 4-6, and Figure 4-7, show the distribution and exposure density of residential, commercial, and industrial buildings, respectively, in Erie County based on the aggregate custom-building stock values input into HAZUS-MH v4.2. Exposure density is the dollar value of structures per unit area, including building content value. The densities are shown in units of $1,000 ($K) per square mile.

Viewing exposure distribution maps, such as Figure 4-5, Figure 4-6 and Figure 4-7 can assist communities in visualizing areas of high exposure and in evaluating aspects of the study area in relation to the specific hazard risks.

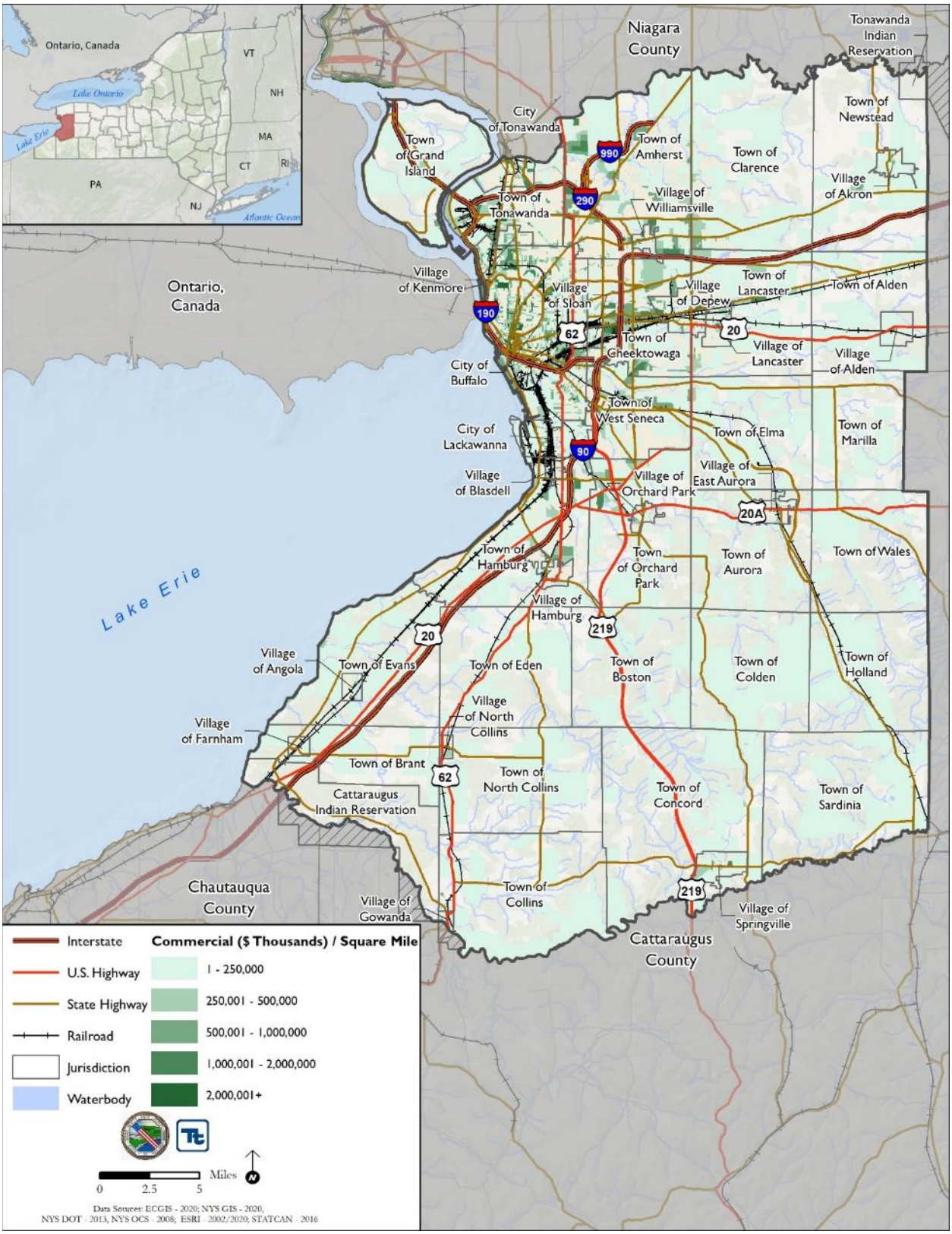
Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-5. Distribution of Residential Building Stock and Value Density in Erie County



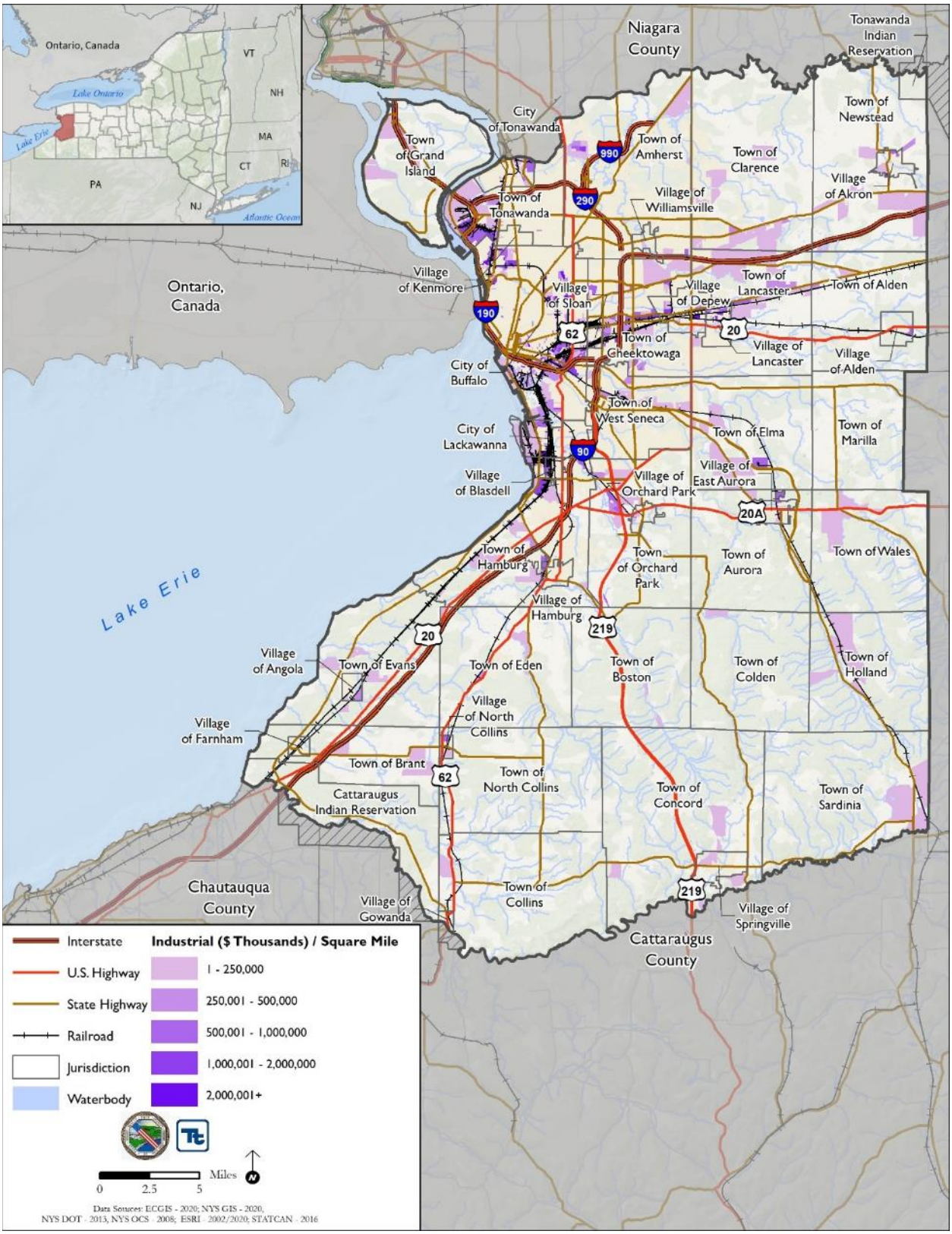
Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-6. Distribution of Commercial Building Stock and Exposure Density in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-7. Distribution of Industrial Building Stock and Exposure Density in Erie County



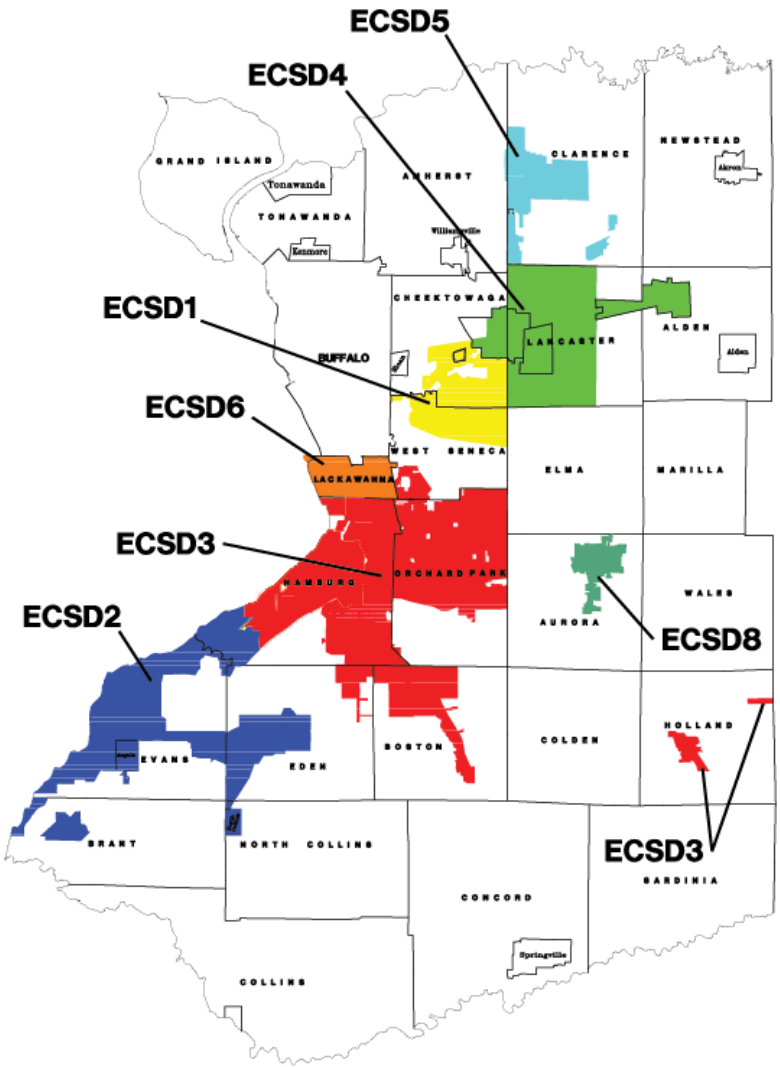
Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.5.1 Land Use and Development Trends

Land use in Erie County is influenced by natural resources, topographic constraints, water lines, sewers, and roads. The City of Buffalo is the center of a large urbanized area. Suburban development extends well beyond the city border. Areas on the county's easter Department of Economic Development, Planning & Tourism, 2015).

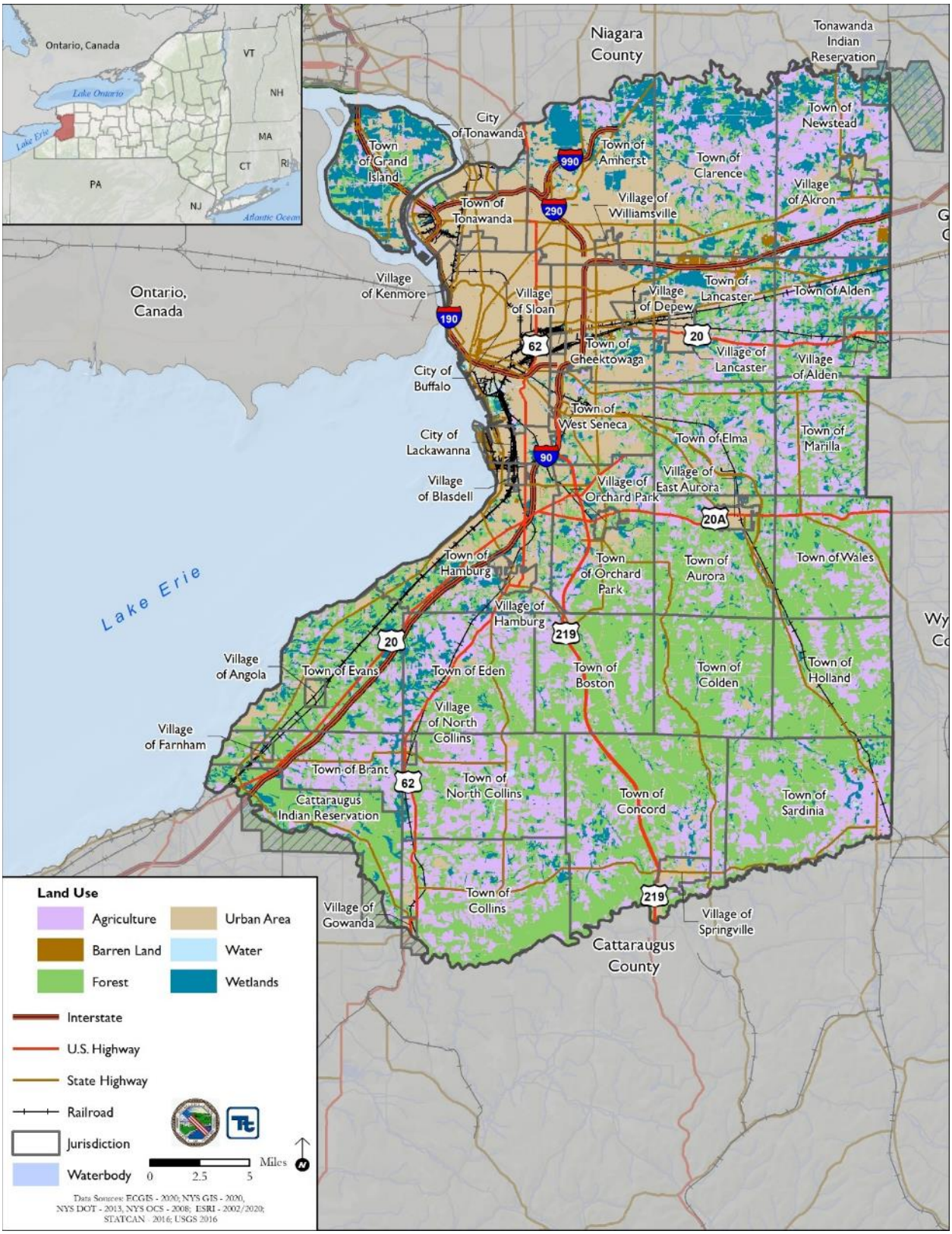
The County's urbanized area is centered in the City of Buffalo but in recent decades suburban development has expanded into all towns that border Buffalo and beyond. Suburban areas include villages and hamlets and are surrounded by farmland, wooded areas, parks, and protected open space. Retail and commercial uses are concentrated in central business districts and along heavily developed and travelled roadways and intersections. Agriculture remains a large land use. Although the number of farms is decreasing slightly, the size of farms is increasing. This trend toward fewer but larger farm operations parallels statewide trends (Erie County Department of Economic Development, Planning & Tourism, 2015).

Figure 4-8. 2016 County-owned sewer districts



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-9. 2016 Land Cover for Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.5.2 Development Trends and New Development

In New York State, land use regulatory authority is vested in towns, villages, and cities. However, many development and preservation issues transcend local political boundaries. In Erie County, each city, town and village are empowered by the Municipal Home Rule Law to plan and zone within its boundaries. DMA 2000 requires that communities consider land use trends, which can impact the need for, and priority of, mitigation options over time. Land use trends can also significantly impact exposure and vulnerability to various hazards. For example, significant development in a hazard area increases the building stock and population exposed to that hazard.

This plan provides a general overview of land use trends and types of development occurring within the study area. An understanding of these development trends can assist in planning for further development and ensuring that appropriate mitigation, planning, and preparedness measures are in place to protect human health and community infrastructure. Areas of recent and expected future development identified during this planning process are shown in the respective jurisdictional annexes (Section 9).

4.5.3 Potential Sites for Temporary Housing and Relocation

To identify potential sites for temporary housing and relocation, each municipality provided possible locations suitable for the placement of temporary housing for residents displaced by disaster, including sites to accommodate relocation of houses out of the floodplain or for the construction of new replacement developments. These locations are indicated in Table 4-3 and are located on the maps in the jurisdictional annexes (see Section 9).

Table 4-3. Potential Temporary Housing Locations in Erie County

Jurisdiction	Site Name	Address	Infrastructure/ Utilities Available	Capacity	Type
Akron (V)	Village Property	Eckerson Avenue & Clinton Street	Water, Electric.	15 Trailers on a site 20' x 50'	Open Mowed Field Off Edge of Street
Akron (V)	Village Property	43 East Avenue, Old DPW Site	Water, Electric.	25 Trailers on a site 20' x 50'	Open Stone Parking Lot
Alden (T)	Town Hall Parking Lot	3311 Wende	50 acres	Parking Lot/ Open Space	All
Alden (T)	Fire Company Parking Lot	Various Locations	100 acres	Parking Lot/ Open Space	All
Alden (T)	University at Buffalo North Campus	12 Capen Hall, Buffalo NY 14260	TBD	University campus facility	Water, sewer, electric, ample external parking lots for placement of trailers
Alden (T)	ECC North Campus	6205 Main St, Williamsville NY	Water, sewer, electric, external sports fields for placement	TBD	College facility
Alden (V)	Alden Town Park	W Main St.	Unknown	Park	Water, Electric, and Septic
Alden (V)	Darien Lakes State Park	Rt 20	Unknown	Park	Water and Electric
Amherst (T)	University at Buffalo North Campus	12 Capen Hall, Buffalo NY 14260	TBD	University campus facility	Water, sewer, electric, ample external parking lots for placement of trailers
Amherst (T)	ECC North Campus	6205 Main St, Williamsville NY	TBD	College facility	Water, sewer, electric, external sports fields for placement
Angola (V)	Lake Shore Schools Athletic Fields	100 High St.	Unknown	Unknown	Unknown

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Site Name	Address	Infrastructure/ Utilities Available	Capacity	Type
Aurora (T)	Parking lot/fields	1003 Center Street	Unknown	Parking lot/fields	Electric, Gas, Water
Aurora (T)	Park	Emery Road east of Underhill	Unknown	Park	Electric, Gas, Water
Aurora (T)	Baseball fields	300 Gleed Avenue	Unknown	Baseball fields	Electric, Gas, Water
Aurora (T)	Park	736 Warren Drive	Unknown	Park	Electric, Gas, Water
Aurora (T)	Park	401 West Falls Road	Unknown	Park	Electric, Gas, Water
Aurora (T)	Park	Buffalo Road west of village line;	Unknown	Park	Electric, Gas, Water
Aurora (T)	Park	Knox Road west of village line; south side of road	Unknown	Park	Electric and Gas
Aurora (T)	Field	Girard Avenue at Buffalo Road	Unknown	Field	Electric, Gas, Water
Aurora (T)	Parking lot/field	141 Girard Avenue	Unknown	Parking lot/field	Electric, Gas, Water
Blasdell (V)	Blasdell Firemen's Park	165 Lake Ave Blasdell, NY	20	Baseball Field	Yes
Boston (T)	County Fairgrounds	5600 McKinley Pkwy, Hamburg, NY	266 acres	Open Space	All utilities available
Clarence (T)	Kelly Schultz, owner	Main Street	175 units	Trailer	Portable generator
Clarence (T)	Eastern Hills Mall	Main/Transit Area	250 units	Trailer	Portable generator
Colden (T)	Kummer Park	Park Street- off Route 240	40 acres of usable land	Park	Power/ Water/ Septic
Depew (V)	Depew High School	5201 Transit Road	20-30	Parking lot	Water/ Electric
East Aurora (V)	Parking lot/fields	1003 Center Street	50-100 spots	Parking lot/fields	All
East Aurora (V)	Park	Emery Road east of Underhill	20-30 spots	Park	All
East Aurora (V)	Baseball fields	300 Gleed Avenue	50-100 spots	Baseball fields	All
East Aurora (V)	Park	736 Warren Drive	50-100 spots	Park	All
East Aurora (V)	Park	401 West Falls Road	50-100 spots	Park	All
East Aurora (V)	Park	Buffalo Road west of village line;	50-100 spots	Park	All
East Aurora (V)	Park	Knox Road west of village line; south side of road	50-100 spots	Park	Electric and Gas
East Aurora (V)	Field	Girard Avenue at Buffalo Road	50-100 spots	Field	All
East Aurora (V)	Parking lot/field	141 Girard Avenue	50-100 spots	Parking lot/field	All
Eden (T)	Eden American Legion	2912 Legion Drive Eden NY 14057	40	FEMA Trailers	Fully outfitted for all utilities
Elma (T)	Iroquois HS	2111 Girdle Rd	100	Parking Lot	Yes
Elma (T)	Senior Center	3007 Bowen Rd	100	Parking Lot	Yes
Elma (T)	Jamison Rd FC	1071 Jamison Rd	100	Parking Lot	Yes
Elma (T)	Blossom FC	1000 N Blossom Rd	100	Parking Lot	Yes
Farnham (V)	Village Park	Commercial Street	5	Park Land	Water, electric, septic
Grand Island (T)	Nike Base	3278 Whitehaven Rd, Grand Island	Unknown	Building	Water, electric, septic
Holland (T)	Town Park	Legion Drive	5	Park	Water and Electric
Holland (T)	Three Valley	Olean Rd	50	Camp Site	Electric
Holland (T)	Mountain Meadows	Parker Rd	50	Camp Site	Electric
Kenmore (V)	Kenmore Community Center	135 Wilber; Kenmore, NY 14217	unknown	Community Center	All available
Kenmore (V)	Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	unknown	Public School	All available
Kenmore (V)	Roosevelt Elementary	283 Washington; Kenmore, NY 14217	unknown	unknown	All available

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Site Name	Address	Infrastructure/ Utilities Available	Capacity	Type
Lancaster (T)	Fire Hall	5423 Broadway, Lancaster, NY 14086	100	Lot	All
Lancaster (T)	Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	Lot	All
Lancaster (V)	Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unsure	Park	Water
Marilla (T)	Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	25-30	Lot	W/E/S
Marilla (T)	Fireman's Grounds	West Ave.	30-35	Lot	NA
Newstead (T)	Veteran's Park	5929 Buell Street/Route 93 Akron, NY 14001	100 trailers	Open mowed field with a stone roadway	Water, electric
Newstead (T)	Newstead Sports complex	44 Skyline Drive Akron, NY 14001	100 trailers	Open mowed field with stone roadway	Water, electric
Newstead (T)	Town property	5750 Crittenden Road Akron, NY 14001	100 trailers	Open field mowed. No road	Water and electric available at the road
North Collins (T)	Fricano Park	Gowanda State Road	Yes	800	Park Grounds
North Collins (T)	Langford Park	Langford Road	Water/electric	300	Park Grounds
North Collins (T)	Tractor Pull Area	Sission Highway	Water/electric	500	Park Grounds
Orchard Park (T)	Compost/Soccer Complex	6909 Milestrip Road	300,000 Sq. Ft. Available	Parkland	Yes
Orchard Park (T)	Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	400,000 Sq. Ft. Available	Vacant Parkland	Yes
Orchard Park (T)	Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	52,000 Sq. Ft. Available	Parking Lot	Yes
Orchard Park (T)	Brush Mountain Park	4520 California Road	200,000 Sq. Ft. Available	Parkland	Yes
Orchard Park (V)	Compost/Soccer Complex	6909 Milestrip Road	Yes	300,000 Sq. Ft. Available	Parkland
Orchard Park (V)	Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	Yes	400,000 Sq. Ft. Available	Vacant Parkland
Orchard Park (V)	Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	Yes	52,000 Sq. Ft. Available	Parking Lot
Orchard Park (V)	Brush Mountain Park	4520 California Road	Yes	200,000 Sq. Ft. Available	Parkland
Tonawanda (C)	Veterans Park	Niagara Street	Water. Power, Sewer in area	24	Trailers on Pavement
Tonawanda (C)	Big Lots Plaza Parking Lot	750 Young Street	Water. Power, Sewer in area	30 to 40 (More if Businesses are Closed)	Trailers on Pavement
Tonawanda (C)	Kohler Pool Parking Lot	291 Kohler St	Water. Power, Sewer in area	20	Trailers on Pavement
Tonawanda (T)	Town of Tonawanda Aquatic Center	1 Pool Plaza	100	Parking lot and one building	Parking lot does not have utilities but inside the building has utilities
Tonawanda (T)	Town Tonawanda Senior Center	291 Ensminger	25	Parking lot and building	Parking lot does not have utilities but inside the building has utilities
Wales (T)	Wales	12345 Big Tree Road	20-25 Acres	Flat Land	There are no utilities on site
Wales (T)	Town Park	Rt 20A	30 Acres	Open Space	None

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Shelters

HAZUS-MH v4.2 estimates displacement and long-term sheltering needs for flood, hurricane, and earthquake events. These results are presented under Impacts on Life, Health, and Safety in the Vulnerability Assessments for Section 5.4.1 (Flood) and Section 5.4.3 (Severe Storm). These results indicate that the need for sheltering large numbers of residents may be significant. However, these results should be used as a starting point for determining the sheltering needs for the county, as this will not include sheltering for populations in surrounding counties or residents that are displaced due to widespread power outages. Table 4-4 lists the shelters identified by municipal officials during the planning process. The Erie County Department of Homeland Security and Emergency Services and American Red Cross maintain a separate list of facilities that could potentially serve as shelters.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 4-4. Shelters in Erie County

Municipality	Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided	Identified by:
Akron (V)	Akron Fire Hall	1 Main Street Akron N.Y. 14001	275	Yes	No	Yes	Basic First Aid	Food, Heat, Air Conditioning, . Sleeping Area	Village
Alden (T)	Town Line Church	1159 Town Line Rd, Alden, NY	100	Unknown	Yes	Yes	First AID kit, AED	Food/ Beverage Service	Town
Alden (V)	Municipal Building	13336 Broadway	145	Yes	Yes	Yes	House fire and EMS Department	Full kitchen	Village
Alden (V)	Alden Station 2	11856 Broadway	75	Yes	Yes	Yes	House fire and EMS Dept	None	Village
Amherst (T)	Town of Amherst Senior Center	370 John James Audubon Parkway	100	Yes	Yes	Yes	Emergency medical	Town of Amherst Senior Center	Town
Angola (V)	MPB	22 Prospect	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Village
Angola (V)	Fire Station 2	151 S. Main	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Village
Angola (V)	JT Waugh School	100 High St.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Village
Aurora (T)	Aurora Senior Center	101 King St., E. Aurora	100	No	Yes	Yes	None – local FD or EMT would be called	None	Town
Boston (T)	Town Hall	8500 Boston State Rd, Boston, NY	100	Yes	Yes	No	None	Need power generator, and showers. Not adequate space – addressed in project 001	Town
Cheektowaga (T)	Cheektowaga Senior Center	3349 Broadway	200	See Animal Control Plan	Partial	Yes	Emergency	Feeding	Town
Cheektowaga (T)	Alexander Bldg.	275 Alexander Avenue	1075	See Animal Control Plan	No	No	Emergency	None	Town
Cheektowaga (T)	Southline Fire Station	1049 French Road	150	See Animal Control Plan	Yes	Yes	Emergency	Feeding	Town
Clarence (T)	Senior Center	Thompson Road	150	No	Yes	Yes	Contact EMT	Food prep capable	Town
Clarence (T)	Senior High School	Main Street	300-500	No	Yes	Yes	Contact EMT	Food prep capable	Town
Colden (T)	Colden Elementary School	8263 Boston-Colden Road, Colden, NY	500	Yes	Yes	Yes	Provided by fire company	No	Town
Colden (T)	Colden Senior Center	8811 NY-240, Colden, NY	100	Yes	Yes	No – mitigation action	Various	No	Town
Concord (T)	Senior Center	Commerce Dr	100	-	Yes	Yes	No	Shelter	Town
Concord (T)	Erie County Fire Department	Genesee Rd	100	-	Unknown	No	No	Warming	Town
Concord (T)	Morton County Fire Department	Mortons Corners Rd	80	-	Unknown	No	No	Warming	Town
Collins (T)	Gowanda High School	Village	As needed	Optional	Yes	Yes	As Needed	Food	Town
Collins (T)	Gowanda Elementary School	Village	As needed	Optional	Yes	Yes	As needed	Food	Town
Collins (T)	Gowanda Fire Hall	230 Aldrich Street	As needed	Optional	Yes	Yes	As needed	Food	Town

Municipality	Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided	Identified by:
Depew (V)	Senior Center	85 Manitou Street, Depew	25-50	Yes	Yes	Yes	Urgent Care	None	Village
East Aurora (V)	Senior Center	101 King Street	100	No	Yes	Yes	Unknown	None	Village
Eden (T)	Eden JR/SR HS	3000 Schoolview Rd Eden NY 14057	250	Yes	Yes	Yes	None	None	Town
Eden (T)	Eden Town Hall	2795 East Church Street Eden NY 14057	40	Yes	Yes	Yes	None	None	Town
Elma (T)	Iroquois HS	2111 Girdle Rd	100	Yes	Yes	Yes	Unknown	-	Town
Elma (T)	Senior Center	3007 Bowen Road	100	Yes	Yes	Yes	Unknown	-	Town
Elma (T)	Jamison Rd FC	1071 Jamison Rd	100	Yes	Yes	Unknown	Unknown	-	Town
Elma (T)	Blossom FC	1000 N. Blossom Rd	100	Yes	Yes	Yes	Unknown	-	Town
Evans (T)	Highland VFC	1 George Nablo, Derby	250	Y	Y	Y	Ambulance, Basic first aid	Fire/Rescue	Town
Evans (T)	N Evans VFC	6980 Versailles, Derby	150	Y	Y	Y	Basic first Aid	Fire/Rescue	Town
Evans (T)	Evans Center VFC	8298 Erie Road, Angola	50	Y	Y	Y	Ambulance – Basic First Aid	Fire/Rescue	Town
Evans (T)	Lake Erie Beach VFC	9483 Lake Shore, Angola	150	Y	Y	Y	Ambulance – Basic first Aid	Fire/Rescue	Town
Farnham (V)	Village Hall	Commercial Street	100	Yes	Yes	Yes	Fire/EMS	Kitchen/Generator	Village
Gowanda (V)	Gowanda High School	Village	As needed	Optional	Yes	Yes	As Needed	Food	Village
Gowanda (V)	Gowanda Elementary School	Village	As needed	Optional	Yes	Yes	As needed	Food	Village
Gowanda (V)	Gowanda Fire Hall	230 Aldrich Street	As needed	Optional	Yes	Yes	As needed	Food	Village
Grand Island (T)	Grand Island High	1100 Ransom Rd, Grand Island	unknown	No	Yes	No	School nurse	None	Town
Grand Island (T)	Grand Island Middle	1100 Ransom Rd, Grand Island	unknown	No	Yes	No	School nurse	None	Town
Grand Island (T)	Huth Road Elementary	1773 Huth Rd, Grand Island	unknown	No	Yes	No	School nurse	None	Town
Grand Island (T)	Kaegabein Elementary	1690 Love Rd, Grand Island	unknown	No	Yes	No	School nurse	None	Town
Grand Island (T)	Sidway School	2451 Baseline Rd, Grand Island	No	No	Yes	No	School nurse	None	Town
Hamburg (T)	Hamburg High School	Legion Drive	-	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms	Town
Hamburg (T)	Hamburg Middle School	Division Street	-	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms	Town
Hamburg (T)	Charlotte Avenue School	Charlotte Avenue	-	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms	Town
Hamburg (T)	Union Pleasant Grade School	Pleasant Avenue	-	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms	Town
Holland (T)	Community Center	3 Legion Dr	100	No	Yes	No	HFD EMT		Town
Holland (T)	Holland School	103 Canada St	500	No	Yes	Yes	HFD EMT		Town

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Municipality	Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided	Identified by:
Holland (T)	Town Hall	47 Pearl St	50	No	Yes	Yes	HFD EMT		Town
Kenmore (V)	Kenmore Community Center	135 Wilber; Kenmore, NY 14217	unknown	No	Yes	No	Kenmore	Kitchen on premises	Village
Kenmore (V)	Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	unknown	No	Yes	Yes	Kenmore	Kitchen on premises	Village
Lancaster (T)	Fire Hall	5423 Broadway, Lancaster, NY 14086	100	No	Yes	Yes	Immediate Care	None	Town
Lancaster (T)	Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	No	Yes	Yes	Immediate Care	None	Town
Lancaster (V)	Village Hall	21 Central Ave #1, Lancaster, NY 14086	Unsure	Yes	Yes	No	None	None	Village
Marilla (T)	Marilla Fire Co.	1950 West Ave, Marilla, NY 14102	100	Yes	Yes	Yes	First Aid	Kitchen	Town
Marilla (T)	Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	500	Yes	Yes	Yes	First Aid	Kitchen	Town
Marilla (T)	Community Center	1810 Two Rod Road	100	Yes	Yes	Yes	First Aid	Kitchen	Town
Newstead (T)	Newstead Senior Center	5691 Cummings Road Akron, NY 14001	48	Yes	Yes	Yes	Basic First Aid	Food, heat, A.C., sleeping area	Town
Newstead (T)	Newstead Fire Hall Station #1	5691 Cummings Road Akron, NY 14001	250	Yes	Yes	Yes	Paramedic services by Twin City Ambulance	Food, Heat, AC, Sleeping Area	Town
Newstead (T)	Newstead Fire Hall Sta. #2	12012 Rapids Road, Akron, NY 14001	25	Yes	No	No	Basic First Aid	Warming Shelter	Town
North Collins (T)	Senior Center	Gowanda State Rd	100	No	Yes	No	None	Shelter/Kitchen	Town
North Collins (T)	Langford Fire Dept.	Langford Rd	125	No	Yes	Yes	EMT	Food/Shelter	Town
North Collins (T)	Town Hall	Gowanda State Rd	125	No	Yes	No	Sheriff/EMT	Shelter/Water	Town
Orchard Park (T)	Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No	None	Warming and cooling station only	Town
Orchard Park (T)	Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only	Town
Orchard Park (V)	Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No	None	Warming and cooling station only	Village
Orchard Park (V)	Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only	Village

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Municipality	Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided	Identified by:
Sardinia (T)	Town Hall	12320 Savage Road	TBD	No	Yes	Yes	First Responders/Red Cross	-	Town
Sardinia (T)	St. Jude's Roman Catholic Church	12800 Genesee Road	TBD	No	Yes	TBD	First Responders/Red Cross	-	Town
Sloan (V)	Piekarski Community Center	140 Halstead Avenue	75	Yes	Partial	Yes	First aid and EMS with local fire department	Short term shelter use (1-2 days)	Village
Tonawanda (C)	Tonawanda High School	600 Fletcher Street	500	No,	Yes	Yes	Local EMS and Hospitals in region.	2 Kitchens, Refrigerators, Freezers, Griddles, Ovens, Convection Ovens, Microwave Ovens, 2-way radios, 30 phone lines,	City
Tonawanda (C)	(ARC Approved)			Assistance Provided by SPCA				PA System, At times Govt surplus food on sight	City
Tonawanda (C)	Tonawanda Senior Center	35 Main St	60	No,	Yes	No	Local EMS and Hospitals in region	Small Kitchen	City
Tonawanda (C)	(ARC Approved)			Assistance Provided by SPCA					City
Tonawanda (C)	Tonawanda Youth Center (ARC Approved)	291 Kohler St	45	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Small Kitchen	City
Tonawanda (C)	Boys and Girls Club (ARC Approved)	325 Franklin St	150	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Kitchen, Steamer, Refrigerators, Freezers, 8 Burners, Max seating 250. PA system	City
Tonawanda (T)	Hoover School	249 Thorncliff	unknown	unknown	Yes	Yes	unknown	unknown	Town
Tonawanda (T)	Multiple Schools	Ken-Ton School District	unknown	unknown	Yes	Yes	unknown	unknown	Town
Wales (T)	Town Hall	12345 Big Tree Rd, Wales Center, NY 14169	50	Yes	Yes	Yes	None	None	Town
West Seneca (T)	Union Fire Co	1845 Union Rd West Seneca, NY 14224	100	Yes	Yes	Yes	Basic EMS & Paramedics as needed	Red Cross trailer on site.	Town

Note: ADA = Americans with Disabilities Act

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Evacuation Routes

Section 24 of the New York State Executive Law-2B allows first responders to take actions necessary to protect public safety in the absence of an emergency declaration. This authority is often applied when immediate action is necessary to evacuate citizens from a hazardous or potentially unsafe area.

Erie County has identified I-90, I-190, U.S. 20, U.S. 20A, U.S. 62, and several state routes as evacuation routes. The primary roads and highways can also serve as evacuation routes for the county. The route used depends on the location of the incident. The county is fortunate to have a variety of well-connected arterial roadways throughout all regions, offering a variety of routing options. Figure 4-10 illustrates the major roadways in Erie County that would be utilized as evacuation routes in and out of the county in the event of an emergency that results in an evacuation.

Other than evacuation plans based on the geographically specific risks, evacuations are conducted on an event-specific basis. Because of the variable nature of such events, the Erie County Department of Homeland Security and Emergency Services assists with the coordination and communication of evacuation routing for the county. County residents can enroll in NY-Alert, a program that allows residents to receive emergency-related information specific to their area. Alerts include severe weather warmings, significant highway closures, hazardous material spills, and other emergency conditions. Residents can receive alerts via text message, phone, email, or fax.

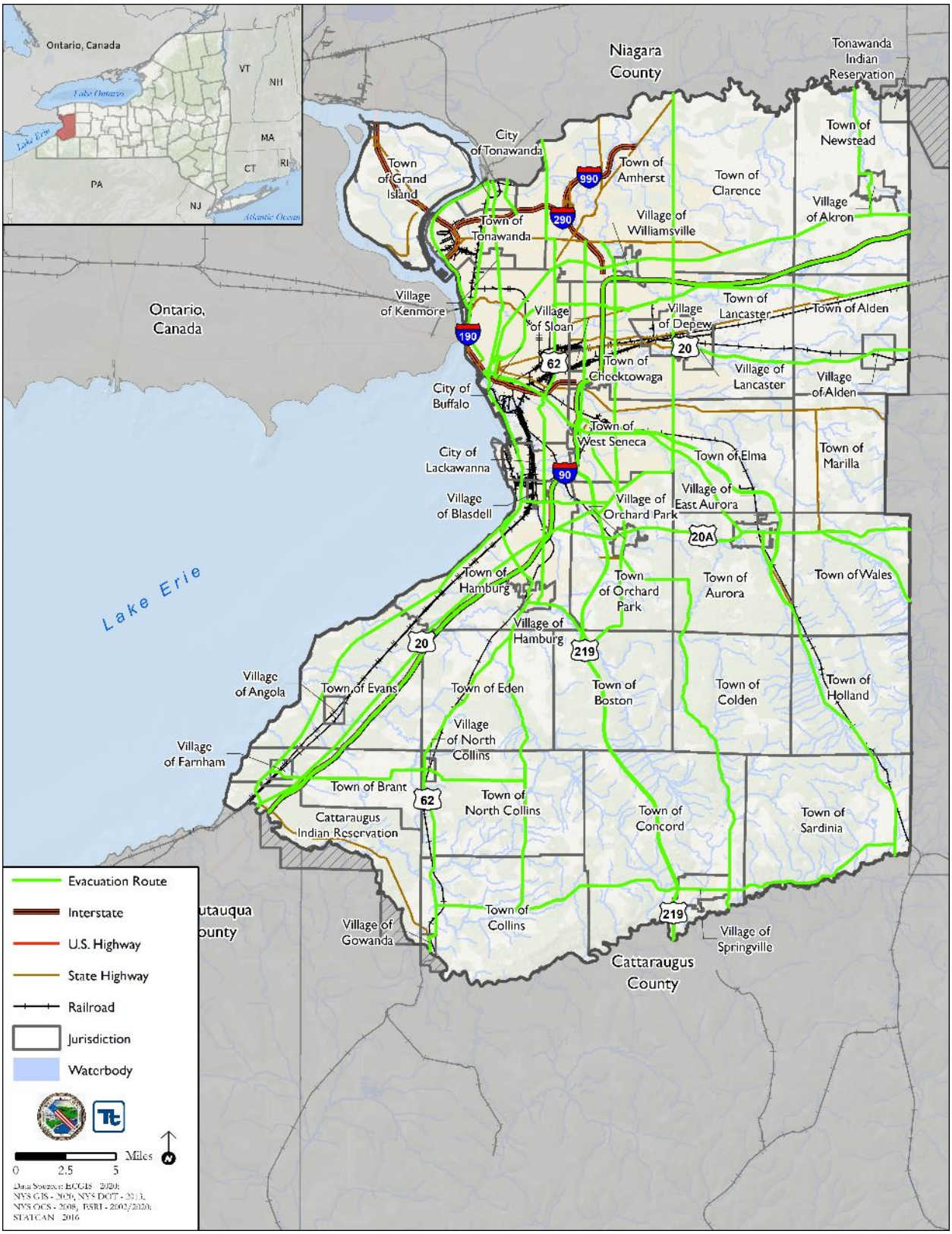
Responsibilities & Priorities

During evacuation, state and local personnel are responsible for clearing roadways of debris and making repairs. State responsibilities including clearing debris from impacted roadways and public property. Local responsibilities include removing debris to a storage/disposal site. Priorities for debris removal after an evacuation are as follows:

- First priority – clearing of transportation corridors to allow passage of emergency vehicles
- Second priority – clearing of transportation corridors and other property to allow utility crews access to damaged power lines and other utility infrastructure needing repair to allow for power restoration
- Third priority – other emergency-related needs, as identified by the affected local municipality or by state agencies, and as authorized by the State Coordinating Officer.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-10. Evacuation Routes in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Long-Term Housing

A buildable parcel analysis was conducted to support identification of potential sites suitable for relocating houses out of hazard areas (i.e., the floodplain) or building new homes in the event structures are destroyed by a natural hazard event. The analysis identified potential areas for post-disaster development in accordance with the 2017 NYS DHSES Hazard Mitigation Planning Standards Guide requirement "*to identify long-term housing options for relocating displaced residents to maintain post-disaster social and economic stability"*. The analysis provides an indication of vacant land suitable for development. In this case, vacant land is defined as a parcel that is classified as vacant and is located outside the following hazard areas:

1) FEMA floodplain (1- and 0.2 percent annual chance flood).
2) Wetlands (National Wetlands Inventory; National Land Cover Database)
3) Steep Slopes (Greater than 25% Slope)

The jurisdictional annexes provide maps of potential long-term housing locations in Erie County's municipalities. Developable land displayed on the figures represents the portion of each identified vacant parcels with greater than 50 percent of their land area outside the two above hazard areas.

4.6 CRITICAL FACILITIES

Critical facilities and infrastructure are those that are essential to the health and welfare of the population. These become especially important after any hazard event. Critical facilities are typically defined as police and fire stations, schools, and emergency operations centers. Critical infrastructure can include the roads and bridges that provide ingress and egress and allow emergency vehicles access to those in need and the utilities that provide water, electricity, and communication services to the community. Also included are Tier II facilities (hazardous materials) and rail yards; rail lines hold or carry significant amounts of hazardous materials with a potential to impact public health and welfare in a hazard event.

Critical Facilities are those facilities considered critical to the health and welfare of the population and that are especially important following a hazard. As defined for this HMP, critical facilities include essential facilities, transportation systems, lifeline utility systems, high-potential loss facilities, and hazardous material facilities.

Essential facilities are a subset of critical facilities that include those facilities that are important to ensure a full recovery following the occurrence of a hazard event. For the county risk assessment, this category was defined to include police, fire, EMS, schools/colleges, shelters, senior facilities, and medical facilities.

A comprehensive inventory of critical facilities in Erie County was developed from various sources, including the Erie County Department of Homeland Security and Emergency Services and Department of Environment and Planning, and input from the Steering Committee and Planning Partnership. The inventory of critical facilities presented in this section represents the current state of this effort at the time of publication of the draft HMP and used for the risk assessment in Section 5 (Risk Assessment). The numbers and types of critical facilities and infrastructure identified for this plan are indicated in Appendix F.

4.6.1 Essential Facilities

This section provides information on emergency facilities, hospital and medical facilities, schools, shelters, and senior care and living facilities. For the purposes of this plan, emergency facilities include police, fire, emergency medical services (EMS), and emergency operations centers (EOC). Figure 4-11 shows the location of the facilities and a list of the critical facilities is provided in Appendix F (Critical Facilities).

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Emergency Facilities

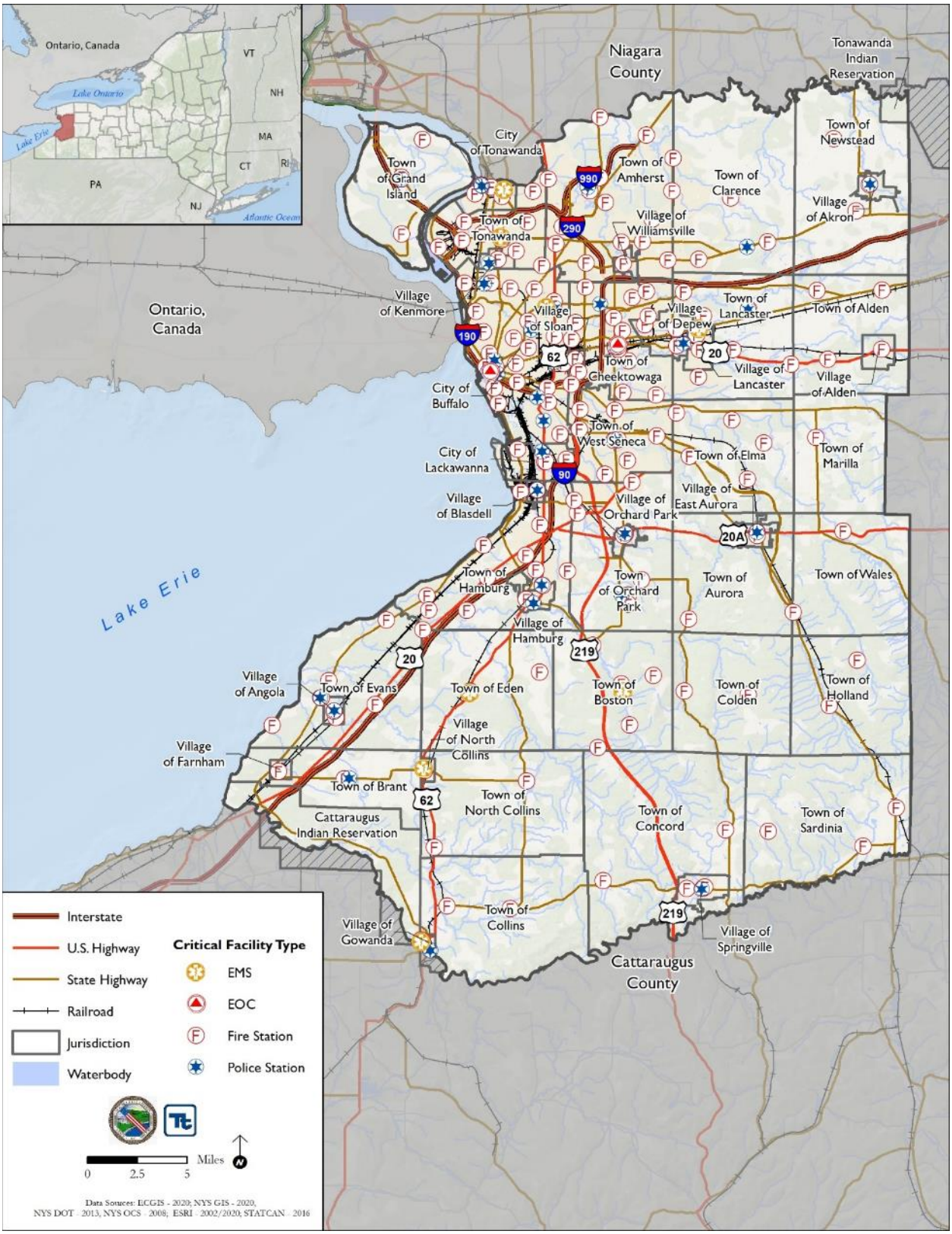
The Erie County Department of Homeland Security and Emergency Services is responsible for coordinating the county's emergency planning and management, including coordination of fire service and emergency medical services, training of first responders, and the creation and maintenance of Comprehensive Emergency Management Plans. The Department works with county departments and other local, state, and federal agencies during an emergency to help protect lives and property, assist those injured, and to provide the rapid restoration of normal services. The Department maintains a countywide radio system consisting of over 3,000 mobile and portable radios, 14 base stations and several radio towers. The Department's specific programs include Fire Safety, Emergency Medical Services, and Homeland Security/Emergency Management/Disaster Preparedness.

- Fire Safety The Fire Safety Division operates from the Emergency Services Training & Operations Center in Cheektowaga, NY. The Fire Safety Office coordinates the recruitment, training and mutual aid operations of our county's 97 fire departments to assist them in serving the needs of the residents, businesses and visitors to their communities.
- Emergency Management The Civil Defense/Disaster Preparedness Division executes the County plan for civil defense and disaster relief before, during and after any type of natural, man-made disaster or war time situation. The activities of this Division are mandated by State Law, with the County maintaining control over certain levels of services.
- Emergency medical services Under the direction of the EMS Division, Medical Emergency Radio System (MERS) Control serves as the County's emergency dispatch center, dispatching ambulances for the City of Buffalo, NYS Thruway and the Buffalo Niagara International Airport (B.N.I.A.). Additionally, MERS Control coordinates the countywide ambulance-to-hospital MERS. MERS Control also acts as the after-hours answering point for the Erie County Department of Emergency Services and the Erie County Department of Health (ECDOH).
- The Emergency Services Communications division COML supports Fire, EMS, Law Enforcement and other public safety related agencies with the design, configuration, repair, installation and programming of portable, mobile and base station radio systems and all of the associated hardware, software, towers, antennas and accessories. These systems encompass 400MHZ two-radio communications and our recent deployment of a new First Responder Alerting Network (www.iamresponding.com) as a secondary means of notification with more than 10,000 users in the county.

The Erie County Sheriff's Office in headquartered in downtown Buffalo , located in the Town of Little Valley, is the primary law enforcement agency in the county, and consists of several main operating Divisions, including the Administrative Civil Enforcement, Jail Management, Professional Standards, Special Services, Reserve and Policing divisions. In addition to the Sheriff's Department, several municipalities have their own police departments. The New York State Police also provide services within the county. There are seven Sheriff substations within the county.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-11. Emergency Facilities in Erie County

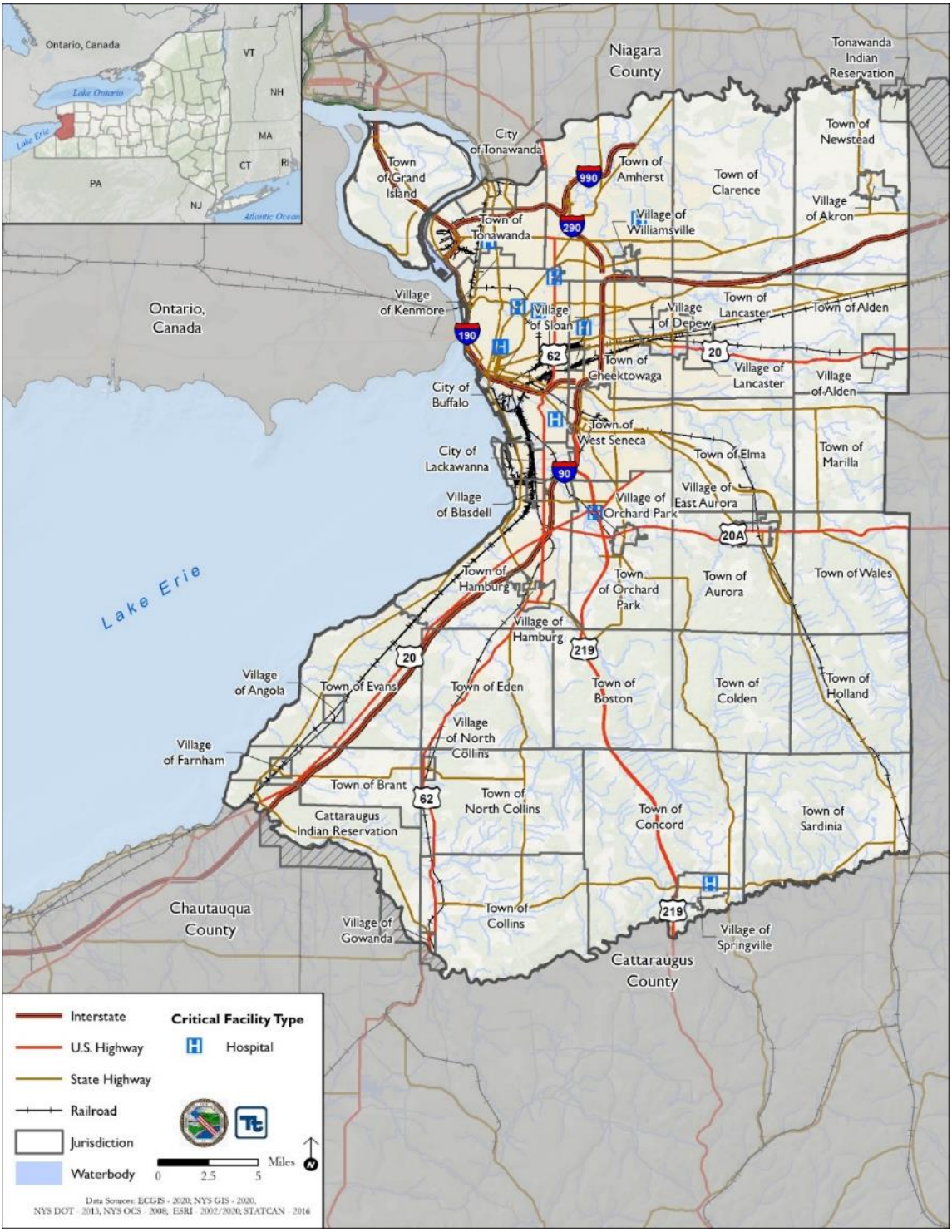


Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hospitals and Medical Facilities

There are 11 major hospitals and medical facilities located within Erie County, six of which are located in the City of Buffalo. The other five are located in Amherst, Cheektowaga, Orchard Park, Springville and Tonawanda.

Figure 4-12. Hospitals in Erie County



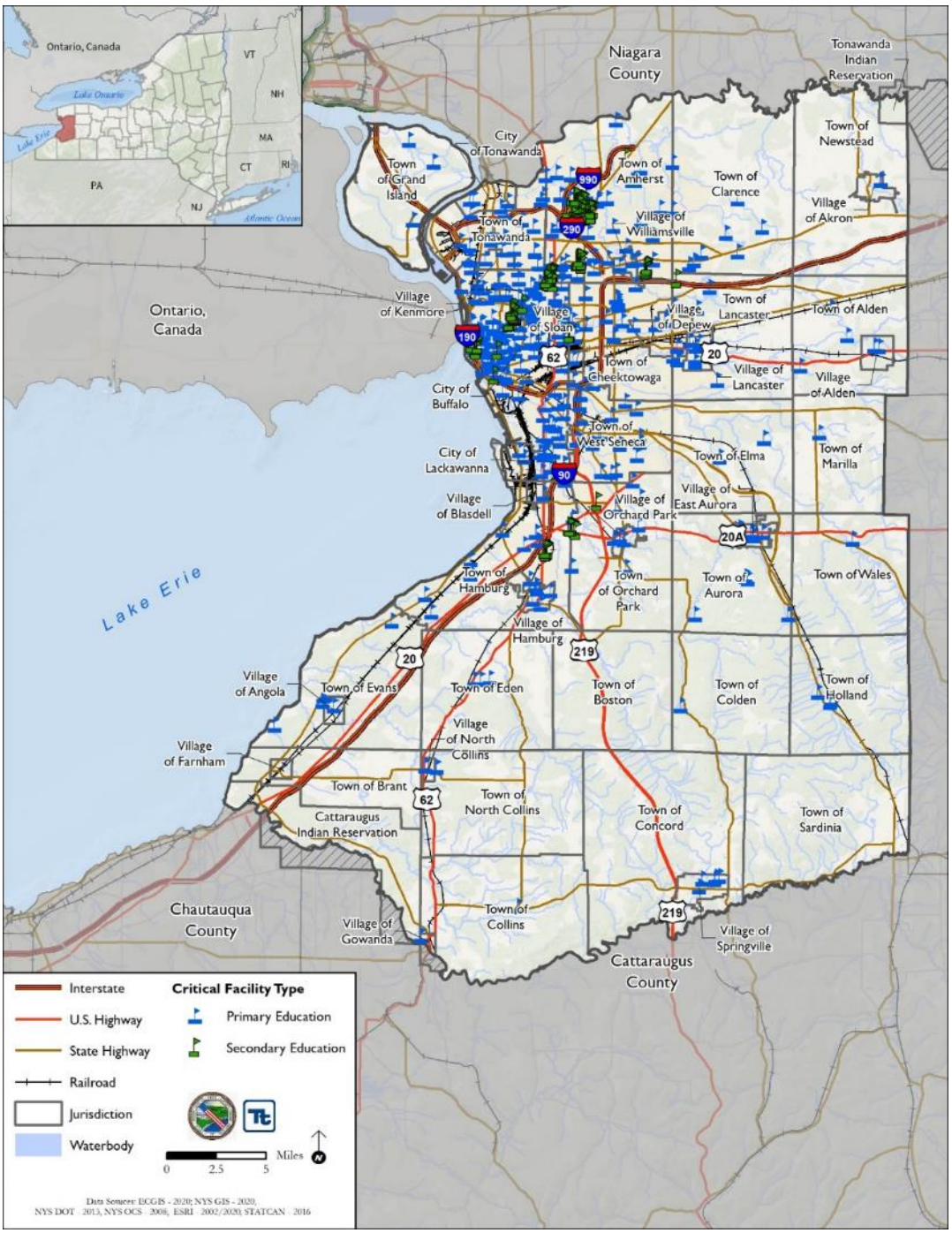
Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Schools

Erie County is home to 32 public school districts. Erie Community College, SUNY Buffalo, Buffalo State College, Canisius College and Daemon College are some of the institutions within the county.

In times of need, schools can function as shelters and are an important resource to the community. Figure 4-13 shows the location of schools within the county.

Figure 4-13. School Buildings within Erie County

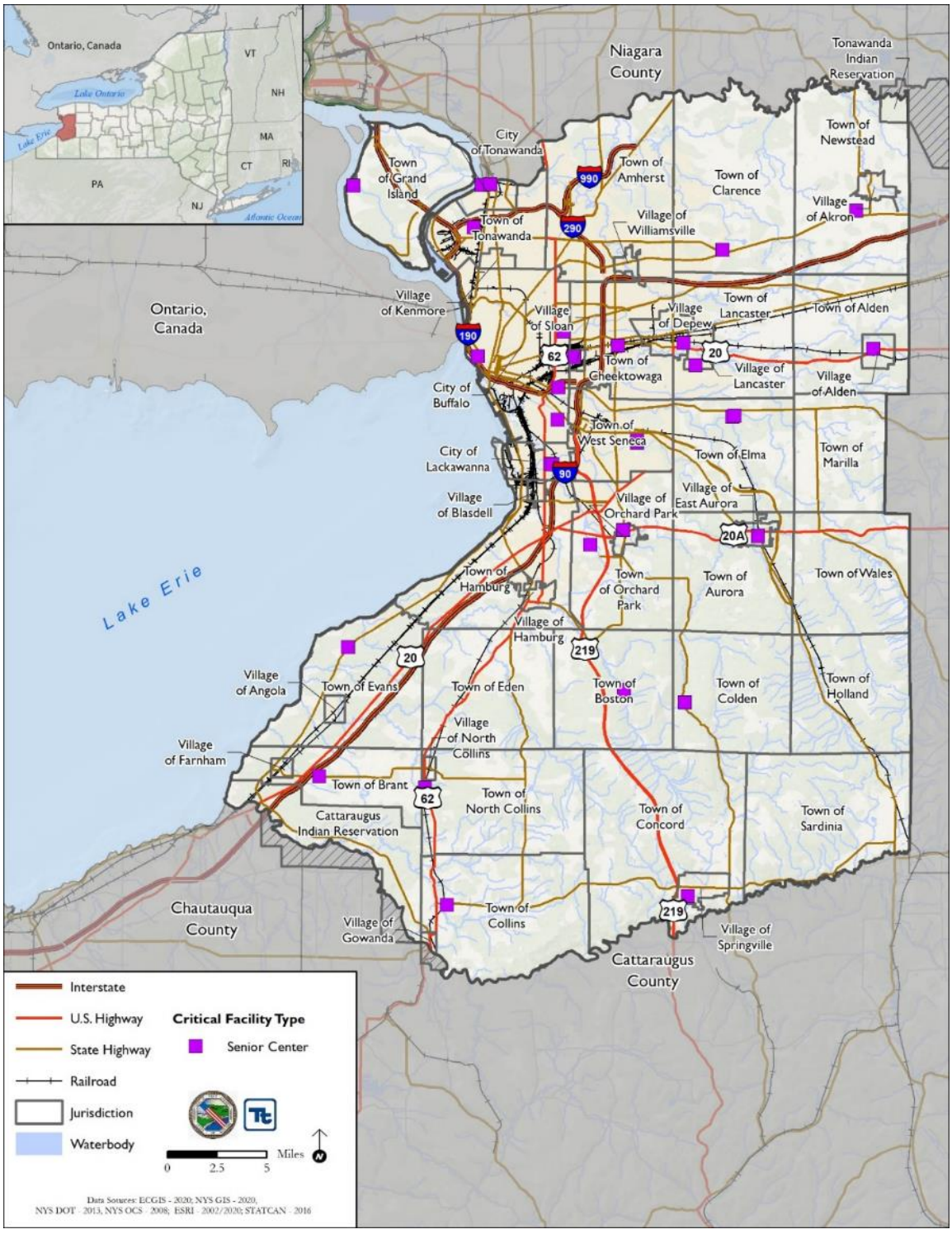


Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Senior Care and Living Facilities

Erie County has 37 senior care facilities. The 2015-2019 American Community Survey 5-Year Estimates identified 161,744 people over the age of 65 living within Erie County. Figure 4-14 shows the location of senior care facilities within the county.

Figure 4-14. Senior Facilities in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.6.2 Transportation Systems

Erie County's transportation network offers residents and employees various options for transportation throughout the county and the region. Three interstate highways traverse the county; Interstate 90, 190, 290 and 990.

Highway, Roadways and Associated Systems

There are 18 state routes that run through the county. The county's Highway Department maintains county roads within all towns. Nearly 3,000 miles of roadways in Erie County are owned by individual municipalities, with most of them identified as being local roadways. The county owns approximately 438 miles of the roads in the county. Transportation features are shown in Figure 4-15.

Airports and Heliports

Air passenger service is provided by the five airports in Erie County. The Greater Buffalo International Airport is by far the largest and best resourced. There are smaller airports in Cheektowaga, Hamburg, Lancater, Newstead and the Buffalo Airpark, which are paved or have grass runways and are most suitable for small private planes, gliders, turboprop, and jet air craft.

Bus and Other Transit Facilities

The Niagara Frontier Transportation Authority (NFTA) operates the public transit system serving Erie County and linking it to Niagara County. The system has over 60 bus routes covering cities and suburbs, and the Metro Rail runs six miles along Main Street in Buffalo. Most routes in the City of Buffalo offer frequent service during peak travel hours, but wait times are higher in outer suburbs where lower density and demand limits the financial feasibility of running buses frequently. NFTA also provides curb-to-curb paratransit services for passengers with disabilities. Other providers offer public transportation to and from rural areas and nearby counties, like the Seneca Transit System,

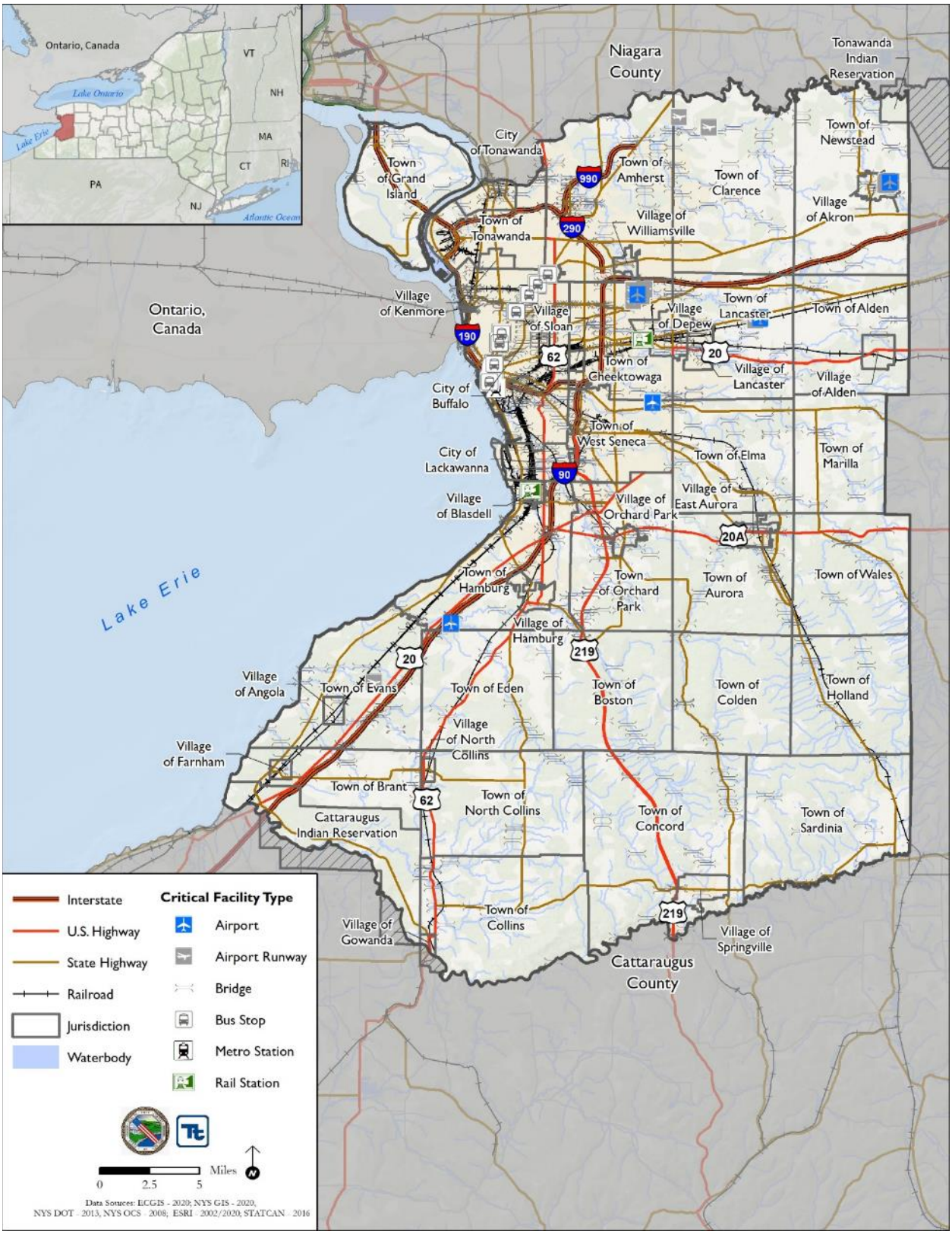
Rideshare services are also present in the county, including Uber and Lyft, although service will be dependent on driver location and availability.

Railroad Facilities

Erie County is served by Amtrak, the national passenger service. Three rail freight companies serve Erie County: the Norfolk Southern, the Buffalo Pittsburgh Railroad and the Buffalo Pittsburgh Railroad. (NYSDOT 2021)

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-15. Transportation Features in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.6.3 Lifeline Utility Systems

This section presents data and information on lifeline utility systems. Lifelines include utility services and infrastructure that provide water, power, and other necessary services to residents. Because of heightened security concerns, some location information for lifelines is not provided in this HMP, although the number of facilities and their general location are considered (as data are available). Additionally, because the majority of power supply lines are privately held, this information is generally difficult to obtain and is not for public release. However, consideration of the utilities in the area is presented below to support the risk assessment in Section 5 (Risk Assessment).

Potable Water

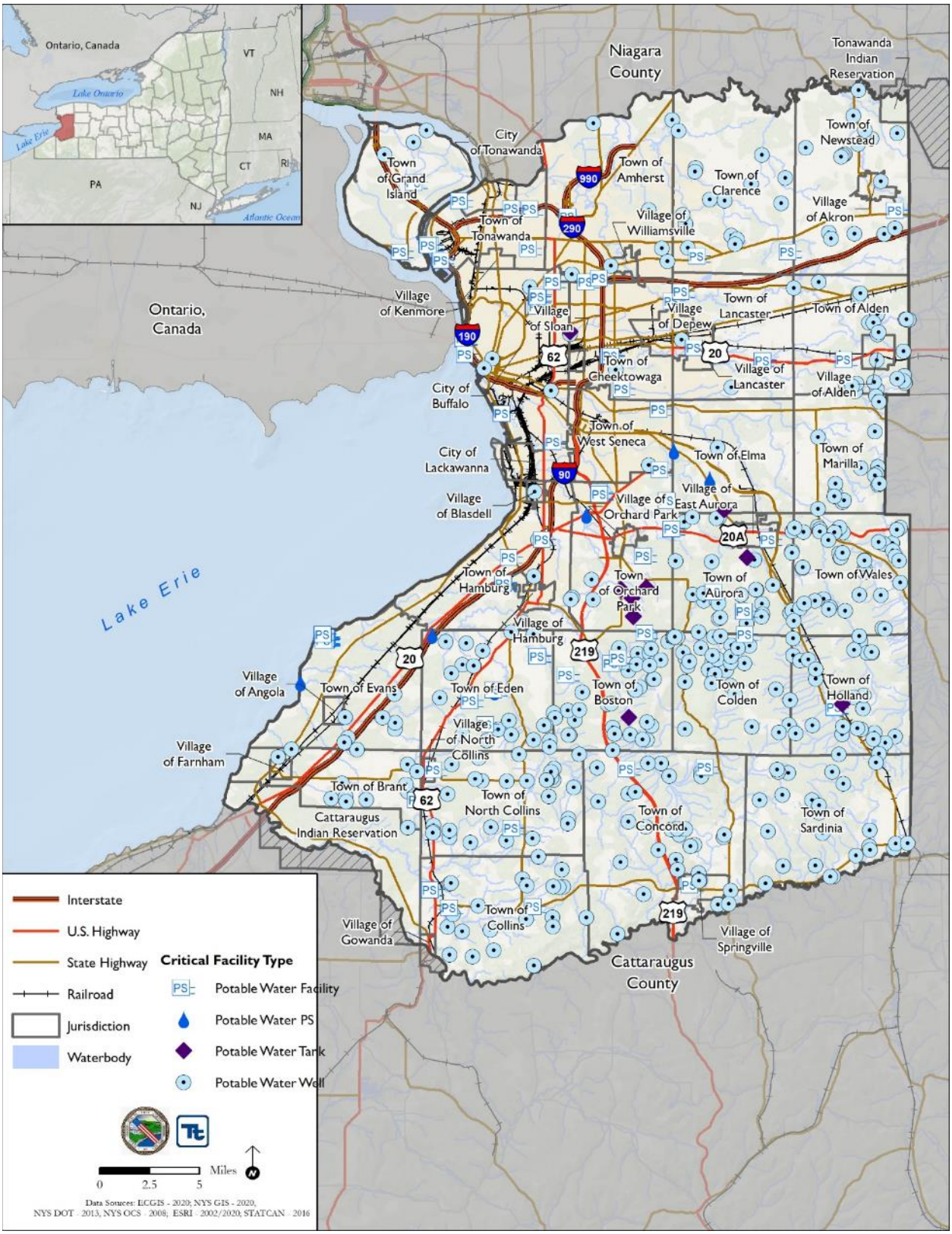
Because of the rural nature of the county, the most common sources of potable water within Erie County are municipal and private sources. Private sources of water include drilled wells, driven point wells, and springs. Municipal water supplies (provided by towns and cities) include community water systems, noncommunity water systems, non-transient noncommunity water systems, and water systems regulated as a condition of a "Permit to Operate" issued by the Department of Health. The Erie County Water Authority is responsible for ensuring compliance with treatment, reporting, and water quality standards for all public water systems.

The NYS DEC Water Well Information database began documenting potable water wells beginning in 2000, and currently reports 386 new wells drilled within the county since that date.

Figure 4-16 identifies potable water facilities in Erie County.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-16. Potable Water Facilities in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

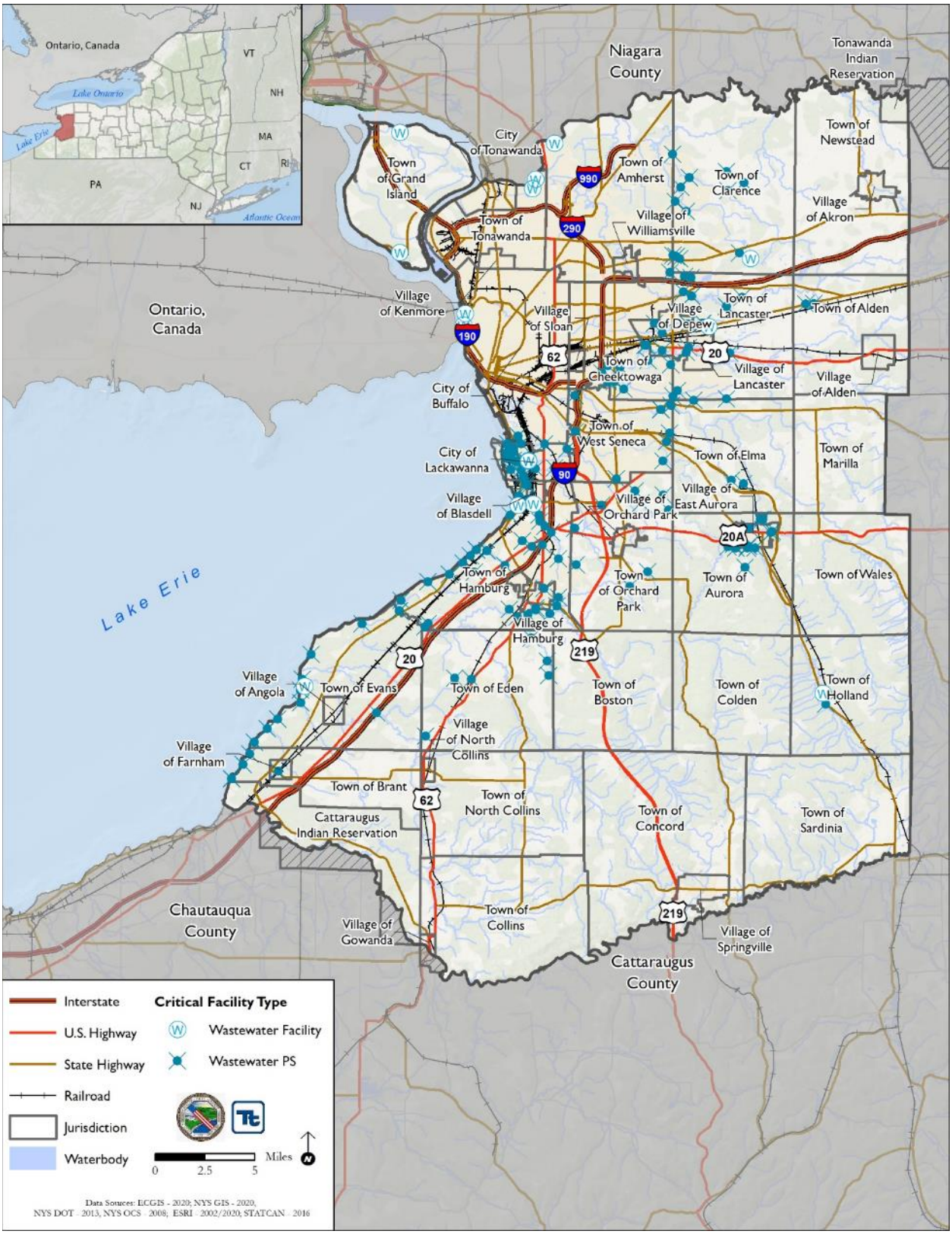
Wastewater Facilities

Municipal wastewater treatment services are provided by wastewater treatment plants, wastewater treatment facilities, and sewage treatment plants. Private wastewater treatment within Erie County includes septic systems and sand filters. Where municipal sewage treatment is not available, on-site septic systems are used. Soil quality in the county is variable, resulting in many parts of the county being unsuitable for on-site wastewater treatment. Undersized or unmaintained on-site septic systems can be an issue, particularly in the drinking watersheds, where exposure and runoff can impair water quality.

During the planning process, the Steering Committee and Planning Partnership identified 16 wastewater treatment facilities in Erie County. Additionally, 187 wastewater pump stations were identified. These facilities and pump stations are displayed in Figure 4-17.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-17. Wastewater Facilities in Erie County

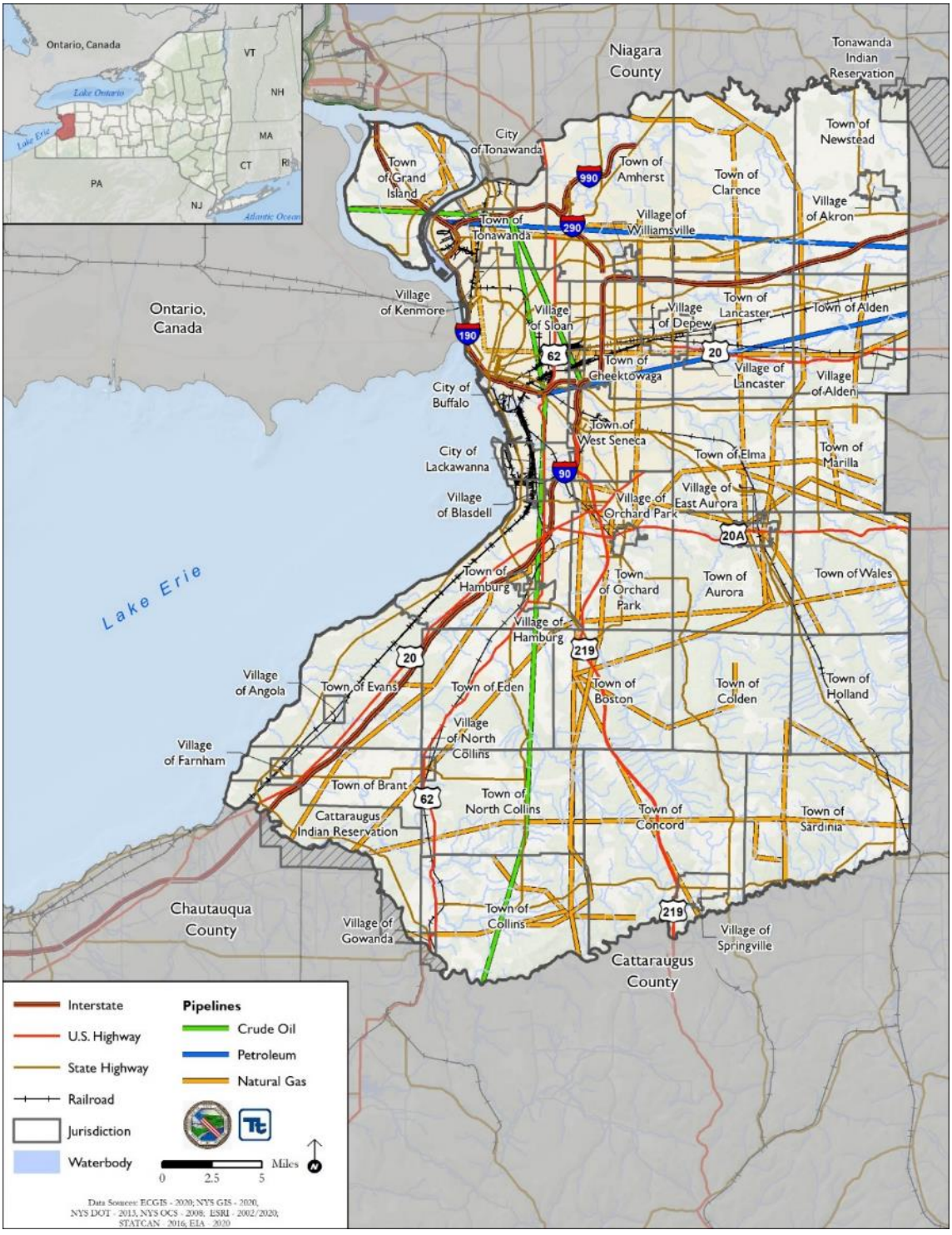


Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Energy Resources

Gas and oil are transmitted through the County primarily by National Fuel Gas Distribution Company, Tennessee Gas, and Empire Pipeline Company. Numerous natural gas, petroleum, and crude oil pipelines cross the county. Figure 4-18 shows the location of pipelines in Erie County.

Figure 4-18. Pipelines in Erie County

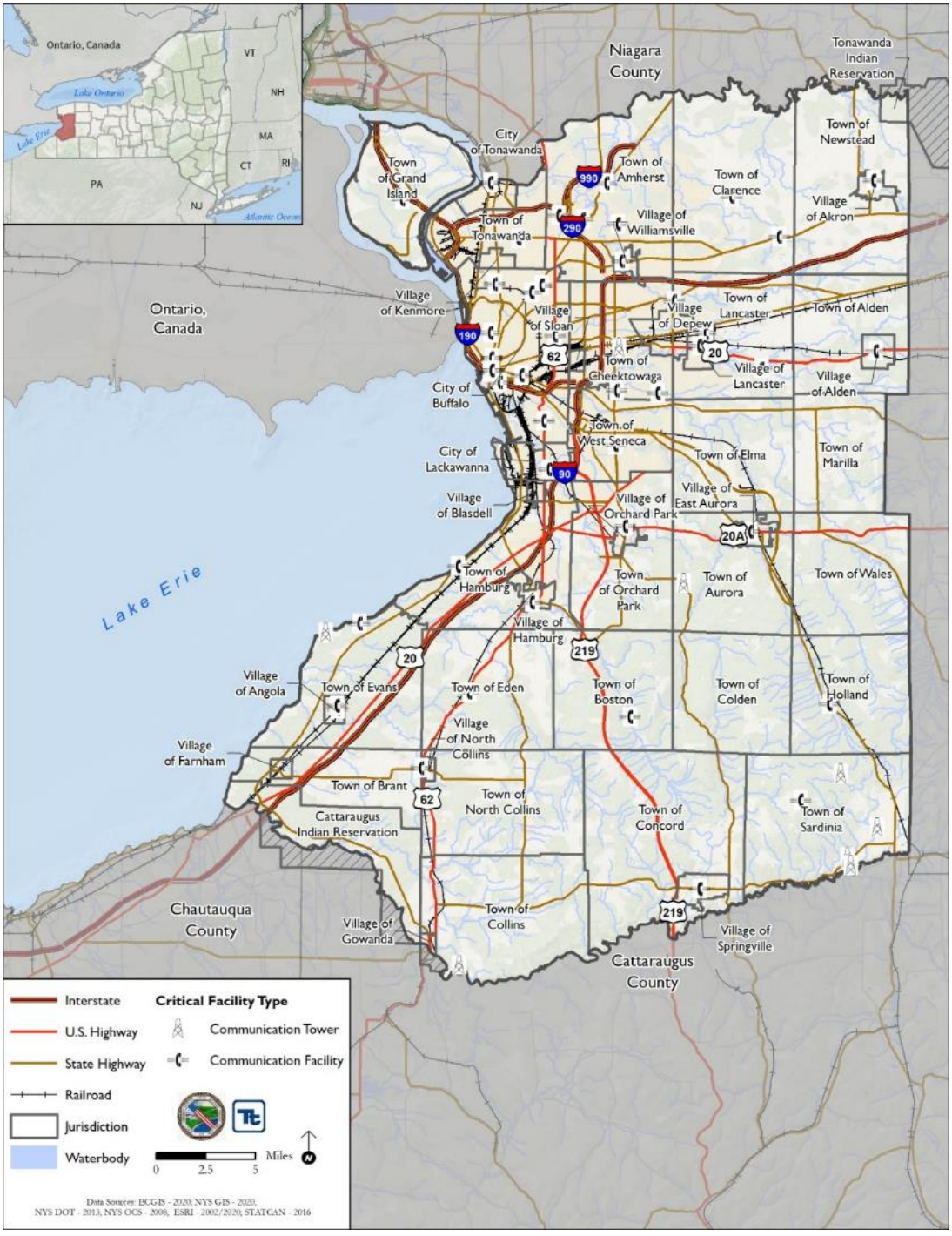


Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Communications

Erie County is served by a variety of communications systems, including traditional land line and cellular service provided by multiple companies, such as Verizon, AT&T, and Sprint. In addition to land line, fiber optic, and cellular communications systems, Erie County has an extensive radio communications network that is utilized by emergency services agencies, hospitals, law enforcement, public works, transportation, and other supporting organizations. Communication facilities within Erie County are shown in Figure 4-19.

Figure 4-19. Communication Facilities within Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

4.6.4 High-Potential Loss Facilities

High-potential loss facilities include dams, levees, hazardous materials (HAZMAT) facilities, nuclear power plants, and military installations. Dams and levees are discussed below.

HAZMAT Facilities

A Superfund site consists of land in the United States that has been contaminated by hazardous waste and identified by the U.S. Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment. These sites are placed on the National Priorities List (NPL). The NPL contains the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.

Abandoned hazardous waste sites placed on the federal NPL include those that the EPA has determined present "a significant risk to human health or the environment," with the sites being eligible for remediation under the Superfund Trust Fund Program. As of 2020, Erie County contains two hazardous sites in the Federal Superfund Program that are included on the NPL (CERCLIS 2020).

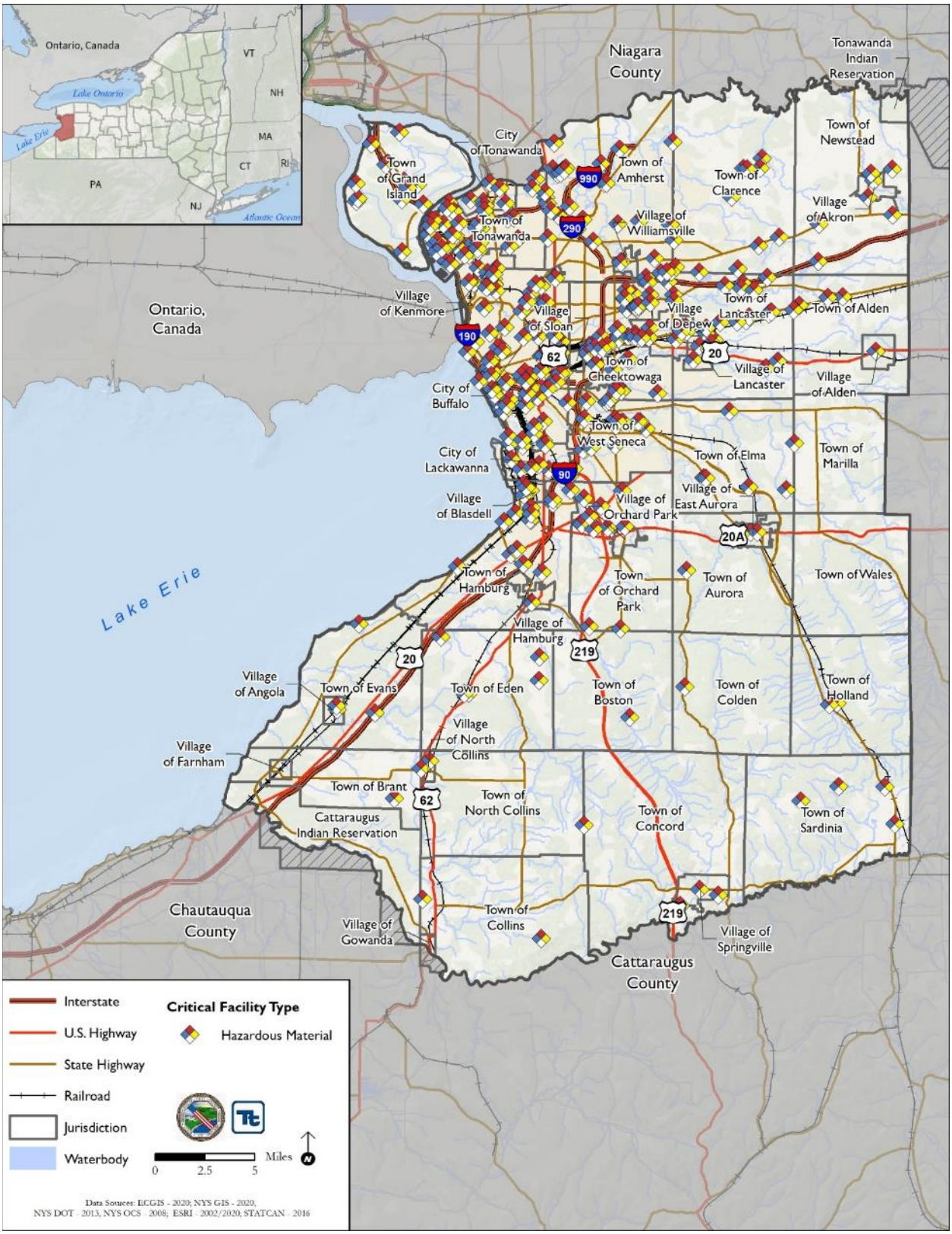
Superfund sites are contaminated locations, requiring a long-term response to clean up hazardous materials; NPL sites are included. The EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) (Superfund) Public Access Database (CPAD) reports currently three archived Superfund site are located in Erie County (CERCLIS 2020). An archived Superfund site is a site with no further interest under the Federal Superfund Program based on available information and that is no longer part of the CERCLIS inventory.

In addition to the hazardous waste sites, there are numerous hazardous facilities in Erie County cataloged by the NYSDEC's Bulk Storage Program Database. The Bulk Storage Program includes three types of facilities; Petroleum Bulk Storage (PBS), Major Oil Storage Facilities (MOSF), and Chemical Bulk Storage (CBS). Registration with NYSDEC is mandatory for all PBS facilities with a total storage capacity of 1,100 gallons or more; all CBS underground tanks and all stationary aboveground tanks with a capacity of 185 gallons or more; and all MOSF sites storing more than 400,000 gallons of petroleum products. As of March 2021, 2,904 sites are listed in the NYSDEC's Bulk Storage Program Database in Erie County, New York (New York State Department of Environmental Conservation [NYSDEC] 2021).

Figure 4-20 identifies HAZMAT facilities identified by Erie County.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-20. HAZMAT Facilities within Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dams and Levees

Dams

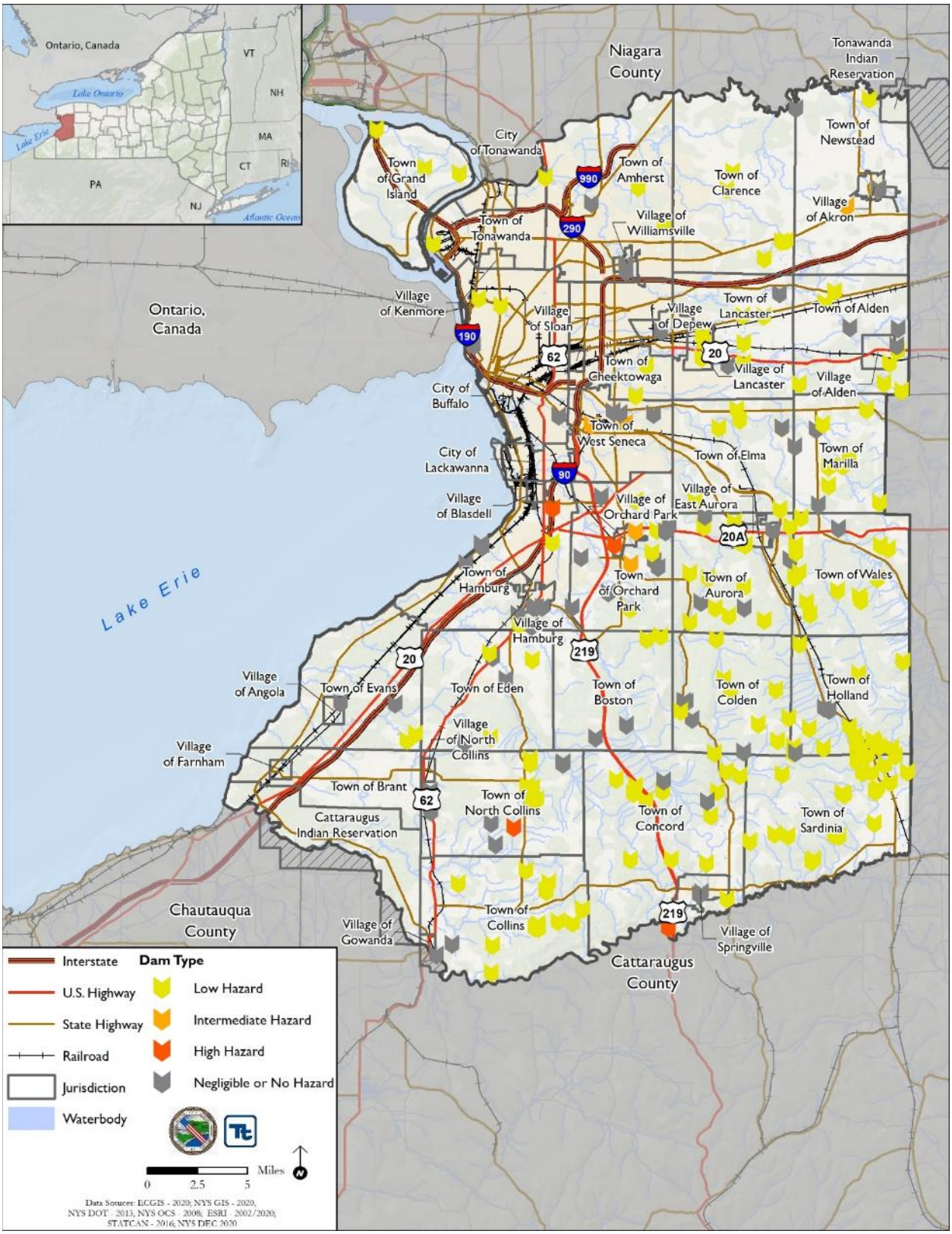
According to the NYSDEC Division of Water Bureau and Flood Protection and Dam Safety, there are three hazard classifications of dams in New York State. The dams are classified in terms of potential for downstream damage if the dam were to fail. The hazard classifications are as follows:

- *Low Hazard (Class A)* is a dam located in an area where failure will damage nothing more than isolated buildings, undeveloped lands, or township or county roads and/or will cause no significant economic loss or serious environmental damage. Failure or operation problems would result in no probable loss of human life. Losses are principally limited to the owner's property.
- *Intermediate Hazard (Class B)* is a dam located in an area where failure may damage isolated homes, main highways, and minor railroads; interrupt the use of relatively important public utilities; and will cause significant economic loss or serious environmental damage. Failure or operation problems would result in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns. Class B dams are often located in predominantly rural or agricultural areas but may also be located in areas with population and significant infrastructure.
- *High Hazard (Class C)* is a dam located in an area where failure may cause loss of human life; serious damage to homes, industrial, or commercial buildings; important public utilities; main highways or railroads; and will cause extensive economic loss. This is a downstream hazard classification for dams in which excessive economic loss (urban area including extensive community, industry, agriculture, or outstanding natural resources) would occur as a direct result of dam failure.

The New York State Inventory of Dams, identifies 164 dams in Erie County: 164 low hazard, 5 intermediate hazard, 4 high hazard, 73 negligible or no hazard classification (NYSDEC, 2020). Figure 4-21 shows dam locations in Erie County.

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 4-21. Dam Locations in Erie County



Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Levees

Nine accredited levee systems are present within Erie County. These were constructed by the United State Army Corps of Engineers and area operated and maintained by the New York State Department of Environmental Conservation. The locations of these levee systems are displayed in Figure 4-22.

The Blasdell Creek Left Bank levee system protects a population of 192 people, 82 structures and an estimated property value of $30,310,075.74

The Cayuga Creek-Cheektowaga levee system is located on the right bank of Cayuga Creek in the Town of Cheektowaga, NY. It extends from the Union Road Bridge to 1,600 feet upstream of the bridge. The total levee length is 0.28 miles, with an average height of six feet and a protected Leveed Area of 35.2 acres. The levee system, including channel, has prevented greater than an estimated $7,153,000 of flood damages since completion.

The Cayuga Creek-Lancaster-Left Bank levee system is located on the left bank of Cayuga Creek in the Village of Lancaster, NY. It extends from to Lake Ave. to Penora St. in the Village of Depew, NY. The levee system total length is 1 mile, average height is 8 feet and the leveed area is 64 acres. A flood in the area behind the level could impact approximately 447 people, 207 commercial and residential structures, and could cause an estimated $ $75,987,510.00million in flood-related damage (USACE, 2020).

Cayuga Creek - Lancaster - Right Bank - Legion Field The levee system is located on the right bank (looking downstream) of Cayuga Creek in the Village of Lancaster, NY. It extends from Park Blvd. to the Broadway bridge in the Village of Lancaster. The levee system is 0.37 miles long, with an average height of eight feet and a leveed area of 23.7 acres. A flood in the area behind the level could impact approximately 184 people, 88 commercial and residential structures, and could cause an estimated $ $25,310,670.00 in flood-related damage (USACE, 2020).

Cayuga Creek - Lancaster - Right Bank - St. Mary's The levee system is located on the right bank (looking downstream) of Cayuga Creek in the Village of Lancaster, NY. It extends from St. Mary's St. at the water tower to St. Mary's St. west of the cemetery. The levee system is 0.42 miles long, with an average height of six feet and a leveed area of 30 acres. A flood in the area behind the level could impact approximately 56 people, 24 commercial and residential structures, and could cause an estimated $6,689,480.00 in flood-related damage (USACE, 2020).

Ellicott Creek-Amherst levee system. The levee system is located on the right bank (looking downstream) of Ellicott Creek in the Town of Amherst, NY. It extends from the Hidden Creek Ct. residential community to the Maple Rd. bridge. The levee system is 0.21 miles in length, with an average of three feet height and a leveed area of 11.5 acres. A flood in the area behind the level could impact approximately 55 people, 14 commercial and residential structures, and could cause an estimated $4,579,550.00 in flood-related damage (USACE, 2020).

Scajaquada Creek - Cheektowaga - Main Stem The levee system is located on the left bank of Scajaquada Creek in the Town of Cheektowaga, NY. It extends from downstream of Central Blvd. to upstream of Harlem Rd. The levee system is 0.44 miles long, with an average height of 3.5 feet and a leveed area of 70.4 acres. A flood in the area behind the level could impact approximately 427 people, 202 commercial and residential structures, and could cause an estimated $58,203,900.00 in flood-related damage (USACE, 2020).

Scajaquada Creek - Cheektowaga – Tributary T-3 The levee system is located on the right bank (looking downstream) of Tributary T-3 in the Town of Cheektowaga, NY. It extends from the downstream limit of Tributary T-2A to George Urban Blvd. The levee system total length is 0.36 miles, with an average height of 3.5 feet and a leveed area of 26.9 acres. A flood in the area behind the level could impact approximately 380 people, 132 commercial and residential structures, and could cause an estimated $12,940,760.00 in flood-related damage

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

(USACE, 2020).

Scajaquada Creek - Cheektowaga – Tributary 3B The levee system is located on the right bank of Tributary T-3B in the Town of Cheektowaga, NY. It extends between Dick Rd. and Union Rd. The levee system is 0.18 miles long, with an average height of 2.5 feet and a leveed area of 22.4 acres. A flood in the area behind the level could impact approximately 122 people, 52 commercial and residential structures, and could cause an estimated $13,348,750.00 in flood-related damage (USACE, 2020).

Figure 4-22. Levee System Locations in Erie County

Source: USACE, 2021

Attachment: 07-Section-4-County-Profile-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 5 . RISK ASSESSMENT

A risk assessment is the process of measuring the potential loss of life, personal injury, and economic and property damage resulting from identified hazards. Identifying potential hazards and vulnerable assets allows planning personnel to address and reduce hazard impacts, and allows emergency management personnel to establish early response priorities. Results of the risk assessment are used in subsequent mitigation planning processes, including determining and prioritizing mitigation actions that reduce each jurisdiction's risk to a specified hazard. Past, present, and future conditions must be evaluated to most accurately assess risk for the county and each jurisdiction. The process focuses on the following elements:

- **Hazard identification**—Use all available information to determine what types of hazards may affect a jurisdiction.
- **Profile each hazard**—Understand each hazard in terms of:
  - Extent—Severity of each hazard.
  - Location—Geographic area most affected by the hazard.
  - Previous occurrences and losses
  - Impacts of Climate Change
  - Probability of Future Hazard Events
- **Assess Vulnerability**
  - Exposure identification—Estimate the total number of assets in the jurisdiction that are likely to experience a hazard event if it occurs by overlaying hazard maps with the asset inventories.
  - Vulnerability identification and loss estimation—Assess the impact of hazard events on the people, property, economy, and lands of the region, including estimates of the cost of potential damage or cost that can be avoided by mitigation.
  - Future changes that may impact vulnerability—Analyze how demographic changes, projected development and climate change impacts can alter current exposure and vulnerability.

This section presents the Erie County risk assessment and is outlined as follows:

- Methodology and tools used to conduct the risk assessment
- Identification of hazards of concern that impact Erie County
- Hazards of concern profiles and vulnerability assessment
- Hazard ranking

5.1 METHODOLOGY AND TOOLS

The Erie County risk assessment was updated using the following best-available information:

- A new building stock inventory was generated using Microsoft's 2018 building footprints, 2020 RSMeans cost adjustment values, and 2020 tax assessor and parcel data.
- 2015-2019 American Community Survey 5-year Population Estimates were utilized.
- A critical facility was generated and reviewed by the Planning Partnership and county jurisdictions.
- Lifelines were identified in the critical facility inventory to align with Federal Emergency Management Agency's (FEMA) lifeline definition.
- Hazards-U.S. (Hazus) was used to estimate potential impacts to the flood, wind, and seismic hazards.
- Best-available hazard data were used, as described in this section.

The following sections summarize the asset inventories, methodology and tools used to support the risk assessment process.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.1.1 Asset Inventories

Erie County assets were identified to assess potential exposure and loss associated with the hazards of concern. For the HMP update, Erie County assessed exposure and vulnerability of the following types of assets: population, buildings and critical facilities and infrastructure, new development, and the environment. Some assets may be more vulnerable because of their physical characteristics or socio-economic uses. To protect individual privacy and the security of critical facilities, information on properties assessed is presented in aggregate, without details about specific individual personal or public properties. Each asset type is described below.

The risk assessment included the collection and use of an expanded and enhanced asset inventory to estimate hazard exposure and vulnerability.

Population

Total population statistics from the 2015-2019 American Community Survey (ACS) 5-year estimate were used to estimate the exposure and potential impacts to the county's population in place of the 2010 U.S. Census block estimates. To determine population statistics for village and towns, village population totals were subtracted from the total town population. Where villages were split between towns and counties, the percentage of the geographic area of the village within each town and county was calculated and applied to the total population to estimate the population in the village within Erie County. Population counts at the jurisdictional level were averaged among the residential structures in the county to estimate the population at the structure level. This estimate provides a more precise distribution of population across the county compared to only using the Census block or Census tract boundaries. Limitations of these analyses are recognized, and thus the results are used only to provide a general estimate for planning purposes.

FEMA's Hazus program was used to model estimated potential losses to flood, seismic and wind hazards; as discussed further later in this section. Hazus still contains 2010 U.S. Census data and was used to estimate sheltering and injuries as part of the hazard analysis.

As discussed in Section 4, County Profile, research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. Vulnerable populations in Erie County included in the risk assessment are children, elderly, population below the poverty level, non-English speaking individuals, and persons institutionalized with a disability.

Buildings

A custom general building stock was created countywide. The general building stock was updated countywide with a custom-building inventory using the 2018 Microsoft building stock inventory data set. The building inventory attributes were updated using parcel tax assessor information provided by Erie County GIS. Attributes provided in the associated files were used to further define each structure, such as year built, number of stories, basement type, occupancy class, and square footage. The centroid of each building footprint was used to estimate the building location. Structural and content replacement cost values (RCV) were calculated for each building using the available assessor data, the building footprint, and RSMeans 2020 values. The analysis used a location factor associated by location zip-code, which produced location factors of 1.01 and 1.05 for residential and non-residential occupancy classes, respectively. RCV is the current cost of returning an asset to its pre-damaged condition using present-day cost of labor and materials. Total RCV consists of both the structural cost to replace

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

a building and the estimate value of contents of a building. The occupancy classes available in Hazus were condensed into the categories of residential, commercial, industrial, agricultural, religious, governmental, and educational to facilitate analysis and presentation of results. Residential loss estimates addressed both multi-family and single-family dwellings.

Critical Facilities and Lifelines

A critical facility inventory, which includes essential facilities, utilities, transportation features and user-defined facilities, was created by the Planning Partnership and county jurisdictions. The development involved a review for accuracy, additions or deletions of new or moved critical assets, identification of backup power for each asset (if known) and whether the critical facility is considered a lifeline in accordance with FEMA's definition (refer to Appendix F, Critical Facilities). To protect individual privacy and the security of assets, information is presented in aggregate, without details about specific individual properties or facilities.

*A **lifeline** provides indispensable service that enables the continuous operation of critical business and government functions, and is critical to human health and safety, or economic security (FEMA).*

Environment and Land Use Area

National land use land cover data created by the U.S. Geological Survey (USGS) in 2016 was used to assess land use characteristics of the county. This dataset was converted from a raster to a vector polygon, which informed spatial areas of residential, non-residential, and natural land use areas. Residential land-use types incorporated all classes listed as developed land use, except for those identified as vacant (i.e., Developed – Low Intensity, Developed – Medium Intensity, Developed – High Intensity). Non-residential land-use types included all other classes. Within non-residential land-use types, natural land areas were extracted into a new category, which includes barren land, forest, water, and wetlands. The natural land areas were referenced to calculate the total acres of natural land area exposed to hazard areas of concern.

New Development

In addition to assessing the vulnerability of the built environment, Erie County examined recent development over the last 5 years and anticipated new development in the next 5 years. Each jurisdiction was asked to provide a list by parcel ID or address of major development that has taken place within these timeframes.

New development was identified as (1) anticipated in the next 5 years and (2) recently developed over the last 5 years. An exposure analysis was conducted in geographic information system (GIS) to determine hazard exposure to these development sites. Projects built on multiple parcels were assessed as one unit. If one parcel identified within the project boundary intersected a spatial hazard layer, the entire project was considered "exposed" to the hazard area of concern.

Identifying these changes and integrating new development into the risk assessment provides communities information to consider when developing the mitigation strategy to reduce these vulnerabilities in the future (one tool in the Mitigation Toolbox discussed in Section 6, Mitigation Strategy. The new development is listed in Section 4, County Profile, and hazard exposure analysis results are presented in Section 9, Jurisdictional Annexes, as a table in each annex.

5.1.2 Methodology

To address the requirements of the DMA 2000 and to better understand potential vulnerability and losses associated with hazards of concern, Erie County used standardized tools, combined with local, state, and federal data and expertise to conduct the risk assessment. Three different levels of analysis were used depending upon

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

the data available for each hazard as described below. Table 5.1-1 summarizes the type of analysis conducted by hazard of concern.

1. **Historic Occurrences and Qualitative Analysis** – This analysis includes an examination of historic impacts to understand potential impacts of future events of similar size. In addition, potential impacts and losses are discussed qualitatively using best-available data and professional judgement.
2. **Exposure Assessment** – This analysis involves overlaying available spatial hazard layers, or hazards with defined extent and locations, with assets in GIS to determine which assets are located in the impact area of the hazard. The analysis highlights which assets are located in the hazard area and may incur future impacts.
3. **Loss Estimation** — The FEMA Hazus modeling software was used to estimate potential losses for the following hazards: flood, earthquake, and hurricane. In addition, an examination of historic impacts and an exposure assessment was conducted for these spatially-delineated hazards.

Table 5.1-1. Summary of Risk Assessment Analyses

Hazard	Population	General Building Stock	Critical Facilities	New Development
Coastal Erosion	E	E	E	E
Cyber Security	Q	Q	Q	Q
Earthquake	E, H	E, H	E, H	E
Expansive Soils	E	E	E	E
Extreme Temperature	Q	Q	Q	Q
Flood	E, H	E, H	E, H	E
Hazmat	E	E	E	E
Landslide	E	E	E	E
Pandemic	Q	Q	Q	Q
Severe Storm	H	H	H	Q
Severe Winter Storm	Q	Q	Q	Q
Utility Failure	Q	Q	Q	Q
Wildfire	E	E	E	E

Notes: E = Exposure analysis; H = Hazus analysis; Q = Qualitative analysis

Hazards U.S. – Multi-Hazard (Hazus-MH)

In 1997, FEMA developed a standardized model for estimating losses caused by earthquakes, known as Hazards U.S. or Hazus. Hazus was developed in response to the need for more effective national-, state-, and community-level planning and the need to identify areas that face the highest risk and potential for loss. Hazus was expanded into a multi-hazard methodology, Hazus with new models for estimating potential losses from wind (hurricanes) and flood (riverine) hazards. Hazus is a GIS-based software tool that applies engineering and scientific risk calculations, which have been developed by hazard and information technology experts, to provide defensible damage and loss estimates. These methodologies are accepted by FEMA and provide a consistent framework for assessing risk across a variety of hazards. The GIS framework also supports the evaluation of hazards and assessment of inventory and loss estimates for these hazards.

Hazus uses GIS technology to produce detailed maps and analytical reports that estimate a community's direct physical damage to building stock, critical facilities, transportation systems and utility systems. To generate this information, Hazus uses default data for inventory, vulnerability, and hazards; this default data can be supplemented with local data to provide a more refined analysis. Damage reports can include induced damage (inundation, fire, threats posed by hazardous materials and debris) and direct economic and social losses

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

(casualties, shelter requirements, and economic impact) depending on the hazard and available local data. Hazus' open data architecture can be used to manage community GIS data in a central location. The use of this software also promotes consistency of data output now and in the future and standardization of data collection and storage. More information on Hazus is available at http://www.fema.gov/hazus.

In general, modeled losses were estimated in the program using depth grids for the flood analysis and probabilistic analyses were performed to develop expected or estimated distribution of losses (mean return period losses) for hurricane wind and seismic hazards. The probabilistic model generates estimated damages and losses for specified return periods (e.g., 100- and 500-year). Table 5.1-2 displays the various levels of analyses that can be conducted using the Hazus software.

Table 5.1-2. Summary of Hazus Analysis Levels

Hazus Analysis Levels	
Level 1	Hazus provides hazard and inventory data with minimal outside data collection or mapping.
Level 2	Analysis involves augmenting the Hazus provided hazard and inventory data with more recent or detailed data for the study region, referred to as "local data"
Level 3	Analysis involves adjusting the built-in loss estimation models used for the hazard loss analyses. This Level is typical done in conjunction with the use of local data.

Coastal Erosion

Best-available data were used to assess Erie County's vulnerability to coastal erosion. The New York State Department of Environmental Conservation (NYS DEC) has paper maps from 1988 that show the Coastal Erosion Hazard Area (CEHA) of the Towns of Bryant, Evans, and Hamburg. Although dated, the NYS DEC commissioner is tasked to review the boundaries of these hazard areas every 10 years and after major coastal storms and to revise the maps if the CEHA boundary changed by 25 feet or more. These CEHA buffers were digitized for the available towns and exposure was analyzed. The City of Tonawanda, City of Lackawanna, City of Buffalo, Town of Grand Island, and Town of Tonawanda also sit along the shore of Lake Erie, but do not have CEHA maps available.

Cyber Security

All of Erie County is exposed to cyber security attack events. A qualitative assessment was conducted to assess Erie County's risk to cyber security attacks. Information from the U.S. Department of Homeland Security, FEMA, and NYS Department of Financial Services were referenced to review the county's overall risk.

Earthquake

A probabilistic assessment was conducted for Erie County for the 500-year mean return period (MRPs) through a Level 2 analysis in Hazus to analyze the earthquake hazard and provide a range of loss estimates. The probabilistic method uses information from historic earthquakes and inferred faults, locations and magnitudes, and computes the probable ground shaking levels that may be experienced during a recurrence period by Census tract.

As noted in the Hazus Earthquake User Manual, "*Although the software offers users the opportunity to prepare comprehensive loss estimates, it should be recognized that uncertainties are inherent in any estimation methodology, even with state-of-the-art techniques. Any region or city studied will have an enormous variety of buildings and facilities of different sizes, shapes, and structural systems that have been constructed over a range of years under diverse seismic design codes. There are a variety of components that contribute to transportation and utility system damage estimations. These components can have differing seismic resistance*" (FEMA 2020). However, Hazus' potential loss estimates are acceptable for the purposes of this HMP.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Ground shaking is the primary cause of earthquake damage to man-made structures and soft soils amplify ground shaking. One contributor to the site amplification is the velocity at which the rock or soil transmits shear waves (S-waves). The National Earthquake Hazard Reductions Program (NEHRP) has developed five soil classifications defined by their shear-wave velocity that impact the severity of an earthquake. The soil classification system ranges from A to E, where A represents hard rock that reduces ground motions from an earthquake and E represents soft soils that amplify and magnify ground shaking and increase building damage and losses. Class D and E NEHRP soils are the two classes most susceptible to amplified ground motion during an earthquake.

An exposure analysis was conducted for the county's assets (population, building stock, critical facilities, and new development) using NEHRP soil data provided by New York State and the national landslide susceptibility data where landslide susceptibility was listed as high susceptibility. The exposure analysis focused on soil types that would experience amplified ground motion during an earthquake (i.e., Class D and E). Assets with their centroid in the hazard areas were totaled to estimate the numbers and values vulnerable to these soil types.

Data from New York State were used in Hazus to replace default NEHRP soils. Groundwater was set at a depth of 5 feet (default setting). The default assumption is a magnitude 7.0 earthquake for all return periods. Although damages are estimated at the census tract level, results were presented at the municipal level. Because there are multiple Census tracts that contain more than one jurisdiction, an area analysis was used to extract the percent of each tract that falls within individual jurisdictions. The percentage was multiplied against the results calculated for each tract and summed for each jurisdiction.

Damage estimates are calculated for losses to buildings (structural and non-structural) and contents; structural losses include load carrying components of the structure, and non-structural losses include those to architectural, mechanical, and electrical components of the structure, such as nonbearing walls, veneer and finishes, HVAC systems, boils, etc.

Expansive Soils

Soils data from the U.S. Department of Agriculture (USDA) and Natural Resources Conservation Service (NRCS) were used to determine the expansive soils hazard areas in Erie County. Soil classes that have a linear extensibility, or the shrink-swell potential, of greater than 3-percent were considered expansive soils. The NRCS Soil Report defines linear extensibility as, "the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state." The report separates linear extensibility over a range (volume change) by depth (inches). The average of the median linear extensibility was calculated for each soil type. If the linear extensibility was greater than 3 and less than or equal to 6, it was considered to have moderate linear extensibility. There are 31 types of soils that are considered to have moderate linear extensibility, with no rating higher than 5.7. An exposure analysis was implemented by overlaying the asset inventory layers and the expansive soils hazard area. Assets with their centroid located in the hazard area were totaled to estimate the totals and values exposed to expansive soils.

Extreme Temperatures

All of Erie County is exposed to extreme temperature events. A qualitative assessment was conducted for the extreme temperatures hazard. Information from the Centers for Disease Control and Prevention, the National Weather Service, U.S. Environmental Protection Agency (EPA), and the Planning Partnership were used to assess the potential impacts to the county's assets.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Flood

The 1- and 0.2-percent annual chance flood events were examined to evaluate the county's risk from the flood hazard. These flood events are generally those considered by planners and evaluated under federal programs such as NFIP.

The following data were used to evaluate exposure and determine potential future losses for this plan update:

- The Erie County FEMA Effective Digital Flood Insurance Rate Map (DFIRM) dated June 2019
- The Erie County FEMA Preliminary Digital Flood Insurance Rate Map (DFIRM) dated February 2019
- The depth grid developed by using data from the NYOIT 1-meter Resolution Digital Elevation Model (DEM), and the 2019 FEMA preliminary and effective DFIRM

The preliminary and effective Erie County FEMA DFIRM published in 2019 were used to evaluate exposure and determine potential future losses. In the cases where there was a new preliminary panel, the preliminary DFIRM was used. This was combined with the effective DFIRM for all other areas. The depth grid generated using the DFIRM and 1-meter DEM was integrated into the Hazus riverine flood model and used to estimate potential losses for the 1-percent annual chance flood event.

To estimate exposure to the 1-percent- and 0.2-percent annual chance flood events, the DFIRM flood boundaries were overlaid on the centroids of updated assets (population, building stock, critical facilities, and new development). Centroids that intersected the flood boundaries were totaled to estimate the building RCV and population vulnerable to the flood inundation areas. A Level 2 Hazus riverine flood analysis was performed. Both the critical facility and building inventories were formatted to be compatible with Hazus and its Comprehensive Data Management System (CDMS). Once updated with the inventories, the Hazus riverine flood model was run to estimate potential losses in Erie County for the 1-percent annual chance flood events. A user-defined analysis was also performed for the building stock. Buildings located within the floodplain were imported as user-defined facilities to estimate potential losses to the building stock at the structural level. Hazus calculated the estimated potential losses to the population (default 2010 U.S. Census data across dasymetric blocks), potential damages to the general building stock, and potential damages to critical facility inventories based on the depth grids generated and the default Hazus damage functions in the flood model.

Hazardous Materials

Overall, potential losses from hazardous materials (hazmat) incidents are difficult to quantify due to the many variables and human elements. Data regarding this hazard were obtained from Erie County and the Planning Partnership as well as appropriate state and federal resources.

The exposure analysis was conducted for the county's assets (population, building stock, critical facilities, and new development) using a radius around potential HazMat incident sites as follows: exposure within 0.5 mile of highways, exposure within 0.5 mile of railways, exposure within 0.5 mile of pipelines, and exposure within an individually unique area of hazmat facilities. Assets with their centroids in one or more of these hazard areas were considered vulnerable to a hazardous material incident.

Landslide

An exposure assessment was conducted using a steep slope layer to determine the county's risk to the landslide hazard. A steep slope layer was created using the 2019 NYOIT 1-meter DEM. The DEM was converted to percent slope and slopes greater than 25 percent were selected. The county's assets (population, buildings, critical facilities, and new development) were examined to determine if they are built in areas of steep slopes (greater than 25 percent).

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Pandemic

All of Erie County is considered exposed to disease outbreak events. A qualitative analysis was conducted using data from the county's Coronavirus Disease 2019 (COVID-19) resource website and research from the Centers for Disease Control and Prevention to review the county's risk to illnesses, including the most recent COVID-19 outbreak.

Severe Storm

A Hazus probabilistic analysis was performed to analyze the wind hazard losses for Erie County for the 100- and 500-year MRP events. The probabilistic Hazus hurricane model activates a database of thousands of potential storms that have tracks and intensities reflecting the full spectrum of Atlantic hurricanes observed since 1886 and identifies those with tracks associated with Erie County. Hazus contains data on historic hurricane events and wind speeds. It also includes surface roughness and vegetation (tree coverage) maps for the area. Surface roughness and vegetation data support the modeling of wind force across various types of land surfaces. Default demographic and updated building and critical facility inventories in Hazus were used for the analysis. Although damages are estimated at the census tract level, results were presented at the municipal level. Because there are multiple census tracts that contain more than one jurisdiction, a density analysis was used to extract the percent of building structures that fall within each tract and jurisdiction. The percentage was multiplied against the results calculated for each tract and summed for each jurisdiction.

Severe Winter Storm

All of Erie County is exposed and vulnerable to the winter storm hazard. In general, structural impacts include damage to roofs and building frames, rather than building content. Current modeling tools are not available to estimate specific losses for this hazard. A percentage of the custom-building stock structural replacement cost value was utilized to estimate damages that could result from winter storm conditions (i.e., 1-percent, 5-percent, and 10-percent of total replacement cost value). Given professional knowledge and currently-available information, the potential losses for this hazard are considered to be overestimated; hence, providing a conservative estimate for losses associated with winter storm events.

Utility Failure

To assess the county's vulnerability to the utility failure hazard and its associated impacts, a qualitative assessment was conducted. Information from the Erie County Water Authority, EPA, and FEMA were referenced to assess the potential impacts to the county's assets from utility failure.

Wildfire

The Wildland-Urban Interface (Interface and Intermix) obtained through the SILVIS Laboratory, Department of Forest Ecology and Management, University of Wisconsin – Madison, was referenced to delineate wildfire hazard areas. The University of Wisconsin – Madison wildland fire hazard areas are based on the 2010 Census and 2006 National Land Cover Dataset and the Protected Areas Database. For this risk assessment, the high-, medium-, and low-density interface areas were combined and used as the "Interface" hazard area, and the high-, medium-, and low-density intermix areas were combined and used as the "Intermix" hazard areas.

To determine what assets are exposed to wildfire, available and appropriate GIS data were overlaid with the hazard area. Assets with their centroid located in the hazard area were totaled to estimate the totals and values exposed to a wildfire event.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Considerations for Mitigation and Next Steps

The following items are to be discussed for considerations for the next plan update to enhance the vulnerability assessment:

- All Hazards
  - Create an updated user-defined general building stock dataset using up-to-date parcels, footprints, and RSMeans values.
  - Utilize updated and current demographic data. If 2020 U.S. Census demographic data are available at the U.S. Census block level during the next plan update, use the Census block estimates and residential structures for a more precise distribution of population, or the current American Community Survey 5-Year Estimate populations counts at the Census tract level.
- Earthquake
  - Identify unreinforced masonry in critical facilities and privately-owned buildings (i.e., residences) by accessing local knowledge, tax assessor information, and/or pictometry/orthophotos. These buildings may not withstand earthquakes of certain magnitudes and plans to provide emergency response or recovery efforts at these properties can be developed.
- Extreme Temperatures
  - Track extreme temperature data for injuries, deaths, shelter needs, pipe freezing, agricultural losses, and other impacts to determine distributions of most at-risk areas.
- Flood
  - The general building stock inventory can be updated to include attributes regarding first floor elevation and foundation type (basement, slab on grade, etc.) to enhance loss estimates.
  - Conduct a Hazus loss analysis for more frequent flood events (e.g., 10- and 50-year flood events).
  - Conduct a repetitive loss area analysis.
  - Continue to expand and update urban flood areas to further inform mitigation.
  - As more current FEMA floodplain data become available (i.e., DFIRMs), update the exposure analysis and generate a more detailed flood depth grid that can be integrated into the current Hazus version.
- Landslide
  - A pilot study conducted in Schenectady County, NY (Landslide Susceptibility – A Pilot Study of Schenectady County, NY) provided a detailed methodology for delineating high-risk landslide areas. This study looked at a variety of environmental characteristics including slope and soil conditions to determine areas at risk to landslide. To coincide with the methodology of that study, the generated slopes were categorized into five classes: 0 to 2 percent; 3 to 7 percent; 8 to 15 percent; 16 to 25 percent; Greater than 25 percent. Should the county determine the need for a more detailed assessment of risk, it could determine steep slope by other percent categorizations. Additional environmental and soil characteristics used in the Schenectady County plan can be collected and used to follow the methodology used to further delineate the county's most at-risk areas.
- Pandemic
  - As more information has been collected about COVID-19, future assessments should consider adding an evaluation of how the county responded to the pandemic. It should identify critical facilities that have vulnerabilities/limitations to respond effectively, as well as major transit routes that connect the community to facilities that help treat or vaccinate patients impacted by the pandemic.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Severe Storm
  - The general building stock inventory can be updated to include attributes regarding protection against strong winds, such as hurricane straps, to enhance loss estimates.
  - Integrate evacuation route data that are currently being developed.
- Wildfire
  - General building stock inventory can be updated to include attributes such as roofing material or fire detection equipment or integrate distance to fuels as another measure of vulnerability.

5.1.3 Data Source Summary

Table 5.1-3 summarizes the data sources used for the risk assessment for this plan.

Table 5.1-3. Risk Assessment Data Documentation

Data	Source	Date	Format
Population data	U.S. Census Bureau; American Community Survey 5-Year Estimates	2010; 2019	Digital (GIS) format
Building Inventory	Erie Parcel Data, Microsoft Building Footprints, Tetra Tech	2018/2020	Digital (GIS) format
Wildfire Fuel Hazard	University of Wisconsin - Madison	2010	Digital (GIS) format
Critical facilities	Erie Planning Partnership and County Jurisdictions	2020	Digital (GIS) format
Digitized Effective FIRM maps	FEMA	2019	Digital (GIS) format
Digitized Preliminary FIRM maps	FEMA	2019	Digital (GIS) format
Expansive Soils	USDA/NRCS	2020	Report
NEHRP Soil	NYS	n.d.	Digital (GIS) format
Rail Network	NYS DOT	2013	Digital (GIS) format
Road Network	NYS GIS	2020	Digital (GIS) format
1-Meter Digital Elevation Model	New York Office of Information Technology	2019	Tif
New Development Data	Erie Planning Partnership and County Jurisdictions	2020	Digital (GIS) Format

Notes: DOT = Department of Transportation
FEMA = Federal Emergency Management Agency
NRCS = Natural Resources Conservation Service
USDA = U.S. Department of Agriculture

Limitations

Loss estimates, exposure assessments, and hazard-specific vulnerability evaluations rely on the best-available data and methodologies. Uncertainties are inherent in any loss estimation methodology and arise in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from the following:

1) Approximations and simplifications necessary to conduct such a study
2) Incomplete or dated inventory, demographic, or economic parameter data
3) The unique nature, geographic extent, and severity of each hazard
4) Mitigation measures already employed by the participating municipalities
5) The amount of advance notice residents have to prepare for a specific hazard event
6) Uncertainty of climate change projections

These factors can result in a range of uncertainty in loss estimates, possibly by a factor of two or more. Therefore, potential exposure and loss estimates are approximate. These results do not predict precise results and should be used to understand relative risk. Over the long term, Erie County will collect additional data and update and refine existing inventories to assist in estimating potential losses.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Potential economic loss is based on the present value of the general building stock using best-available data. The county acknowledges significant impacts may occur to critical facilities and infrastructure as a result of these hazard events causing great economic loss. However, monetized damage estimates to critical facilities and infrastructure, and economic impacts were not quantified and require more detailed loss analyses. In addition, economic impacts to industry such as tourism and the real-estate market were not analyzed.

Attachment: 08-Section-5.1-Methodology-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.2 IDENTIFICATION OF HAZARDS OF CONCERN

To provide a strong foundation for mitigation actions considered in Section 6 (Mitigation Strategy) and Section 9 (Jurisdictional Annexes), Erie County focused on considering a full range of hazards that could impact the area and then identified and ranked those hazards that presented the greatest concern. The hazard of concern identification process incorporated input from the county and participating jurisdictions; review of the New York State Hazard Mitigation Plan (NYS HMP 2019); review of the 2015 Erie County HMP (2015 Erie County Multi-Jurisdictional Hazard Mitigation Plan); research and local, state, and federal information on the frequency, magnitude, and costs associated with the various hazards that have previously or could feasibly impact the region; and qualitative or anecdotal information regarding natural (not man-made) hazards and the perceived vulnerability of the study area's assets to them. Table 5.2-1 documents the process of identifying the natural hazards of concern for further profiling and evaluation. Specific hazards not identified as a hazard of concern for Erie County will not be further discussed in detail.

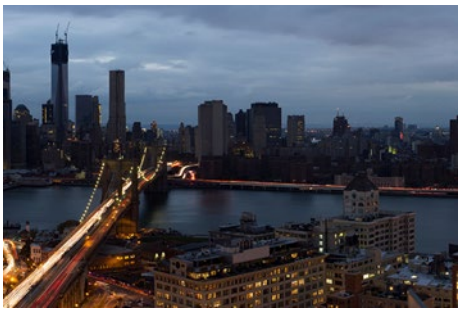
Hazards of Concern are those hazards that are considered most likely to impact a community. These are identified using available data and local knowledge.

Natural Hazards are those hazards that are a source of harm or difficultly created by a meteorological, environmental, or geological event.

5.2.1 Changes from 2015 Hazard Mitigation Plan

The 2015 Erie County Hazard Mitigation Plan did not identify Cyber Security, Hazardous Materials, Pandemic, or Utility Failure as hazards of concern. Members of the Steering Committee and Planning Partnership identified all four of these hazards as hazards of concern for the 2022 Hazard Mitigation Plan Update.

The 2022 Erie County Hazard Mitigation Plan includes best available data throughout the plan to present an updated understanding of Erie County's risk.



Source: NYIS (2019)

5.2.2 Hazard Groupings

The Steering Committee approved use of the following hazard event groupings which are the same as those provided by the Federal Emergency Management Agency (FEMA) guidance documents (*FEMA 386-2 Understanding Your Risks, Identifying Hazards and Estimating Losses*; *Multi-Hazard Identification and Risk Assessment – The Cornerstone of the National Mitigation Strategy*; *Local Mitigation Planning Handbook*), and with consideration of hazard grouping in the NYS HMP.

Coastal Erosion is one of the primary hazards leading to loss of lives or damage to property and infrastructure in coastal areas. Many natural factors affect erosion of the shoreline, including shore and near-shore morphology, shoreline orientation, and the response of these factors to storm frequency and sea-level rise.

A *Cyber Security* incident involves either the theft or modification of information on government agency computer systems or a system compromise with the potential to disrupt essential services.

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

An *Earthquake* is the sudden movement of the earth's surface caused by the release of stress accumulated within or along the edge of the earth's tectonic plates, a volcanic eruption, or a man-made explosion.

The *Expansive Soil* hazard involves soils and soft rock that tend to swell or shrink due to changes in moisture content are known as expansive soils. Expansive soils are often referred to as swelling clays because clay materials are most susceptible to swelling and shrinking. Changes in soil volume present a hazard primarily to structures built on expansive soils. The most extensive damage occurs to highways and streets.

The *Extreme Temperature* hazard includes both heat and cold events, which can have a significant impact to human health, commercial/agricultural businesses, and primary and secondary effects on infrastructure (e.g., burst pipes and power failure). What constitutes "extreme cold" or "extreme heat" can vary across different areas of the country based on what the population is accustomed to. The 2022 HMP considers the heat island effect that occurs within developed areas.

The *Flood* hazard includes riverine flooding, flash flooding, shallow flooding, ice jam flooding, urban drainage flooding, and dam failure flooding. Inclusion of the various forms of flooding under a general *Flood* hazard is consistent with that used in FEMA's *Multi-Hazard Identification and Risk Assessment* guidance and the NYS HMP.

The *Hazardous Materials* profile includes materials and wastes that are considered severely harmful to human health and the environment, as defined by the U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (also known as Superfund). Many hazardous materials are commonly used substances, which are harmless in their normal uses but are quite dangerous if released.

The *Landslide* hazard includes rock falls, rock topples, rotational slump, transitional slide, earth flows, creep, block slides, debris avalanche, and debris flows.

The *Pandemic* hazard exists when there are more cases of a particular disease than expected in a given area, or among a specific group of people, over a particular period of time. An aggregation of cases in a given area over a particular period, regardless of the number of cases, is called a cluster. In an outbreak or epidemic, it is presumed that the cases are related to one another or that they have a common cause.

The *Severe Storm* hazard includes windstorms that often entail a variety of other influencing weather conditions, including thunderstorms, hail, lightning, and tornadoes. Tropical disturbances (hurricanes, tropical storms, and tropical depressions) are often identified as a type of severe storm. For this HMP update, *Severe Storm* includes thunderstorms, hail, lightning, tornadoes, hurricanes, and tropical storms.

The *Severe Winter Storm* hazard includes blizzards, ice storms, snowstorms, sleet, and freezing rain.

The *Utility Failure* hazard is defined as any interruption or loss of electrical service caused by disruption of power transmission from accident, sabotage, natural hazards, or equipment failure (also referred to as a loss of power or power outage). A significant power failure is defined as any incident of a long duration, which would require the involvement of the local and/or state emergency management organizations to coordinate provision of food, water, heating, cooling, and shelter.

The *Wildfire* hazard can be defined as any non-structural fire that occurs in the wildland. Three distinct types of wildland fires have been defined and include naturally occurring wildfire, human-caused wildfire, and prescribed fire. They may be highly destructive and become difficult to control. Wildfires

result in the disturbance of forest and brush and destruction of real estate and personal property and have secondary impacts on other hazards, such as flooding, by removing vegetation and disturbing watersheds.

Other than the Utility Failure hazard profile, technological (e.g., hazardous material incidents) and man-made hazards (e.g., terrorism, man-made dam breaches/failures) are not being addressed in this planning process. The DMA 2000 regulations do not require consideration of such hazards, and due to limited funding, these were not chosen for inclusion in this plan by Erie County and planning participants. The county can expand the scope of this HMP to include other less frequent natural, technological, and man-made hazards as resources permit.

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
Avalanche	No	No	• The New York State Hazard Mitigation Plan (NYS HMP) identifies avalanche as a hazard of concern. • Avalanches can occur in any situation where snow, slope, and weather conditions combine to create proper conditions. About 90 percent of all avalanches start on slopes of 30 to 45 degrees, and about 98 percent of all avalanches occur on slopes of 25 to 50 degrees. The topography of Erie County does not support the occurrence of an avalanche. • New York State, in general, has a very low occurrence of avalanche events based on statistics provided by National Avalanche Center – American Avalanche Association (NAC-AAA) between 1998 and 2018. • Avalanche was identified as a hazard in the NYS HMP, and there have been occurrences in the state; however, there were no occurrences in Erie County. The Steering Committee and Planning Partnership do not consider the hazard to be a significant concern.	• NYS DHSES • NAC-AAA
Coastal Erosion	Yes	Yes	• The NYS HMP identifies coastal erosion as a hazard of concern for New York State. Erosion can impact all of the state's coastal counties along Lake Erie and the Niagara River, Lake Ontario and the St. Lawrence River, Atlantic Ocean and Long Island Sound, Hudson River south of the federal dam in Troy, the East River, the Harlem River, the Kill van Kull and Arthur Kill, and all connecting waterbodies, bays, harbors, shallows, and wetlands. • Erie County is a coastal county, and the Steering Committee and Planning Partnership consider the hazard to be a significant concern.	• NYS DHSES • Input from Steering Committee and Planning Partnership
Dam Failure	Yes	No	• The 2019 NYS HMP does not identify dam failure as a hazard of concern for New York State, though it is included in the Flood hazard profile. • According to the NYS DEC, there are 248 dams within Erie County, as shown in Section 4. Of these 248 dams in Erie County: 164 low hazard, 6 intermediate hazard, 3 high hazard, 63 negligible or no hazard classification, and 12 with no classification code (NYSDEC 2020). • Dam failure is included in the flood profile.	• NYS DHSES • Input from Steering Committee and Planning Partnership • NYSDEC • NYS GIS
Pandemic	Yes	Yes	• The 2019 NYS HMP does not identify disease outbreak as a hazard of concern for New York State. • The county has been impacted by various diseases (influenza, Lyme disease, COVID-19). The Steering Committee and Planning Partnership has identified disease outbreak as a hazard of concern for Erie County.	• NYS DHSES • NYS DEC • Input from Steering Committee and

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
				Planning Partnership
Drought	Yes	No	• The NYS HMP identifies drought as a hazard of concern for the state. Erie County has been impacted by several drought events that have occurred in New York State. • Drought conditions can cause shortages in water for human consumption, impact agricultural production, and lead to reduced local firefighting capabilities. A majority of Erie County relies on groundwater for their potable water, and droughts can impact groundwater resources significantly, limiting the availability of drinking water to county residents. • New York State was included in one FEMA drought-related disaster declaration, which did not include Erie County. • Erie County was included in five recent drought-related U.S. Department of Agriculture (USDA) disaster declarations: o S3441 – Drought – 2012 o S3427 – Drought / Excessive Heat – 2012 o S4023 – Drought / Excessive Heat – 2016 o S4031 – Drought / Excessive Heat – 2016 o S4037 – Drought / Excessive Heat – 2016 • According to the Northeast Regional Climate Center (NRCC), Erie County is in the Western Plateau Climate Division. This division has been impacted by periods of severe and extreme drought, including the following events: o October – November 1985 o November 1908 – January 1909 o October 1930 – June 1931 o November – December 2001 • Despite the occurrence of certain drought events in the county, the Steering Committee and Planning Partnership did not identify drought as a hazard of concern for Erie County.	• NYS DHSES • FEMA • USDA • Input from Steering Committee and Planning Partnership • NOAA-NCEI • NRCC

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
Earthquake	Yes	Yes	• The NYS HMP identified earthquake as a hazard of concern for the state. • Erie County has a peak ground acceleration (PGA) below 3%g. According to the FEMA document "Understanding Your Risks: Identifying Hazards and Estimating Losses", areas with 3%g should conduct a risk assessment for earthquakes. • New York State was included in one FEMA earthquake-related disaster declaration (DR-1415); Erie County was not included in this declaration. • According to the NYS HMP, between 1737 and 2016, there were 550 earthquakes epicentered in the state and numerous earthquakes outside of the state that were felt within the state. From 1996 to 2017, there have been no significant earthquakes epicentered in Erie County. • Based on input from the Steering Committee and Planning Partnership, earthquake has been identified as a hazard of concern for Erie County.	• NYS DHSES • Input from Steering Committee and Planning Partnership • U.S. Geological Survey (USGS) – Earthquake Hazards Program, Review of USGS Seismic Maps
Expansive Soils	Yes	Yes	• The NYS HMP does not identify expansive soils as a hazard of concern for New York State. While a majority of Erie County is underlain by soils with little to no swelling potential, and less than 50% of the area is underlain by soils with abundant clays of slight to moderate swelling potential. The Town of Amherst and certain other areas, however, are potentially significantly by this hazard. • The Steering Committee and Planning Partnership identified expansive soils as a hazard of concern for Erie County.	• NYS DHSES • Input from Steering Committee and Planning Partnership • Review of USGS 1989 Swelling Clays Map of the Conterminous United States
Extreme Temperature	Yes	Yes	• The NYS HMP identifies Coldwaves and Heatwaves as hazards of concern for New York State. • Erie County was included in four recent USDA disaster declarations related to extreme temperature events: ○ S3249 – March 2012 – Frosts and Freezes	• NYS DHSES • Input from Steering Committee and Planning Partnership

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
			○ S3250 – March 2012 – Frosts and Freezes, Unseasonably Warm Temperatures, and Excessive Heat ○ S3427 – June 2012 – Excessive Heat (also included Drought) ○ S3886 – January 2015 – Frosts and Freezes • The Steering Committee and Planning Partnership identified extreme temperature as a hazard of concern for Erie County.	• NOAA-NCEI • USDA
Flood (riverine, ice jam, dam failure, urban flooding, and flash flooding)	Yes	Yes	• The NYS HMP identifies flooding as a hazard of concern for New York State. • Between 1956 and 2020, Erie County was included in 7 FEMA flood-related declarations. ○ FEMA DR 494 March 19, 1976 Severe Ice Storm ○ FEMA DR 1233 June 25, 1998 - July 10, 1998 Severe Storm(s) ○ FEMA DR 1335 May 3, 2000 - August 12, 2000 Severe Storm(s) ○ FEMA DR 1534 May 13, 2004 - June 17, 2004 Severe Storm(s) ○ FEMA DR 1665 October 12, 2006 - October 25, 2006 Severe Storm(s) ○ FEMA DR 1857 August 8, 2009 - August 10, 2009 ○ FEMA DR 4472 October 31, 2019 - November 1, 2019 Severe Storm(s) Based on the history of flooding and its impacts on Erie County and input from the Steering Committee and Planning Partnership, flooding has been identified as a hazard of concern for the county.	• NYS DHSES • Input from Steering Committee and Planning Partnership • FEMA • NOAA-NCEI • USACE CRREL Ice Jam Database
Hailstorm	Yes	Yes	Please see Severe Storm Profile	
Hurricane	Yes	Yes	Please see Severe Storm Profile	
Ice Jams	Yes	Yes	Please see Flood Profile	
Ice Storm	Yes	Yes	Please see Severe Winter Storm Profile	
Invasive Species/Infestation	Yes	No	• The 2019 NYS HMP does not identify invasive species as a hazard of concern for New York State. • New York State has been affected by various instances of invasive ticks and mosquitos. • The NYS DEC has identified Erie County to be located within the emerald ash borer restricted zone and identified several known locations of the emerald ash borer within the county. • The Erie County Steering Committee and Planning Partnership did not identify invasive species or infestation as a hazard of concern within Erie County.	• NYS DEC • Input from Steering Committee and Planning Partnership

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
Land Subsidence	Yes	No	• NYS HMP indicates New York State is vulnerable to land subsidence; however, this hazard is "extremely localized" and poses a "very low risk to population and property", according to the 2019 NYS HMP. • The Steering Committee and Planning Partnership did not identify land subsidence as a hazard of concern for Erie County.	• NYS DHSES • Input from Steering Committee and Planning Partnership • USGS
Landslide	Yes	Yes	• The 2019 NYS HMP includes landslide as a hazard of concern for New York State. • Between 1954 and 2020, New York State has included in one landslide-related disaster declaration, which included Erie County. • Based on previous occurrences and input from the Steering Committee and Planning Partnership, the landslide hazard was identified as a hazard of concern for Erie County.	• NYS DHSES • Input from Steering Committee and Planning Partnership • FEMA
Nor'Easters	No	No	• The Steering Committee and Planning Partnership do not consider Nor'Easters to be a hazard of concern for Erie County.	• NYS DHSES • FEMA • NOAA-NCEI
Severe Storm (windstorms, thunderstorms, hurricanes / tropical storms, hail, and tornadoes)	Yes	Yes	The NYS HMP identifies severe storm as a hazard of concern for New York State; however, for the state HMP, the hazards were profiled in individual sections lightning, hail, tornadoes, high winds, and hurricanes/tropical storms. For the Erie County HMP, the hazards were combined into one profile. Between 1954 and 2020, Erie County was included in seven FEMA severe storm-related declarations. ○ FEMA DR 4472 2019-10-31 Severe Storm(s) ○ FEMA DR 1857 2009-08-08 Severe Storm(s) ○ FEMA DR 1665 2006-10-12 Severe Storm(s) ○ FEMA DR 1534 2004-05-13 Severe Storm(s) ○ FEMA DR 1335 2000-05-03 Severe Storm(s) ○ FEMA DR 1233 1998-06-25 Severe Storm(s) ○ FEMA DR 494 1976-03-19 Severe Ice Storm • Erie County was included in two severe storm-related U.S. Department of Agriculture (USDA) disaster declarations: ○ S3593 – 2013 Excessive rain and related flooding, high winds, and hail	• NYS DHSES • FEMA • NOAA-NCEI • SPC • Input from Steering Committee and Planning Partnership

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
			○ S3885 – 2015 Excessive Rain, High Winds, Hail, Lightning, and Tornado According to the National Environmental Information Center, storm events database indicates that Erie County was impacted by approximately 22 tornado events between 1950 and 2020, causing a total of 6 injuries and approximately $4.7 million in property damage. • Based on previous occurrences and input from the Steering Committee and Planning Partnership, severe storms are identified as a hazard of concern for Erie County.	
Severe Winter Storm (heavy snow, blizzards, ice storms)	Yes	Yes	• The NYS HMP identifies ice storms and snow storms as hazards of concern for New York State. According to the 2019 NYS HMP, Erie County has an annualized count of 6 Severe Winter Storm events, and their annualized winter storm losses are $8 million. • FEMA included Erie County in 22 winter storm-related disaster declarations: ○ DR-494 March 19, 1976 Severe Ice Storm ○ DR-527 February 5, 1977 Snow ○ EM-3027 January 29, 1977 Snow ○ EM-3107 March 13-17, 1993 Snow ○ EM-3136 January 1-15, 1999 Snow ○ EM-3157 November 19-21, 2000 Snow ○ DR-1404/EM-3170 December 24-29, 2001 Snow ○ EM-3268 October 12-25, 2006 Snow ○ DR-4204 November 17-26, 2014 Snow • Based on previous occurrences and input from the Steering Committee and Planning Partnership, severe winter storms are identified as a hazard of concern for Erie County.	• NYS DHSES • FEMA • NOAA-NCEI • Input from Steering Committee and Planning Partnership
Tornado	Yes	Yes	Please see Severe Storm	
Tsunami	No	No	• Tsunami is identified as a hazard of concern in the NYS HMP. • The Steering Committee and Planning Partnership do not consider tsunami to be a hazard of concern for Erie County.	• NYS DHSES • Input from Steering Committee and Planning Partnership
Volcano	No	No	• The NYS HMP identifies volcano as a hazard of concern for New York State. However, the the Steering Committee and Planning Partnership do not consider volcano to be a hazard of concern for Erie County.	• NYS DHSES • Input from Steering

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.2-1. Identification of Natural Hazards of Concern for Erie County

Hazard	Is this a hazard that may occur in Erie County?	If yes, does this hazard pose a significant threat to Erie County?	Why was this determination made?	Source(s)
				Committee and Planning Partnership
Wildfire	Yes	Yes	• The NYS HMP identifies wildfire as a hazard of concern for New York State. • Erie County was not included in any FEMA wildfire-related disaster declarations. • NYS DEC records indicate the possibility that there have been hundreds of wildfires or brush fires in Erie County between 2003–2017. • Based on available data and the nature of the county, the Steering Committee and Planning Partnership identified Wildfire as a hazard of concern.	• NYS DHSES • Input from Steering Committee and Planning Partnership • FEMA
Windstorm	Yes	Yes	Please see Severe Storm	

CRREL *Cold Regions Research and Engineering Laboratory*
DR *Presidential Disaster Declaration Number*
EM *Presidential Disaster Emergency Number*
FEMA *Federal Emergency Management Agency*
NCEI *National Centers for Environmental Information*
NRCC *Northeast Regional Climate Center*
NYS DEC *New York State Department of Environmental Conservation*
NYS DHSES *New York State Division of Homeland Security and Emergency Services*
NYS HMP *New York State Hazard Mitigation Plan*
PGA *Peak ground acceleration*
SPC *Storm Prediction Center*
USDA *U.S. Department of Agriculture*
USGS *United States Geologic Survey*

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the

5.2.3 Summary of Hazards of Concern

In summary, a total of 13 hazards of concern were identified as significant hazards affecting the entire county, to be addressed at the county level in this plan (shown here in alphabetical order):

- Coastal Erosion
- Cyber Security
- Earthquake
- Expansive Soils
- Extreme Temperature
- Flood
- Hazardous Materials
- Landslide
- Pandemic
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

Other hazards of concern that might have occurred in Erie County but have a low potential to occur or result in significant impacts can be considered in future updates to this plan.

Attachment: 09-Section-5.2-Hazard-of-Concern-ID-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

5.3 HAZARD RANKING

As discussed in Section 5.2, Identification of Hazards of Concern, a comprehensive range of natural hazards that pose a significant risk to Erie County was selected and considered during the development of this plan. However, each community in Erie County has differing levels of exposure and vulnerability to each of these hazards. It is important for each community participating in this plan to recognize those hazards that pose the greatest risk to their community and direct their attention and resources accordingly to most effectively and efficiently manage risk and reduce losses. The hazard ranking for the county and each participating jurisdiction can be found in their jurisdictional annexes in Volume II, Section 9 of this plan.

To this end, a hazard risk ranking process was conducted for Erie County and its municipalities using the method described below. This method includes four risk assessment categories—probability of occurrence, impact (population, property, and economy), adaptive capacity, and changing future conditions (i.e., climate change). Each was assigned a weighting factor to calculate an overall ranking value for each hazard of concern. Depending on the calculation, each hazard was assigned a high, medium, or low ranking. Details regarding each of these categories are described in the sections below.

5.3.1 Hazard Ranking Methodology

The methodology used to rank the hazards of concern for Erie County is described below. Estimates of risk for the county were developed using methodologies promoted by the Federal Emergency Management Agency's (FEMA) hazard mitigation planning guidance, generated by FEMA's HAZUS-MH risk assessment tool and input from Erie County and participating jurisdictions. The ranking includes a factor to evaluate capacity of the participating jurisdiction to address each hazard through plans, policies, and mitigation strategies. For example, a community participating in the Community Rating System (CRS) Program has a high capacity to address and mitigate flooding issues, which will be reflected in the ranking benchmark. In addition, a factor addressing the degree of climate change impact is included in the methodology to adjust rankings for hazards expected to be significantly impacted by climate change. Table 5.3-1 shows the values for the four risk assessment categories assigned to Erie County's hazards. Details for each category are further described below.

Table 5.3-1. Summary of Hazard Ranking Approach

Category		Level / Category	Degree of Risk / Benchmark Value	Numeric Value	Weighted Value
Probability of Occurrence		Unlikely	A hazard event is not likely to occur or is unlikely to occur with less than a 1 percent annual chance probability.	0	30%
		Rare	Between 1 and 10 percent annual probability of a hazard event occurring.	1	
		Occasional	Between 10 and 100 percent annual probability of a hazard event occurring.	2	
		Frequent	100 percent annual probability; a hazard event may occur multiple times per year.	3	
Impact (Sum of all 3)	Population (Numeric Value x 3)	Low	14 percent or less of population is exposed to a hazard with potential for measurable life-safety impact due to its extent and location.	1	30%
		Medium	15 to 29 percent of population is exposed to a hazard with potential for measurable life-safety impact due to its extent and location.	2	
		High	30 percent or more of population is exposed to a hazard with potential for measurable life-safety impact, due to its extent and location.	3	
	Property (Numeric Value x 2)	Low	Property exposure is 14 percent or less of the total number of structures for your community.	1	
		Medium	Property exposure is 15 to 29 percent of the total number of structures for the community.	2	

Category		Level / Category	Degree of Risk / Benchmark Value	Numeric Value	Weighted Value
		High	Property exposure is 30 percent or more of the total number of structures for the community.	3	
	Economy (Numeric Value x 1)	Low	Loss estimate is 9 percent or less of the total replacement cost for the community.	1	
		Medium	Loss estimate is 10 to 19 percent of the total replacement cost for the community.	2	
		High	Loss estimate is 20 percent or more of the total replacement cost for the community.	3	
Adaptive Capacity		Low	Weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.	3	30%
		Medium	Plans, policies, codes/ordinances in place and meet minimum requirements; mitigation strategies identified but not implemented on a widespread scale; county/jurisdiction can recover but needs outside resources; moderate county/jurisdiction capabilities.	2	
		High	Plans, policies, codes/ordinances in place and exceed minimum requirements; mitigation/protective measures in place; county/jurisdiction has ability to recover quickly because resources are readily available, and capabilities are high.	1	
Climate Change		Low	No local data are available; modeling projects are uncertain on whether there is increased future risk; confidence level is low (inconclusive evidence).	1	10%
		Medium	Studies and modeling projections indicate a potential for exacerbated conditions due to climate change; confidence level is medium to high (suggestive to moderate evidence).	2	
		High	Studies and modeling projections indicate exacerbated conditions/increased future risk due to climate change; very high confidence level (strong evidence, well documented, and acceptable methods).	3	

Probability of Occurrence

The probability of occurrence is the likelihood of a hazard event occurring in any given year. A review of historic events assists with this determination. Each hazard of concern is rated in accordance with the numerical ratings and definitions described in Table 5.3-2. The probability of occurrence is given a weighted value of 30 percent.

Table 5.3-2. Probability of Occurrence Ranking Factors

Numeric Value	Probability Category	Definition
0	Unlikely	A hazard event is not likely to occur or is unlikely to occur with less than a 1 percent annual chance probability.
1	Rare	Between 1 and 10 percent annual probability of a hazard event occurring.
2	Occasional	Between 10 and 100 percent annual probability of a hazard event occurring.
3	Frequent	100 percent annual probability; a hazard event may occur multiple times per year.

Hazard Impacts

The impact of each hazard is considered in three categories: impact on population, impact on property (general building stock including critical facilities), and impact on the economy. Based on documented historic losses and individual assessments by each participating municipality, an impact rating of high, medium, or low is assigned with a corresponding numeric value for each hazard of concern. In addition, a weighting factor is assigned to each impact category: 3 for population, 2 for property, and 1 for economy. This gives the impact on population the greatest weight in evaluating the impact of a hazard. The total of each category is assigned a

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

weighted value of 30 percent. Table 5.3-3 presents the numerical rating, weighted factor, and description for each impact category.

Table 5.3-3. Numerical Values and Definitions for Impacts on Population, Property, and Economy

Category	Weighted Value	Low Impact* (1)	Medium Impact (2)	High Impact (3)
Population	3	14% or less of population is exposed to a hazard with potential for measurable life-safety impact, due to its extent and location.	15% to 29% of population is exposed to a hazard with potential for measurable life-safety impact, due to its extent and location.	30% or more of population is exposed to a hazard with potential for measurable life-safety impact, due to its extent and location.
Property	2	Property exposure is 14% or less of the total number of structures for community.	Property exposure is 15% to 29% of the total number of structures for community.	Property exposure is 30% or more of the total number of structures for community.
Economy	1	Loss estimate is 9% or less of the total replacement cost for community.	Loss estimate is 10% to 19% of the total replacement cost for community.	Loss estimate is 20% or more of the total replacement cost for community.

Note: A numerical value of zero is assigned if there is no impact.

** For the purposes of this exercise, "impacted" means exposed for population and property and loss for economy.*

Additional Impacts

Along with impacts on population, property, and economy, the overall risk ranking considers two additional impacts that affect the county's vulnerability: Capability and Climate Change. Table 5.3-4 presents the numerical rating and description for each category.

Adaptive Capacity

Capability refers to a jurisdiction's ability to protect the community from or withstand a hazard event. Mitigation measures are already in place, including codes and ordinances, plans, and procedures to withstand hazards due to design or location, deployable resources, or plans and procedures in place to respond to an event. The capability category has a weighted factor of 30 percent.

Climate Change or Changing Future Conditions

Climate change refers to the impact that climate change projections have on increasing or decreasing the severity and frequency of a hazard. The Climate Change category has a weighted factor of 10 percent.

Table 5.3-4. Numerical Values and Definitions for Changing Future Conditions and Adaptive Capacity

Category	Low Impact	Medium Impact	High Impact
Capability	Weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.	Plans, policies, codes/ordinances in place and meet minimum requirements; mitigation strategies identified but not implemented on a widespread scale; county/jurisdiction can recover but needs outside resources; moderate county/jurisdiction capabilities.	Plans, policies, codes/ordinances in place and exceed minimum requirements; mitigation/protective measures in place; county/jurisdiction has ability to recover quickly because resources are readily available and capabilities are high.
Climate Change	No local data are available; modeling projects are uncertain on whether there is increased future risk; confidence level is low (inconclusive evidence).	Studies and modeling projections indicate a potential for exacerbated conditions due to climate change; confidence level is medium to high (suggestive to moderate evidence).	Studies and modeling projections indicate exacerbated conditions and increased future risk due to climate change; very high confidence level (strong evidence, well documented and acceptable methods).

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Note: "Low impact" for adaptive capacity means the jurisdiction does not have the capability to effectively respond, which increases vulnerability; whereas high impact for adaptive capacity means the jurisdiction does have the capability to effectively respond, which decreases vulnerability.

Risk Ranking Value

Each impact was then weighted and the risk ranking for each hazard is then calculated using the following formula:

Example Risk Ranking Equation

Risk Ranking = [(Impact on Population x 3) + (Impact on Property x 2) + (Impact on Economy x 1) x 0.3] + [Capability x 0.3] + [Climate Impact x 0.1] + [Probability of Occurrence x 0.3]

Based on the total for each hazard, a priority ranking is assigned to each hazard of concern (high, medium, or low). The rankings were categorized as follows: Low = values less than 3.9; Medium = values between 3.9 and 4.9; High = values greater than 4.9.

5.3.2 Hazard Ranking Results

Using the process described above, the risk ranking for the identified hazards of concern was determined for Erie County. The hazard ranking for Erie County is detailed in the subsequent tables that present the step-wise process for the ranking. The countywide risk ranking includes the entire planning area and may not reflect the highest risk indicated for any of the participating jurisdictions. The resulting ranks of each municipality indicate the differing degrees of risk exposure and vulnerability. The results support the appropriate selection and prioritization of initiatives to reduce the highest levels of risk for each municipality. Both the county and the participating jurisdictions have applied the same methodology to develop the countywide risk and local rankings to ensure consistency in the overall ranking of risk; jurisdictions had the ability to alter rankings based on local knowledge and experience in handling each hazard.

This hazard ranking exercise serves four purposes: (1) to describe the probability of occurrence for each hazard; (2) to describe the impact each would have on the people, property, and economy; (3) to evaluate the capabilities a community has with regards to natural hazards; and (4) to consider changing future conditions (i.e., climate change) in Erie County. Estimates of risk for Erie County were developed using methodologies promoted by FEMA's hazard mitigation planning guidance, generated by FEMA's HAZUS-MH risk assessment tool and input from the county and participating municipalities.

Table 5.3-5 shows the probability ranking assigned for the likelihood of occurrence for each hazard.

Table 5.3-5. Probability of Occurrence Ranking for Hazards of Concern for Erie County

Hazard of Concern	Probability	Numeric Value
Coastal Erosion	Unlikely	0
Cyber Attack	Frequent	3
Earthquake	Rare	1
Expansive Soils	Rare	1
Extreme Temperature	Rare	1
Flood	Frequent	3
Hazardous Materials	Frequent	3
Landslide	Unlikely	0

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Hazard of Concern	Probability	Numeric Value
Pandemic	Unlikely	0
Severe Storm	Frequent	3
Severe Winter Storm	Frequent	3
Utility Interruption	Frequent	3
Wildfire	Occasional	2

Table 5.3-6 shows the impact evaluation results for each hazard of concern, including impact on property, structures, and the economy on the county level. The weighting factor results and a total impact for each hazard also are summarized. It is noted that several hazards that have a high impact on the local jurisdictional level can have a lower impact when analyzed countywide.

Table 5.3-6. Impact Ranking for Hazards of Concern for Erie County

Hazard of Concern	Population			Property			Economy			Total Impact Rating (Population + Property + Economy)
	Impact	Numeric Value	Multiplied by Weighing Factor (3)	Impact	Numeric Value	Multiplied by Weighing Factor (2)	Impact	Numeric Value	Multiplied by Weighing Factor (1)	
Coastal Erosion	Low	1	3	Low	1	2	Low	1	1	6
Cyber Attack	Low	1	3	Low	1	2	High	1	3	8
Earthquake	High	3	9	High	3	6	Low	1	1	16
Extreme Temperature	High	3	9	Low	1	2	Low	1	1	12
Expansive Soils	Low	1	3	Low	1	2	Medium	2	2	7
Flood	Low	1	3	Low	1	2	Low	1	1	6
Hazardous Materials	Low	1	3	Low	1	2	Medium	2	1	6
Landslide	Low	1	3	Low	1	2	Low	1	1	6
Pandemic	High	3	9	Low	1	2	High	3	3	14
Severe Storm	High	3	9	Low	1	2	Low	1	1	12
Severe Winter Storm	High	3	9	Low	1	2	Low	1	1	12
Utility Interruption	Medium	2	6	Medium	2	4	Medium	2	2	12
Wildfire	Medium	2	6	Medium	3	6	Medium	2	2	14

Table 5.3-7 shows the additional impact rankings for the hazards of concern. This includes the overall capabilities of the county and municipalities and the consideration of changing future conditions, such as climate change.

Table 5.3-7. Additional Impact Ranking for Hazards of Concern for Erie County

Hazard of Concern	Capabilities	Numeric Value	Climate Change	Numeric Value
Coastal Erosion	High	1	Medium	2
Cyber Attack	Medium	2	Low	1
Earthquake	High	1	Low	1
Extreme Temperature	High	1	High	3
Expansive Soils	High	1	Low	1
Flood	Medium	2	High	3
Hazardous Materials	High	1	Low	1

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Hazard of Concern	Capabilities	Numeric Value	Climate Change	Numeric Value
Landslide	High	1	Low	1
Pandemic	High	1	Medium	2
Severe Storm	High	1	Medium	2
Severe Winter Storm	High	1	Medium	2
Utility Interruption	High	1	Medium	2
Wildfire	High	1	High	3

Table 5.3-8 presents the total calculations for each hazard ranking value for the hazards of concern. The rankings were categorized and assigned a color as follows: Low = values less than or equal to 3.8 (green); Medium = values between 3.9 and 4.9 (yellow); High = values greater than or equal to 5.0 (red).

Table 5.3-8. Total Hazard Ranking Values for the Hazards of Concern for Erie County

Hazard of Concern	Probability x 30%	Total Impact x 30%	Adaptive Capacity x 30%	Changing Future Conditions x 10%	Total Risk Ranking Value
Coastal Erosion	0	3	2	1	Low
Cyber Attack	0.9	3	2	3	Medium
Earthquake	0.3	9	6	1	High
Expansive Soils	0.3	3	2	2	Low
Extreme Temperature	0.3	9	2	1	Medium
Flood	0.9	3	2	1	Low
Hazardous Materials	0.9	3	2	2	Low
Landslide	0	3	2	1	Low
Pandemic	0	9	2	3	Medium
Severe Storm	0.9	9	2	1	High
Severe Winter Storm	0.9	9	2	1	High
Utility Interruption	0.9	6	4	2	High
Wildfire	0.6	6	4	2	Medium

Notes: Low = Values less than 3.9; Medium = Values between 3.9 and 4.9; High = Values greater than 4.9

Table 5.3-9 presents the jurisdictional hazard ranking for each hazard. An evaluation of the total risk ranking score determined ranking categories that were grouped into three categories: low, medium, and high. It also includes input by the municipalities.

These rankings have been used as one of the bases for identifying the jurisdictional hazard mitigation strategies included in this plan in Section 9, Jurisdictional Annexes. The summary rankings for the county reflect the results of the vulnerability analysis for each hazard of concern and vary from the specific results of each jurisdiction. For example, the severe storm hazard may be ranked low in one jurisdiction, but due to the exposure and impact countywide, it is ranked as a high hazard and is addressed in the county mitigation strategy accordingly. Jurisdictional ranking results are presented in each local annex in this plan in Section 9, Jurisdictional Annexes.

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 5.3-9. Summary of Overall Ranking of Hazards by Jurisdiction

Erie County Municipalities	Coastal Erosion	Cyber	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Material	Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Interruption	Wildfire
Erie County	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	Medium
Erie County Water Authority	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	Medium
Akron (V)	Low	Medium	Low	Low	Medium	Low	Low	Low	High	High	High	High	Low
Alden (T)	Low	Medium	Low	Low	Medium	Medium	Low	Low	Medium	Medium	High	Medium	Low
Alden (V)	Low	Medium	Low	Low	Medium	Low	Medium	Low	Low	Medium	High	High	Low
Amherst (T)	Low	Medium	Medium	Medium	Medium	Low	Low	Low	Medium	Medium	Medium	Medium	Low
Angola (V)	Low	Medium	Medium	Low	Medium	Low	Low	Low	High	High	High	High	Medium
Aurora (T)	Low	Medium	Low	Low	Medium	High	Low	Medium	Medium	Medium	Medium	High	Low
Blasdell (V)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	Medium	Medium	Low	Low
Boston (T)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Brant (T)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Buffalo (C)	Low	Medium	High	Low	Medium	Low	Low	Low	High	High	High	High	Low
Cheektowaga (T)	Low	Medium	Medium	Low	Medium	Low	Low	Low	High	High	High	High	Low
Clarence (T)	N/A	Medium	Medium	Medium	Medium	Low	Low	Low	High	High	High	High	Low
Colden (T)	Low	Medium	Low	Low	Medium	Low	Low	Medium	Medium	High	High	High	Medium
Collins (T)	Low	Medium	High	Low	Medium	Low	Low	Medium	Medium	High	High	High	High
Concord (T)	Low	Medium	High	Low	Medium	Low	Low	Medium	High	High	High	High	High
Depew (V)	Low	Medium	Medium	Low	Medium	High	Medium	Low	Medium	Medium	Medium	Medium	Low
East Aurora (V)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Eden (T)	Low	Medium	Medium	Medium	Medium	Low	Low	Low	High	High	High	Medium	Medium
Elma (T)	Low	Medium	High	Medium	Medium	Low	Low	Low	Medium	High	Medium	Medium	High
Evans (T)	High	Medium	Medium	Medium	Medium	High	Low	Low	High	High	High	High	Medium
Farnham (V)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Gowanda (V)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Grand Island (T)	Medium	Medium	Low	High	Medium	Low	Low	Low	High	Low	Medium	High	High
Hamburg (T)	Low	Medium	High	High	Medium	Low	Low	Low	High	High	High	High	High
Hamburg (V)	Low	Medium	High	Low	Medium	Low	Low	Low	High	High	High	High	Low
Holland (T)	Low	Medium	Low	Low	Medium	Medium	Low	Medium	Medium	High	High	High	Low
Kenmore (V)	Low	Medium	High	Low	Medium	Low	Low	Low	High	High	High	High	Low

Erie County Municipalities	Coastal Erosion	Cyber	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Material	Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Interruption	Wildfire
Lackawanna (C)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	Low
Lancaster (T)	Low	Medium	Medium	Medium	Medium	High	Medium	Low	Medium	High	High	High	Medium
Lancaster (V)	Low	Medium	High	Medium	Medium	High	High	Low	Medium	High	High	Medium	Low
Marilla (T)	Low	Low	Medium	Low	Medium	Low	Low	Low	Medium	Medium	Medium	High	Low
Newstead (T)	Low	Medium	Medium	Low	Medium	Medium	Low	Low	High	High	High	High	Medium
North Collins (T)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	High	High	High	High
North Collins (V)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Orchard Park (T)	Low	Medium	Low	Low	Medium	Low	Medium	Low	Medium	High	High	High	Medium
Orchard Park (V)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	High	High	High	Low
Sardinia (T)	Low	Medium	High	Low	Medium	Medium	High	Low	High	High	High	High	High
Sloan (V)	Low	Medium	High	Low	Medium	Low	Low	Low	High	High	High	High	Low
Springville (V)	Low	Medium	High	Low	Medium	Low	Low	Low	Medium	High	High	High	High
Tonawanda (C)	Low	Medium	Medium	Low	Medium	Low	High	Low	High	High	High	High	Low
Tonawanda (T)	Low	Medium	High	Low	Medium	Low	High	Low	High	High	High	High	Low
Wales (T)	Low	Low	Low	Low	Medium	Low	Medium	Low	Medium	Medium	Medium	Medium	Low
West Seneca (T)	Low	Medium	High	Medium	Medium	High	Medium	Low	High	High	High	High	Medium
Williamsville (V)	Low	Medium	Low	Low	Medium	Low	Low	Low	Medium	High	High	High	Low

Attachment: 10-Section-5.3-Hazards-Ranking-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

5.4.1 Coastal Erosion

This section provides a profile and vulnerability assessment of the coastal erosion hazard for Erie County.

5.4.1.1 Hazard Profile

This section presents the coastal erosion description, extent, location, previous occurrences and losses, and probability of future occurrences.

Hazard Description

Along with flooding, coastal erosion is one of the primary hazards leading to loss of lives or damage to property and infrastructure in coastal areas. Many natural factors affect erosion of the shoreline, including shore and near-shore morphology, shoreline orientation, and the response of these factors to storm frequency and sea level rise. Coastal shorelines change constantly in response to wind, waves, tides, water level fluctuation, seasonal and climatic variations, human alteration, and other factors that influence the movement of sand and material within a shoreline system.

Coastal erosion is a natural phenomenon consisting of an endless sediment redistribution process that continually changes beaches, dunes, and bluffs. Waves, currents, wind-driven water, ice, rainwater runoff, and groundwater seepage all move sand, sediment, and water along the coastline. Other contributing factors can increase coastal erosion of a natural protective feature and these include length of fetch; wind direction and speed; wavelength, height, and period; nearshore water depth; tidal influence; and overall strength of a storm (NYS DEC 2020).

Coastal erosion can result in significant economic loss through the destruction of buildings, roads, infrastructure, natural resources, and wildlife habitats. Damage often results from an episodic event, such as the combination of severe storm waves and dune or bluff erosion.

Erosion results in the transfer of sediment from one location to another. The addition of sediment to a location is referred to as accretion. Accretion can be beneficial if it strengthens a shoreline, leading to wider beaches and more material for dune building. However, accretion can also result in the narrowing and shoaling of channels and inlets. This can ultimately lead to a potential increase of coastal flooding risk or lack of safe water access for emergency response boats.

Coastal erosion is usually a sporadic event and most typically associated with another hazard event, such as a strong storm. Additionally, erosion rates are influenced by local geographic features and man-made structures. Although coastal erosion is most typically associated with flooding, it can also be caused by windstorm events, which can blow beach and dune sand overland into adjacent low-lying marshes, upland habitats, inland bays, and communities. If related to a flood event, erosion is typically seen when extreme rainfall scours and erodes dunes and when inland floodwaters return through the dunes and beach face into the ocean (FEMA 1996). Within Erie County, erosion and fluctuations of water levels along Lake Erie are the most serious and present coastal hazard threat.

Human activities can also lead to coastal erosion and intensify the effects of natural processes and speed up the coastal erosion process. This includes construction, shipping, boating, and recreation, which can all increase erosion of sandy beaches, dunes, and bluffs (NYS DEC 2020). Humans contribute to the coastal erosion in several ways:

- By removing vegetation, exposing bare soil to be easily eroded by wind, waves, and precipitation;

- Directing run-off from streets, parking lots, roofs, and other locations over a bluff edge causing it to erode; or
- By construction of 'hardened' structures along the shore that block that movement of sand along the coast, reflect wave energy onto adjacent shorelines, or cause deepening of the nearshore area (NYS DEC 2020).

Historically, some of the methods used by municipalities and property owners to stop or slow down coastal erosion or shoreline change have actually exacerbated the problem. Attempting to halt the natural process of erosion with shore parallel or perpendicular structures, such as seawalls (groins and jetties) and other hard structures, typically worsens the erosion in front of the structure (i.e., walls), prevents or starves any sediment behind the structure (groins) from supplying down-drift properties with sediment, and subjects down-drift beaches to increased erosion. Since most sediment transport associated with erosion and longshore drift has been reduced, some of the state's greatest coastal assets and attractions—beaches, dunes, barrier beaches, salt marshes, and estuaries—are threatened and will slowly disappear as the sediment sources that feed and sustain them are eliminated.

Bluff coastlines along Lake Erie are constantly changing as the result of wind, currents, storms, and changing lake levels. Because of this, developed sandy shorelines are often stabilized with hardened structures (seawalls, bulkheads, revetments, rip-rap, gabions, and groins) to protect coastal properties from erosion. While hardened structures typically prove to be beneficial in reducing property damage, the rate of coastal erosion typically increases near stabilization structures. Shore protection structures, such as seawalls and revetments, usually eliminate natural wave run-up and sand deposition processes and can increase reflected wave action and currents at the waterline. Increased wave action can cause localized scour in front of structures and prevent settlement of suspended sediment (FEMA 1996). This increased erosion impacts natural habitats, spawning grounds, recreational activity areas, and public access (Frizzera 2011).

A variety of natural- and human-induced factors influence the erosion process. For example, shoreline orientation and exposure to prevailing winds, seiches, and waves all influence erosion rates. Beach composition influences erosion rates as well. For example, a beach composed of a finer sand and silt is easily eroded compared to beaches primarily consisting of course sand, boulders, gravel or large rocks, which are more resistant to erosion. Common contributing factors to coastal erosion include, but are not limited to, the following and further discussed below:

- Impacts from storms;
- Decreased sediment supplies;
- Storm-induced high water or seiches;
- Elevated lake levels; and
- Wave action.

Impacts from Storms

Beaches, dunes, and bluffs are a natural barrier between Lake Erie and inland communities, ecosystems, and resources. During a strong storm, changes to beaches, dunes, and bluffs can be significant and the results are sometimes catastrophic. The U.S. Geological Service (USGS) provides scientific support for mitigation planning through observations of beach, dune, and bluff change, as well as models of waves and storm surge to identify areas vulnerable to extreme coastal changes. By identifying areas of coastline in New York State likely to experience extreme and devastating erosion during a coastal storm, it is possible to determine risk levels associated with development in areas where the land shifts and moves with each land-falling storm (NYS DHSES 2013).

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Decreased Sediment Supplies

Coastal landforms, such as bluffs, are essential in maintaining a supply of sediment to beaches and dunes. If engineered structures are used to stabilize shorelines, the natural process of erosion is disturbed and decreases the amount of sediment supply. With reduced sediment, the ability of natural protective features (dunes and beaches) to provide prevention from storms and flood control benefits is reduced (NYS DHSES 2013).

Storm-Induced High Water or Seiches

Great Lakes storms can occur any time of the year and at varying levels of severity. Natural protective features within coastal erosion hazard areas provide buffering and protection to shorelines from erosion. Dunes and bluffs are effective against storm-induced high water and related wave action (NYS DHSES 2013).

Wind and weather conditions on the Great Lakes may create a seiche, an oscillating wave which can be several feet high. In many of the Great Lakes, the time period between the "high" and "low" of a seiche may be between 4 and 7 hours. As this is similar to the 6-hour time period of the tides on the ocean, it is frequently mistaken for a tide.

Elevated Lake Levels

Elevated lake levels contribute to higher rates of coastal erosion. Higher lake levels will magnify the reach of currents and wave action. Unlike oceans which have tides, the Great Lakes are considered to be non-tidal and experience change in water levels primarily because of meteorological effects. Water levels in the Great Lakes have long-term, annual, and short-term variations. Long-term variations depend on precipitation and water storage over many years. Annual variations occur with the changing seasons with an annual high in the late spring and a low in the winter. These changes occur at a rate that can be measured in feet per month (NOAA 2020).

Wave Action

As waves approach a shoreline, they crest and break, losing some initial energy. The remaining wave runs up the beach before pulling back down. Depending on the size of the wave, angle of wave "attack," and the wave period, waves can cause erosion or accretion of sediment. Seasonal high temperatures and seiches contribute to elevated lake levels allowing larger waves to reach the shoreline. Greater water depths near shore also result in less loss of wave energy from shoaling.

Bluff Erosion

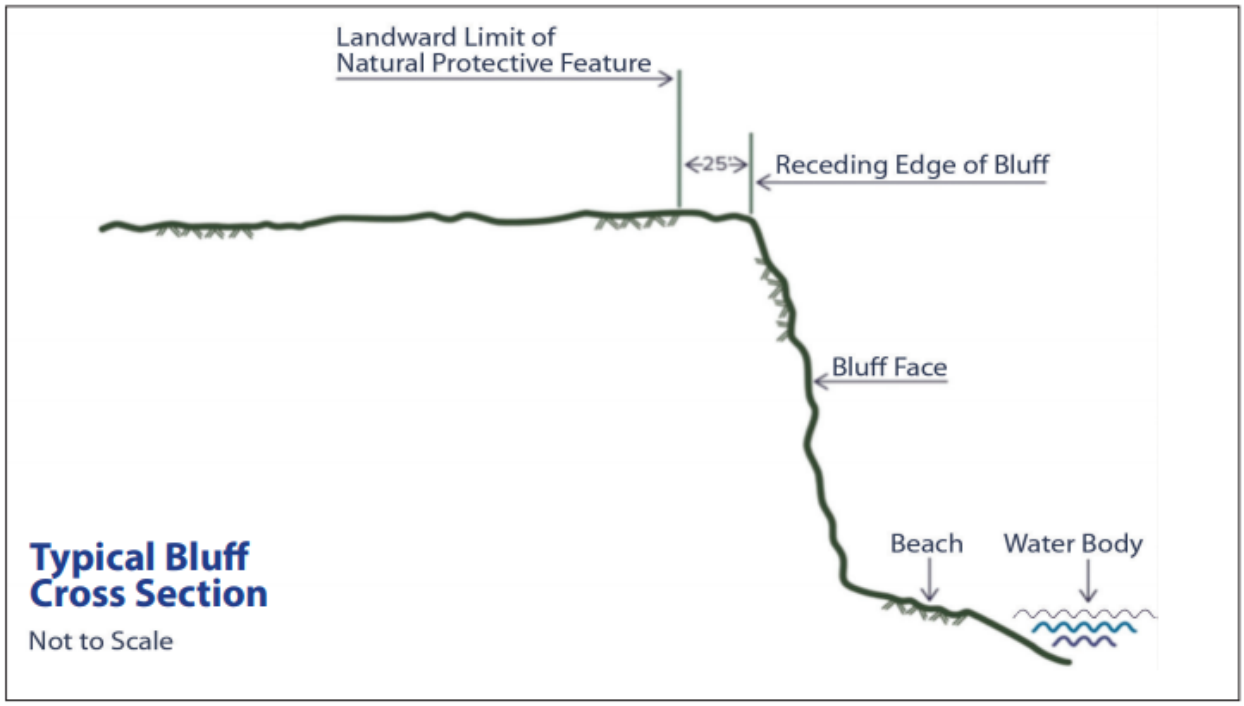
The stability of coastal bluffs along New York's Great Lakes depends on the action of the surface water over the face of the bluff as much as it does on the material of the bluff, steepness of the slope and wave action at the toe of the slope. Human disturbances on the bluff may also affect stability (NY Sea Grant 2019). During heavy rainfall, sediment can be washed down the face of the bluff if it is not vegetated, similar to the beach and dune erosion processes just discussed. Storm-related increases in water height can also be detrimental to coastal bluffs. When waves begin to attack the base of the bluff, which is normally protected by a beach, sediment will be removed from the base (i.e., toe) resulting in undercutting and leaving a vertical scarp. This will make the entire bluff unstable because of the continual slumping of bluff material from above the eroded toe, which in turn removes the vegetation that provides stability and protective cover, furthering erosion (NYS Sea Grant 2018). This slumping can also result in small landslides on the face of the bluff.

Groundwater can also increase erosional rates in coastal bluffs. As the groundwater moves, it loosens and picks up material; erosion will result when the water flows out of the bluff removing sediment with it. The coarser the bluff material, the more easily this can occur. Gullies, which form as a result of surface water flowing down or

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

through the bluff face, indicate groundwater-related problems. In freezing temperatures, the groundwater will become trapped in the bluff and expand as cracks. This separates larger chunks of sediment, which slide down the face (NYS Sea Grant 2018).

Figure 5.4.1-1. Cross Section of Typical Great Lakes Bluff



Source: NYS Sea Grant 2019

Extent

Coastal erosion is measured as the rate of change in the position or horizontal displacement of a shoreline over a period of time. Geologists measure the severity of erosion in two ways, as a rate of linear retreat (feet of shoreline recession per year) and volumetric loss (cubic yards of eroded sediment per linear foot of shoreline frontage per year) (NYC Emergency Management 2019).

Coastal erosion can occur rapidly or gradually. However, measuring erosion is often difficult, because the extent of natural erosion in a specific shoreline varies significantly from year to year. If choices are made to dredge or nourish beaches along particular parts of the coast, it can be difficult to determine how much beach is being lost or gained through natural processes and how much is being affected by human activities (NYC Emergency Management 2019). Coastal erosion may also be exacerbated by human activities, such as boat wakes, shoreline hardening, and dredging (FEMA 1996).

Several factors determine whether a community exhibits greater long-term erosion or accretion:

- Exposure to high-energy storm waves,
- Sediment size and composition of eroding coastal landforms feeding adjacent beaches,
- Near-shore bathymetric variations that direct wave approach,
- Along-shore variations in wave energy and sediment transport rates,
- Relative lake elevations,
- Frequency and severity of storm events, and

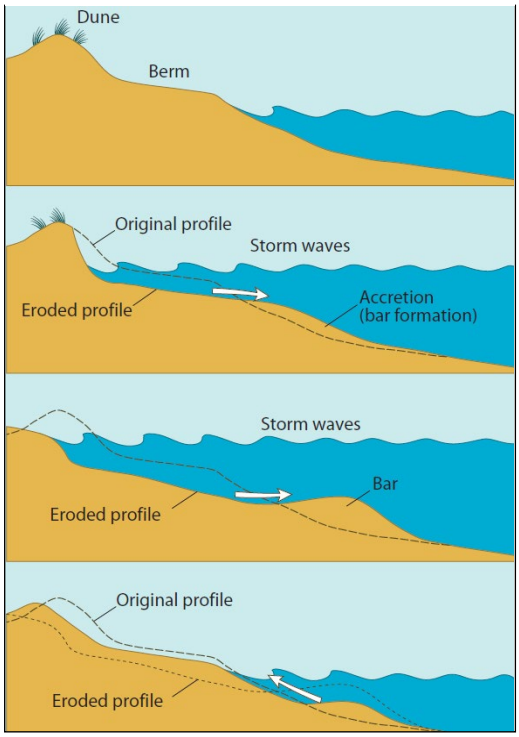
Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Human interference with sediment supply (e.g. revetments, seawalls, jetties) (Woods Hole Sea Grant 2003).

Beaches constantly change daily, weekly, monthly, and yearly, primarily in response to waves. The size and presence of any part of a beach at a given time is influenced by a number of factors: size and direction of the waves, size and shape of sand grains on the beach, the level of water at the time waves strike, and the initial shape of the beach.

Waves play a major role in controlling the form, position, and size of the beach. Waves are responsible for picking up and moving sand along the coast. The beach responds quickly to changes in wave energy. Very large, choppy waves tend to pick up and remove sand from the beach berm, which lowers the elevation, flattening the beach profile and causing the berm and shoreline to move landward. The material picked up from the waves can move in many directions depending on numerous factors. Most frequent, material is moved offshore and is deposited in a bar during storms. As the bar grows, it causes larger waves to break and dissipate their energy before they reach the landward berm, which adds protection to the beaches. In calmer weather, long, gentle waves can pick up much of the sand and bring it back onshore, building up the berm, raising the height of the backshore and moving the beach berm and shoreline back seaward. This creates a cycle where the beach erodes and builds back up in response to wave action. Over the course of a year, beaches can move back and forth by as much as 270 feet (Tanski 2012). Figure 5.4.1-2 illustrates the beach response to waves.

Figure 5.4.1-2. Beach Response to Waves



Source: Tanski 2012

Location

Much of New York's Great Lakes shorelines are naturally subject to erosion, which becomes a concern particularly where there are homes, businesses, or other structures nearby. Since the last glaciers retreated more than 10,000 years ago, Great Lakes water levels have varied dramatically, as have the flows of water between these five massive lakes and their combined outflow to the Atlantic Ocean. (NY Sea Grant 2019). Changes in water level move the shoreline and areas likely to experience erosion.

Erie County has extensive shoreline that can be impacted by coastal erosion, including the coastline along Lake Erie and along the Niagara River. Erie County borders the upper 12 miles of the East Branch of the Niagara River in the Town of Grand Island, The Town of Tonawanda, and the City of Tonawanda. Grand Island is one of the world's largest freshwater islands and has a shoreline edge of about 23.5 miles (USACE 1971). The City of Buffalo, the City of Lackawanna, the Town of Hamburg, the Town of Evans, the Town of Brant, and the Cattaraugus Reservation are directly located on the shoreline of Lake Erie.

The average height of the shore bluffs is 40 to 50 feet and up to 100 feet in short reaches. The lower part of the bluffs consists of shale, generally well above the limit of wave uprush. In some places, shale extends the full height of the bluff, but more generally the top half is earth. For some distance on either side of river mouths, the bluffs are lower and may be entirely granular material or silt and clay. Narrow gravel and shingle beaches, 40 to 50 feet wide at average lake levels, extend along some of the shale bluff reaches. Several wider sand beaches

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

occur mainly between Silver Creek and Cattaraugus Creek and in the Town of Evans. Except for these beaches and occasional pockets of sand trapped by natural headlands or shore structures, little sand is present in this entire reach, and if present, is likely a thin layer over the shale bottom (USACE 1971).

Because of the relative stability of the high shale bluffs, severe erosion and flooding problems in Erie County are relatively few. Erosion of the bluffs and deterioration from weathering and frost action do occur, and improvements close to the top of the bluffs become threatened (USACE 1971).

In the City of Buffalo, most of the shoreline along Niagara River and Lake Erie is protected by breakwaters. The outer harbor breakwater protects Buffalo Harbor by alleviating the severity of flooding on Lake Erie. The other breakwater, which is further north and parallels the lake's eastern shore, separates Black Rock Canal from the Niagara River (FEMA FIS 2019). New York uses other protection measures for coastal erosion in the Great Lakes, such as sea walls, revetments, bulkheads, groins, jetties, and nature-based solutions (reestablishing natural shorelines and vegetation) (NYS Sea Grant 2019).

Coastal Erosion Hazard Area

The coastline of Lake Erie is designated by NYS DEC as an area at risk to coastal erosion from natural and human activities and is therefore regulated. NYS DEC has two programs focused on the protection of coastal erosion: Coastal Erosion Hazard Area (CEHA) permit program and the United States Army Corps of Engineers (USACE) Civil Works Program. The CEHA program regulates and issues permits for activities within a coastal erosion hazard area. NYS DEC works with USACE to study coastal erosion problems along coastlines and to develop coastal erosion solutions. These are usually large-scale projects that impact entire communities (NYS DEC 2020).

NYS prevents and reduces coastal erosion by:

- Promoting and preserving the natural protective features, such as dunes and bluffs, beaches, and near-shore areas of coastal regions;
- Restricting or prohibiting activities or development in natural protective feature areas;
- Ensuring new construction or structures are built a safe distance from areas of active coastal erosion and the impact of coastal storms;
- Regulating the placement and construction of coastal erosion protection structures, when justified, to minimize damage to property, natural protective features, and other natural resources;
- Restricting development involving public investment in services, facilities, or activities (for example, extending public water supply and sewer services) which are likely to encourage new permanent development in coastal erosion hazard areas;
- Requiring publicly financed coastal erosion protection structures (intended to minimize coastal erosion damage) to be used only where necessary to protect human life or where the public benefits of such structures clearly outweigh the public expenditures; and
- Encouraging administration of coastal erosion management programs by coastal municipalities and establishing procedural standards for local program implementation and establishing standards for the issuance of coastal erosion management permits (NYS DEC 2020).

Because of the consistent coastal erosion problems along the New York State coastline, the State Legislature passed the CEHA Act (Article 34 of the Environmental Conservation Law [ECL]), establishing the state's coastal policy in August 1981. Under this act:

- Areas prone to coastal erosion are identified.

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Activities in areas subject to coastal erosion are undertaken in such a way that damage to property is minimized, increases in coastal erosion are prevented, and natural features are protected. Public actions likely to encourage new development in CEHA should not be undertaken unless the areas are protected by structural or other erosion control projects, which could prevent erosion damage during the life of the proposed action.
- Erosion control projects are publicly financed only where needed to protect human life for existing or new development, which absolutely requires a location within a given hazard area.
- Public and private erosion control projects should minimize damage to other human-made property, natural protective features, and other natural resources.

As of April 23, 2021, Erie County contains no certified CEHA communities; however, the Town of Brant and the Town of Evans are NYS DEC-regulated CEHA communities. Regulated CEHA communities have various actions that are restricted, prohibited, or require a permit (NYS DEC 2020a, b).

As a part of the CEHA Act, NYS DEC has developed minimum standards and criteria, 6 NYCRR Part 505 – Coastal Erosion Management, for the statewide regulation of development and other activities within these areas. Part 505 defines a regulatory program to be administered by DEC within identified CEHA and establishes standards for the issuance of coastal erosion management permits by the DEC. Procedural requirements have also been established for local governments that wish to implement a local program, although local implementation is not required until after the NYS DEC has filed CEHA maps for a municipality (NYS DEC 1988). Part 505 establishes two categories of CEHA: (1) Structural Hazard Areas and (2) Natural Protective Features.

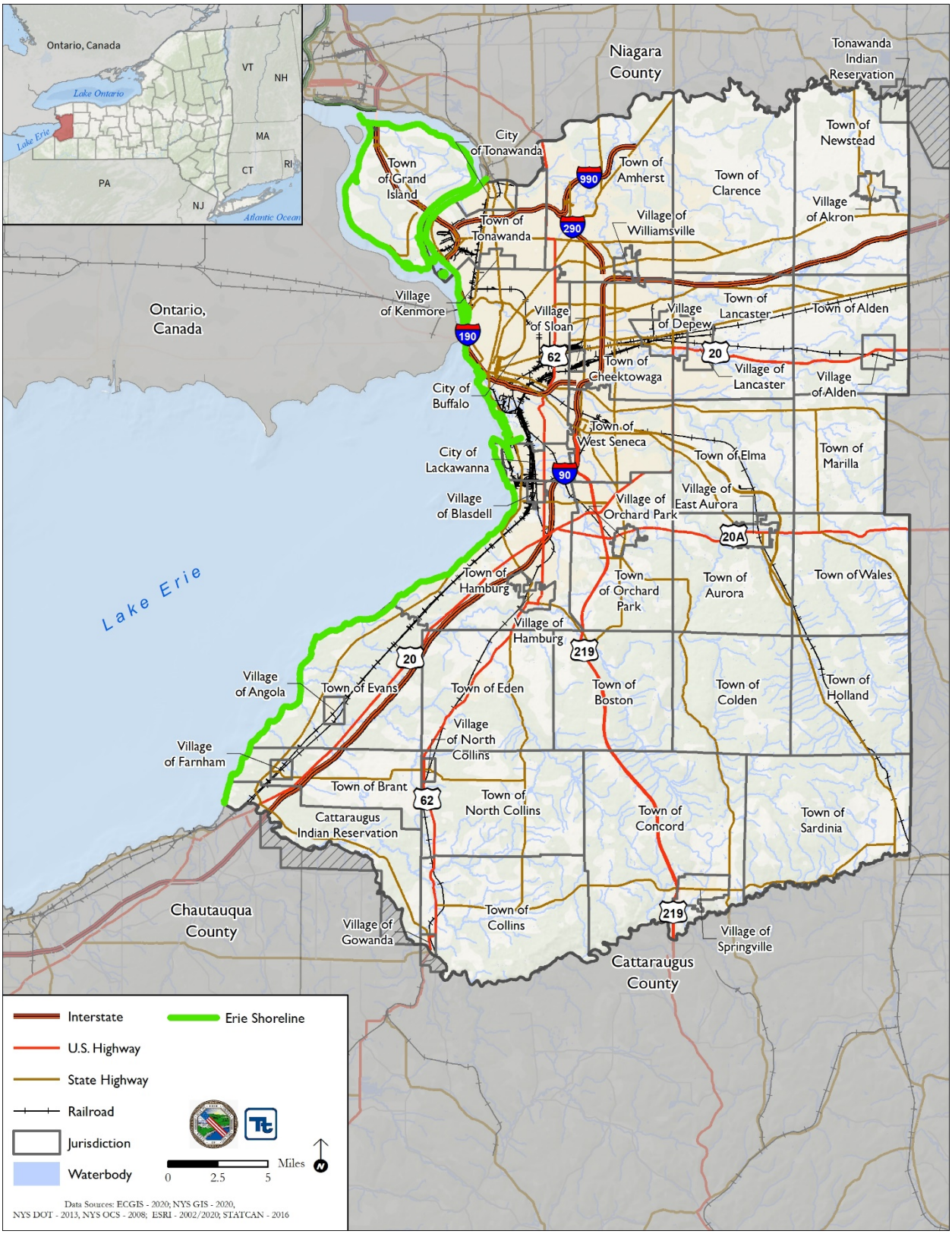
- *Structural Hazard Areas* are shorelands, located landward of natural protective features, and have shorelines receding at a long-term average annual recession rate of 1 foot or more per year. The inland boundary of a structural hazard area is calculated by starting at the landward limit of the fronting natural protective feature and measuring it along a line perpendicular to the shoreline a horizontal distance which is 40 times the long-term average annual recession rate (NYS DEC 1988).
- *Natural Protective Feature Area (NPFA)s* are a land and/or water area containing natural protective features, the alteration of which might reduce or destroy the protection afforded other lands against erosion or high water, or lower the reserves of sand or other natural materials available to replenish storm losses through natural processes. All NPFAs are delineated as such on CEHA maps (NYS DEC 1988). NYS DEC is in the process of updating these maps.

The NYS DEC 1988 CEHA paper maps depict CEHA along the Towns of Brant, Hamburg, and Evans. These maps show the landward limit of the natural protective features, but do not include the surface hazard areas. The NYS DEC commissioner is tasked to review the boundaries of these hazard areas every 10 years, and after major coastal storms, and revise the maps if the CEHA boundary changed by 25 feet or more (NYS DEC Article 34, Chapter 841).

Since the CEHA maps do not depict the complete hazard area, they are not illustrated as a part of this risk assessment. Instead, Figure 5.4.1-3 highlights the shoreline of Erie County. The entire shoreline is vulnerable to coastal erosion.

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Figure 5.4.1-3. Coastal Erosion Hazard Areas for Erie County



Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

NYS DEC is currently proposing a general permit (Great Lakes Erosion Control General Permit) for the purposes of shore protection to safeguard existing functional erosion control structures, roads, bridges, infrastructure, and property along the Lake Ontario shoreline, Lake Erie shoreline, Niagara River, and Saint Lawrence River, including affected portions of navigable bays and tributaries (NYS DEC 2020).

Previous Occurrences and Losses

Although many factors contribute to the natural coastal erosion of Erie County shorelines; historical storm events have significantly increased coastal erosion processes. Because Erie County is located along Lake Erie, strong Great Lakes storm events that commonly occur within the area have resulted in significant losses and temporary or permanent changes to the County's shorelines. Details regarding Severe Storm and Severe Winter Storm events that have impacted Erie County are presented earlier in Section 5.4.10 and Section 5.4.11, respectively.

Between 1954 and 2020, New York State and Erie County were not included in any FEMA declared coastal erosion specific disasters (DR) or emergency declarations (EM). However, Erie County has been included in numerous declarations that involved severe storms and severe winter storms. Section 5.4.6 (Flood), Section 5.4.10 (Severe Storm), and Section 5.4.11 (Severe Winter Storm) include more information on these declarations. For this 2022 Hazard Mitigation Plan (HMP), known coastal erosion events that have impacted Erie County between 2000 and 2020 are identified.

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 5.4.1-1. Coastal Erosion Events in Erie County, 2000 to 2020

Dates of Event	Event Type	FEMA Declaration Number	Erie County Designated?	Location	Losses / Impacts
December 12, 2000	Flood, Coastal Erosion	N/A	N/A	Lake Erie	The high winds caused water levels at the eastern end of Lake Erie to rise over 5 feet in a few hours. The high water levels coupled with waves of 10 to 14 feet caused shoreline erosion and localized flooding. Evacuations took place at Hoover Beach in the Town of Hamburg.
November 6, 2005	Flood, Coastal Erosion	N/A	N/A	Lake Erie	High water levels and waves of 10 to 15 feet resulted in some erosion of the lake shore and limited property damage.
January 30, 2008	Flood, Coastal Erosion	N/A	N/A	Lake Erie	The high water levels and waves to 12 to 16 feet resulted in erosion of the lake shore and significant flooding at the extreme eastern end of the lake.
October 31, 2019	Coastal Erosion	N/A	N/A	Buffalo, Lake Erie	The North Breakwater in the Buffalo Harbor suffered severe storm damage resulting in gaps in the breakwater. Gaps in the structure could be seen from the east end of Erie Basin Marina and also from Ralph C. Wilson Jr. Centennial Park.
November 27, 2019	High Wind, Coastal Erosion	N/A	N/A	Buffalo, Lake Erie	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. 50-60 knot winds blew for a 3-5 hour period in the cold advection behind the cold front. A seiche peaked at 9.56 feet above low water datum with the level above Lake Erie's flood stage for about 4 hours. This flooded Canalside in downtown Buffalo, flooded Route 5, and caused additional damage to breakwaters in Dunkirk in Buffalo. Selected peak wind speeds included 69 mph in Fredonia, 66 mph in Hamburg, 59 mph at Buffalo Airport, 58 mph in Batavia, and 58 mph in Warsaw.
January 12, 2020	Strong Wind, Coastal Erosion	N/A	N/A	Buffalo, Lake Erie	Post-frontal winds mixed well behind an early morning cold front brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.
January 18, 2020	Lakeshore Flood, Coastal Erosion	N/A	N/A	Buffalo, Lake Erie	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19 resulting in snow. As the cold front passed that brought colder air in, a seiche on Lake Erie again brought lakeshore flooding to Chautauqua and Erie counties, doing further damage to the Dunkirk Pier, Buffalo break wall, and closing Route 5 in Hamburg. There were two distinct pulses of higher water on the east end of the lake, as well. The first corresponded with lake levels of 8.18 feet above low water datum, and the second of 7.3 feet above low water datum.

Source: NOAA-NCEI 2021; FEMA 2021

Probability of Future Occurrences

Coastal erosion is a frequent event and occurs because of both natural and human activities. All beaches are affected by coastal erosion, but the rate and severity of erosion vary in frequency. Chronic erosion is the gradual recession of a shoreline over a period of decades and will be impacted by wave heights, wave angles, climate changes, and human causes such as development, removal of vegetation, runoff from development, and impacts of hard structures in the coastal zone (NYS DEC 2020). Episodic erosion occurs in response to flood events or coastal storms and is characterized by a rapid recession of the shoreline. Because coastal erosion is tied closely to other activities, frequency rates and severity levels are best evaluated in conjunction with other related hazards' probabilities and by analyzing secondary impacts from storms, human actions, and other factors. Sections 5.4.10 (Severe Storm) and 5.4.11 (Severe Winter Storm) include information on the probability of severe storms and severe winter storms.

Section 5.3 ranks the identified hazards of concern for Erie County. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Steering and Planning Committees, the probability of occurrence for coastal erosion in the County is considered 'unlikely' (not likely to occur or less than 1 percent annual chance of occurring).

Climate Change Impacts

Climate change is beginning to affect both people and resources in New York State, and these impacts are projected to continue growing. Impacts related to increasing temperatures and heavier precipitation are already being felt in the state. ClimAID: the Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision makers with information on the state's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge (New York State Energy Research and Development Authority [NYSERDA] 2014).

Each region in New York State, as defined by ClimAID, has attributes that will be affected by climate change. Erie County is part of Region 1, Western New York and the Great Lakes Plain. In Region 1, it is estimated that temperatures will increase by 3.7 ºF to 7.3 ºF by the 2050s and 4.2 ºF to 12.0 ºF by the 2080s (baseline of 47.7 ºF). Precipitation totals will increase between 2 to 12 percent by the 2050s and 1 to 17 percent by the 2080s (baseline of 34.0 inches). Regional precipitation across New York State is projected to increase by approximately 1-8 percent by the 2020s, 3-12 percent by the 2050s, and 4-15 percent by the 2080s (NYSERDA 2014).

The projected increase in precipitation is expected to occur in heavy downpours and less in light rains. Downpours are very likely to increase in frequency and intensity (NYSERDA 2014). Heavy rainfall can contribute to greater amounts of sediment being carried off of bluffs and coastlines.

Overall regional precipitation is the primary driver of average Great Lakes water levels. Increases in annual precipitation will impact the elevation of lakes. Projected increases in precipitation totals are likely to increase the elevation of Lake Erie. Higher lake elevations lead to greater rates of erosion.

Temperatures are predicted to increase in Erie County, which may lead to an increase in intensity and frequency of severe storm events. This increase may lead to more weather patterns that cause coastal erosion events. Warmer temperatures are also likely to reduce the amount of time per winter that the Great Lakes are covered in ice (NYSERDA 2014). Ice typically dampens or eliminates wave action. A reduction in ice coverage and the length of the ice season is likely to result in more frequent wave events, which in turn may increase severe coastal erosion event frequency and overall erosional rates.

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

5.4.1.2 Vulnerability Assessment

To understand the County's current risk to coastal erosion, the 1988 NYS DEC CEHA paper maps were digitized. These maps were only available for the Towns of Brant, Evans, and Hamburg. Section 5.2 includes additional details on the methodology used to assess coastal erosion risk. Other jurisdictions along the Lake Erie shore could potentially feel the effects of coastal erosion. The City of Tonawanda, City of Lackawanna, City of Buffalo, Town of Grand Island, and Town of Tonawanda also sit along the shore of Lake Erie, but do not have CEHA maps available. Figure 5.4.1-3 illustrates the entire shoreline of Erie County.

Impact on Life, Health and Safety

To estimate population exposed and vulnerable to the coastal erosion hazard areas, a spatial analysis was conducted. Table 5.4.1-2 lists the estimated population located in the digitized CEHA buffer. Overall, 214 people live within the coastal risk hazard area. The same analysis was performed using the CEHA boundary and buffer; an estimated 6,996 people live in this delineated area susceptible to erosion. The Town of Evans has the greatest number of persons living within the designated coastal risk hazard area.

Table 5.4.1-2. Approximate Population Residing in the CEHA Buffer

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population Exposed to the Coastal Erosion Hazard Area (CEHA)	
		Number of Persons Exposed	Percent of Total
Brant (T)	1,541	1	0.1%
Evans (T)	13,782	137	1.0%
Hamburg (T)	45,985	76	0.2%
Erie County Total	**917,296**	**214**	**<0.1%**

Source: NYS DEC 1988; American Community Survey 5-year Estimate 2019
Note: Only jurisdictions with CEHA data are include in totals
T = Town;, % = Percent

Research has also shown that some populations may experience exacerbated impacts and prolonged recovery if/when impacted because of many factors, including their physical and financial ability to react or respond during a hazard. Socially vulnerable populations (e.g., low-income populations, persons with disabilities, and the elderly) in Erie County may be at the greatest risk to coastal erosion. Within the County, there are 126,806 persons living in poverty and 120,246 persons with disabilities. The cost of interventions to protect properties from coastal erosion risk may financially stress lower- or middle-income residents. Relocating may be difficult because of the expenses and the availability of accessible housing or the time needed to make housing accessible. Structural improvements may not be possible because doing so could render the housing inaccessible (NYC Emergency Management 2019).

The population over the age of 65 is also more vulnerable and, physically, they may have more difficulty evacuating. They may require extra time or outside assistance during evacuations and are more likely to seek or need medical attention, which may not be available during a storm event. Population estimates for the County indicate that 161,744 persons over 65 currently live in Erie County.

The CDC 2016 Social Vulnerability Index (SVI) ranks U.S. Census tracts on socioeconomic status, household composition and disability, minority status and language, and housing and transportation. Erie County's overall score is 0.3986, indicating that in general its communities have low to moderate vulnerability (CDC 2016).

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

As discussed above, the application of the CEHA data set for assessing vulnerability is limited. Communities along inland bays, such as the Towns of Grand Island and Tonawanda, may be vulnerable to the coastal erosion hazard but are not assessed based upon the limitation to the spatial hazard layer's extent.

Impact on General Building Stock

To understand buildings that may be at risk to coastal erosion, an exposure analysis was conducted to determine buildings located in the digitized CEHA buffer. There are an estimated 122 structures located in the CEHA buffer area with a replacement cost value of approximately $62.2 million (less than 1 percent of the total replacement cost value in the County).

It is important to note that these estimates are considered high because coastal erosion generally occurs in increments of inches to feet per year along the coastline, with the exception of large-scale events, and may not necessarily occur across the entire coastline at the same time.

Table 5.4.1-3. Building Exposure to the CEHA Buffer

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Exposed to the Coastal Erosion Hazard Area (CEHA)			
			Number of Buildings Exposed	Percent of Total	Total Replacement Cost Value Exposed	Percent of Total
Brant (T)	1,325	$657,594,060	1	0.1%	$293,344	0.0%
Evans (T)	7,952	$3,335,060,692	86	1.1%	$33,546,029	1.0%
Hamburg (T)	19,130	$11,911,210,828	35	0.2%	$28,330,911	0.2%
Erie County Total	**360,925**	**$222,515,035,436**	**122**	**<0.1%**	**$62,170,285**	**<0.1%**

Source: NYS DEC 1988; RS Means 2020
Note: Only jurisdictions with CEHA data are include in totals
T = Town, % = Percent

Impact on Critical Facilities

It is important to determine the critical facilities and infrastructure that may be at risk to coastal erosion impacts, and to identify persons who may be impacted if damage occurs. Coastal erosion can degrade the surrounding infrastructure and utility lines, depending on their location on the property. Critical services may be interrupted because of direct damage or if transportation corridors that connect these facilities to the community are damaged. Roads that are damaged may isolate residents and prevent access to many service providers needing to reach vulnerable populations.

Critical facility and lifeline exposure to the coastal erosion hazard areas was examined. If the critical facility is located in the coastal erosion hazard area, it is considered exposed. Table 5.4.1-4 and Table 5.4.1-5 list the number of critical facilities and lifelines at risk of coastal erosion per jurisdiction, and are summarized by each FEMA lifeline category, respectively. The Town of Evans has the most critical facilities in the CEHA buffer (three) and a majority of them are wastewater pump stations.

Table 5.4.1-4. Critical Facilities Located in the CEHA Buffer

Jurisdiction	Critical Facilities Exposed to the Coastal Erosion Hazard Area (CEHA)		
	Dam	Potable Water Pumping Station	Wastewater Pump Station
Brant (T)	0	0	0
Evans (T)	0	1	2

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Jurisdiction	Critical Facilities Exposed to the Coastal Erosion Hazard Area (CEHA)		
	Dam	Potable Water Pumping Station	Wastewater Pump Station
Hamburg (T)	1	0	0
Erie County Total	**1**	**1**	**2**

Source: NYS DEC 1988
Note: Only jurisdictions with CEHA data are include in totals
T = Town,

Table 5.4.1-5. Total Number of Lifelines Located in the CEHA Buffer

FEMA Lifeline Category	Number of Lifelines	Number of Lifelines Exposed to Coastal Erosion Hazard Area (CEHA)
Communications	59	0
Energy	176	0
Food, Water, Shelter	951	3
Hazardous Materials	398	0
Health and Medical	144	0
Safety and Security	1,047	0
Transportation	1,158	0
Erie County Total	**3,933**	**3**

Source: NYS DEC 1988; FEMA 2020
Note: Only jurisdictions with CEHA data are include in totals

Impact on Economy

Rapid coastal erosion has the potential for financial loss in the local and regional economy. Gradual coastal erosion may also pose financial risks such as damage to general building stock and associated tax loss, impacts to utilities and infrastructure, interruption to business, and impacts on tourism. In areas that are directly experiencing coastal erosion, renovations of commercial and industrial buildings may be necessary, disrupting associated services. If businesses and residents relocate from waterfront property, the low availability and high cost of housing in coastal areas may present a challenge. However, if residents with waterfront property remain, they may be required to make structural changes or construct bulkheads or riprap to protect their property. The cost of these interventions may financially stress lower- or middle-income residents (NYC Emergency Management 2019). The Impact on Buildings subsection discusses direct impacts to buildings in Erie County.

Coastal erosion can cause extensive damage to the County's local economy, such as tourism. In 2017, tourism was a $1.8 billion industry for the County (Visit Buffalo Niagara 2017). Therefore, destruction caused by coastal erosion in any of the parks and coastal communities relying on tourism may have negative economic consequences.

Impact on the Environment

Erosion is a natural or man-made process that can greatly impact the environment. Sediment transferred through streams, lakes, and rivers can erode soil and impact ecosystems. High sediment concentrations can benefit the environment by retaining dead plant production and capturing suspended sediment (USGS n.d.). Alternatively, upland erosion can degrade water quality and quantity, ultimately impacting aquatic life. Negative overall impacts to the environment occur when erosion eliminates or contaminates critical habitats. For instance, filter-feeding bivalves consume small particles, which, if contaminated from erosion runoff, could kill them (Kreeger et al. 2010).

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Cascading Impacts to Other Hazards

Coastal erosion can increase the risk of floods. Section 5.4.6 includes more information on the impact of floods.

Future Changes That May Impact Vulnerability

Understanding future changes that affect vulnerability can assist in planning for future development and ensure establishment of appropriate mitigation, planning, and preparedness measures. Changes in the natural environment and built environment and in how they interact can also provide insight to plan for the future.

Projected Development

Section 4 identifies areas targeted for future growth and development across the County. Any areas of growth located in the defined coastal risk areas could be potentially impacted by coastal erosion. Specific areas of recent and new development are indicated in tabular form and/or on the hazard maps included in Volume II, Section 9 (Jurisdictional Annexes) of this plan.

Projected Changes in Population

According to the U.S. Census Bureau, the population of Erie County has remained stable between 2010 and 2019 (917,173 persons in 2010 and 917,296 persons in 2019). Estimated population projections provided by the 2017 Cornell Program on Applied Demographics indicates that the County's population will decrease into 2040, decreasing the total population to approximately 769,396 persons (Cornell Program on Applied Demographics 2017). Changes in the density of population can impact the number of persons exposed to erosion. As forests continue to be cleared for new development and run-off persists, the population in the County will remain exposed to this hazard. Furthermore, County visitors and tourists will continue to drive potential growth in the coastal communities and their amenities, exposing more persons to coastal erosion hazard areas.

Climate Change

Climate is defined not simply as average temperature and precipitation but also by the type, frequency, and intensity of weather events. Both globally and at the local scale, climate change has the potential to alter the prevalence and severity of events that exacerbate coastal erosion. While predicting changes of coastal erosion under a changing climate is difficult, understanding vulnerabilities to potential changes is a critical part of estimating future climate change impacts on human health, society, and the environment (U.S. Environmental Protection Agency [EPA], 2006). Ultimately, warmer temperatures may lead to an increase in frequency of storms, thus leading to more weather events with potentially increased severity, that cause erosion.

Change of Vulnerability Since 2015 HMP

Erie County continues to be vulnerable to the coastal erosion hazard. However, there are several differences between the exposure estimates of this plan update and the results reported in the 2015 HMP. Updated building stock from RS Means 2020 was used in the current risk assessment. Further, exposure for both the population and critical facilities was analyzed. These updated datasets provide a more accurate exposure analysis to the coastal erosion hazard.

Attachment: 11-Section-5.4.1-Coastal-Erosion-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.2 Cyber Security

This section provides a hazard profile (description, location, extent, previous occurrences and losses, probability of future occurrences, and impact of climate change) and vulnerability assessment of the cyber security hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.2.1 Hazard Profile

This section presents the cyber security description, extent, location, previous occurrences and losses, and probability of future occurrences.

Hazard Description

A cyber incident involves either the theft or modification of information on government agency computer systems, or a system compromise with the potential to disrupt essential services. A system compromise can impact one or more government agencies, a private utility, or specific Critical Infrastructure/Key Resources (CIKR) such as the power grid, public transportation systems, and wireless networks (NYC Emergency Management 2019).

Cyber incidents differ by motive, attack type and vector, and perpetrator profile. Motives for cyber incidents can vary, ranging from the pursuit of financial gain to political or social aims. Cyber threats are difficult to identify and comprehend. Types of threats include viruses erasing entire systems, intruders breaking into systems and altering files, intruders using someone's personal computer to attack others, or intruders stealing confidential information. The spectrum of cyber risks is limitless, with threats having a wide range of effects on the individual, community, organizational, and national sectors (NYC Emergency Management 2019). These risks include:

- Organized cyber-crime, state-sponsored hackers, and cyber espionage can pose national security risks to the United States
- Transportation, power, and other services may be disrupted by large-scale cyber incidents. The extent of the disruption is highly uncertain as it will be determined by many unknown factors, such as the target and size of the incident.
- Vulnerability to data breach and loss increases if an organization's network is compromised. Information about a company, its employees, and its customers can be at risk.
- Individually owned devices (such as computers, tablets, mobile phones, and gaming systems) that connect to the Internet are vulnerable to intrusion. Personal information may be at risk without proper security (NYC Emergency Management 2019).

A cyber-attack can affect a variety of sectors with potentially severe consequences, as described below.

- Android: Malicious software designed to exploit the Android operating systems (OS) running on smartphones, tablets, and other devices. Some variants of Android malware have the capability of disabling the device, allowing a malicious actor to remotely control the device, track the user's activity, lock the device, or encrypt or steal personal information transmitted from or stored on the device. As users are increasingly turning to mobile devices for both business and personal use, cyber threat actors are devoting their efforts to developing malware designed to compromise the device software.
- Botnets: A group of Internet-connected computers and devices that have been infected by malware that allows a malicious actor to control them remotely. The malicious actor then uses the botnet for nefarious purposes such as sending spam email, stealing data, spreading additional malware infections to other devices, generating illicit advertising revenue through click-fraud, mining cryptocurrencies, or conducting distributed denial-of-service (DDoS) attacks. In the cases where botnets are used to conduct DDoS attacks, these infected devices are used to generate an excessive amount of network traffic

designed to overwhelm a website, server, or online service to the point that legitimate users cannot access it.

- Exploit Kits (EKs): Toolkits that automate the exploitation of vulnerabilities in popular software applications to maximize successful infections and serve as a platform to deliver malicious payloads, such as Trojans, spyware, ransomware, and other malicious software. Most users will encounter EKs from visiting seemingly legitimate, high-traffic websites that either contain links to EKs embedded within malicious advertising (malvertising) or have malicious code hidden directly within the website itself. Malicious URLs linking to EKs are commonly distributed through spam email and spear-phishing campaigns.
- ICS: A collective term for several types of control systems and other equipment used to operate and/or automate industrial processes. ICS includes supervisory control and data acquisition (SCADA) systems – often incorrectly used interchangeably with ICS – and distributed control systems (DCS).
- iOS: Malicious software designed to exploit Apple's iOS operating system running on smartphones, tablets, and other devices. Some variants of iOS malware have the capability of disabling the device, allowing a malicious actor to remotely control the device, track the user's activity, lock the device, or encrypt or steal personal information transmitted from or stored on the device. As users are increasingly turning to mobile devices for both business and personal use, cyber threat actors are increasingly devoting their efforts to developing malware designed to compromise mobile devices, including operating systems (such as iOS) and applications (such as those available in the App Store). Android devices have historically seen more malware threats than iOS largely because of the open-source operating system; however, malware specifically targeting iOS has increased in the last 2 years.
- macOS: Though the majority of known malware targeting operating systems are made to exploit Microsoft Windows, devices running macOS are vulnerable as well. Furthermore, as macOS has become increasingly popular, more malware has been created to target macOS. More macOS malware was discovered in the second quarter of 2017 than in all of 2016.
- Point of Sale (PoS): Malicious software designed to steal credit and debit card data from payment processing systems, known as point-of-sale (PoS) terminals.
- Ransomware: Malicious software (malware) that attempts to extort money from victims by restricting access to a computer system or files. The most prevalent form of this profit-motivated malware is crypto-ransomware, which encrypts files into encoded messages that can only be decrypted (decoded) with a key held by the malicious actor.
- Trojans: A type of malware that, unlike viruses and worms, does not self-replicate. Named after the mythological wooden horse used to sneak Greek warriors through the gates of Troy, trojans are often disguised as legitimate software to avoid detection or trick users into installing the trojan onto their system. Users can be exposed to trojans through numerous vectors, such as clicking on links or opening attachments in phishing emails, other forms of social engineering, malicious advertising (malvertisting), or by visiting compromised websites, known as drive-by downloads. Once a trojan executes, it often downloads other malware onto the system or provides an attacker with a backdoor to gain access and conduct further malicious activity, such as stealing, deleting, or modifying data (New Jersey Cybersecurity and Communications Integration Cell 2019).

Cyber terrorism is the use of existing computers and information, particularly over the Internet, to cause physical or financial harm or a severe disruption of infrastructure service. Transportation, public safety, and utility services are all critical, and are highly dependent on information technology. The motive behind such disruptions can be driven by religious, political, or other objectives. Three kinds of attacks can be conducted on computers and these include attacks of physical means, attacks of electronic means, and attacks using malicious code (Waldron 2011). Specifically, these types of attacks include the following:

- Conventional kinetic weapons can be directed against computer equipment, a computer facility, or transmission lines to create a physical attack that disrupts the reliability of equipment.

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- The power of electromagnetic energy, most commonly in the form of an electromagnetic pulse (EMP), can be used to create an electronic attack (EA) directed against computer equipment or data transmissions. By overheating circuitry or jamming communications, an EA disrupts the reliability of equipment and the integrity of data.
- Malicious code can be used to create a cyber-attack, or computer network attack (CNA), directed against computer processing code, instruction logic, or data. The code can generate a stream of malicious network packets that can disrupt data or logic through exploiting vulnerability in computer software, or a weakness in the computer security practices of an organization. This type of cyber-attack can disrupt the reliability of equipment, the integrity of data, and the confidentiality of communications (Wilson and Clay 2007).

Cyber terrorists typically have two broad motivations to carry out an attack, as described below.

- Effects-based: Cyber terrorism exists when computer attacks result in effects that are disruptive enough to generate fear comparable to a traditional act of terrorism.
- Intent-based: Cyber terrorism exists when unlawful or politically motivated computer attacks are done to intimidate or coerce a government or people to further a political objective, or to cause grave harm or severe economic damage (Wilson and Clay 2007).

Table 5.4.2-1. Perpetrator Categories for Cyber-attacks

Category	Category Description	Description of Attack
External	Outside the victim organization	These attacks—which can be perpetrated by subgroups including organized crime, nation-state or state-affiliated entities, unaffiliated individuals, activists, former employees, acquaintances, competitors, or customers—can take any number of forms.
Internal	Inside the victim organization	These attacks have usually been malicious, for the purposes of financial gain, though some were the result of breaches because of careless or accidental data exposure. Internal actor subgroups include system admin, end-user, doctor or nurse, developer, manager, executive, cashier, finance, and human resources.
Partner	Third party sharing a business relationship with the victim	This attack is the least common of the three perpetrator categories and often unintentional. Example: a courier losing a device containing sensitive data

Source: Verizon Wireless DBIR 2018

In terms of specific attacks on computers, cyber terrorists have the ability to attack several types of computer systems in a variety of ways. The systems are summarized in Table 5.4.2-2.

Table 5.4.2-2. Computer Systems that can be Attacked

Computer System	Description
All system and network devices with BIND weaknesses	The Berkeley Internet Name Domain (BIND) package is the most widely used implementation of Domain Name Service (DNS) by which systems on the Internet are located by name, without having to know specific Internet protocol (IP) addresses. In a typical example of a BIND attack, intruders erase system logs and install tools to gain administrative access. They then compile and install Internet Relay Chat (IRC) utilities and network scanning tools, which are used to scan more than a dozen class-B networks in search of additional systems running vulnerable versions of BIND. In a matter of minutes, they can use the compromised system to attack hundreds of remote systems.
Vulnerable Common Gateway Interface (CGI) programs and application extensions (such as ColdFusion) installed on web servers (multiple UNIX and Linux systems)	Most web servers support CGI for data collection and verification. Intruders have exploited vulnerable CGI programs to vandalize web pages and steal credit cards.

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Computer System	Description
RPC weaknesses (all Web servers)	Remote procedure calls (RPC) allow programs on one computer to execute programs on a second computer. They are widely used to access network services, such as shared files in the Network File System (NFS). There is compelling evidence that the vast majority of service attacks launched during 1999 and early 2000 were executed by systems that had been victimized because they had RPC vulnerabilities. In 1998, the broadly successful attack on U.S. military systems during the Solar Sunrise incident also exploited an RPC flaw found on hundreds of Department of Defense systems.
RDS security hole in Microsoft IIS (multiple UNIX and Linux systems)	Malicious users took advantage of programming flaws in Microsoft's Internet Information Server (IIS), which is used to host websites deployed on Microsoft Windows NT and Windows 2000, to run remote commands with administrator privileges. Experts who developed the "Top Ten" list of the most exploited Internet security flaws believe that exploiting other IIS flaws, such as .HTR files, are as common as exploits of Remote Desktop Services (RDS).
Sadmind (Solaris machines only)	Global file sharing and inappropriate information sharing via NetBIOS and Windows NT ports allow file sharing over networks. When improperly configured, they can expose critical system files or give full file system access to hostile parties.
User IDs, especially root/administrator with no or weak passwords (UNIX, Windows, and Macintosh systems)	Some systems come with "demo" or "guest" accounts with no passwords or with widely known default passwords. Service workers often leave maintenance accounts with no passwords, while some database management systems install administration accounts with default passwords. In addition, busy system administrators often select system passwords that are easily guessable ("love," "money," "wizard" are common) or use a blank password. Many attackers try default passwords and then try to guess passwords before resorting to more sophisticated methods.
IMAP and POP buffer overflow vulnerabilities or incorrect configuration (all systems)	Internet message access protocol (IMAP) and Post Office Protocol (POP) are popular remote access mail protocols, allowing users to access their e-mail accounts. The "open access" nature of these services makes them especially vulnerable to exploitation because openings are frequently left in firewalls to allow for external e-mail access. Attackers who exploit flaws in IMAP or POP often gain instant root- level control.
Default SNMP community strings set to "public" and "private" (multiple UNIX and Linux systems)	The Simple Network Management Protocol (SNMP) is widely used by network administrators to monitor and administer all types of network-connected devices, ranging from routers to printers to computers. SNMP uses an unencrypted "community string" as its only authentication mechanism. Lack of encryption creates one level of security vulnerability, but the default community string used by the vast majority of SNMP devices is "public," with a few clever network equipment vendors changing the string to "private," which presents a greater security risk. Attackers can use this vulnerability in SNMP to reconfigure or shut down devices remotely.

Source: New Jersey Office of Emergency Management 2019

In addition to the motivations for cyber-attack on vulnerable systems, cyber-attacks can be further divided by the complexity of the attack. The categories of attacks include:

- ***Simple-unstructured attacks*** are the most common. These are amateurish attacks with relatively minimal consequences.
- ***Advanced-structured attacks*** are more sophisticated and consequential and have a greater emphasis on targeting victims prior to an attack, resulting in a more debilitating effect.
- ***Complex-coordinated attacks*** are the most advanced and most troublesome type of attack where success could mean a network shutdown.

Because virtually all critical systems are reliant upon computer systems, the secondary hazards that could result from a cyber terrorism attack could be devastating. For example, many of New York's roadway systems rely on sophisticated traffic control systems that prevent gridlock and accidents daily. Without these systems, the risk of accidents increases, not only auto accidents but also hazardous materials in-transit incidents. Additionally, a cyber-attack on a nuclear power plant could have devastating consequences if the plant suffers an intentional catastrophic failure. A cyber-attack could also completely incapacitate the communications infrastructure, not only in New York but across the United States, leading to disturbing secondary consequences and hazards. Public Safety Answering Points (PSAPs) could be targeted by cyber-attacks, and if affected, significant impacts could occur to public safety response and dispatching of emergency services.

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Because the power grid is also largely controlled by computer systems, a widespread power outage is a possibility. A failure of the power grid would severely impact the health and welfare of individuals reliant on power, such as those with medical needs requiring specialized equipment. The number of critical systems reliant on computer systems are numerous, thus disruption of one or more of the systems would cause severe secondary-cascading hazards. Secondary impacts could also affect private structures and systems within them, such as HVAC systems, life support systems, and security systems.

Since cyber security is a fairly new concept, limited regulations are in place. The United States Department of Homeland Security (DHS) recognizes the threat of a potential cyber-attack and has established the Cyber and Infrastructure Security Agency (CISA) Division to address cyber related threats. CISA is responsible for protecting the nation's critical infrastructure from physical and cyber threats. This mission requires effective coordination and collaboration among a broad spectrum of government and private-sector organizations (U.S. Department of Homeland Security N.D.).

Extent

The magnitude or extent of an incident will vary greatly based on the size, extent, and duration of the impact. Additionally, the extent will vary based upon which specific system is affected by an attack, the warning time, and ability to preempt an attack.

The extent, nature, and timing of cyber incidents are impossible to predict. There may or may not be any warning. Some cyber incidents take a long time (weeks, months or even years) to be discovered and identified (FEMA 2019).

The Multi-State Information Sharing and Analysis Center (MS-ISAC) created the Cyber Alert Level Indicator. It shows the current level of malicious cyber activity and reflects the potential for, or actual damage. The five cyber alert levels include low, guarded, elevated, high, and severe. Each level is indicated by a color. The following is additional information regarding these levels:

- **Low** – Indicates a low risk. No unusual activity exists beyond the normal concern for known hacking activities, known viruses, or other malicious activity.
- **Guarded** – Indicates a general risk of increased hacking, virus, or other malicious activity. The potential exists for malicious cyber activities, but no known exploits have been identified, or known exploits have been identified but no significant impact has occurred.
- **Elevated** – Indicates a significant risk because of increased hacking, virus, or other malicious activity that compromises systems or diminishes service. At this level, known vulnerabilities are being exploited with a moderate level of damage or disruption, or the potential for significant damage or disruption is high.
- **High** - Indicates a high risk of increased hacking, virus, or other malicious cyber activity that targets or compromises core infrastructure; causes multiple service outages; compromises multiple systems; or compromises critical infrastructure. At this level, vulnerabilities are being exploited with a high level of damage or disruption, or the potential for severe damage or disruption is high.
- **Severe** - Indicates a severe risk of hacking, virus, or other malicious activity resulting in wide-spread outages and/or significantly destructive compromises to systems with no known remedy; or debilitates one or more critical infrastructure sectors. At this level, vulnerabilities are being exploited with a severe level or widespread level of damage or disruption of Critical Infrastructure Assets.

The United States Federal Cybersecurity Centers, in coordination with departments and agencies with a cybersecurity or cyber operations mission, adopted a common schema for describing the severity of cyber incidents affecting the homeland, U.S. capabilities, or U.S. interests. The schema establishes a common

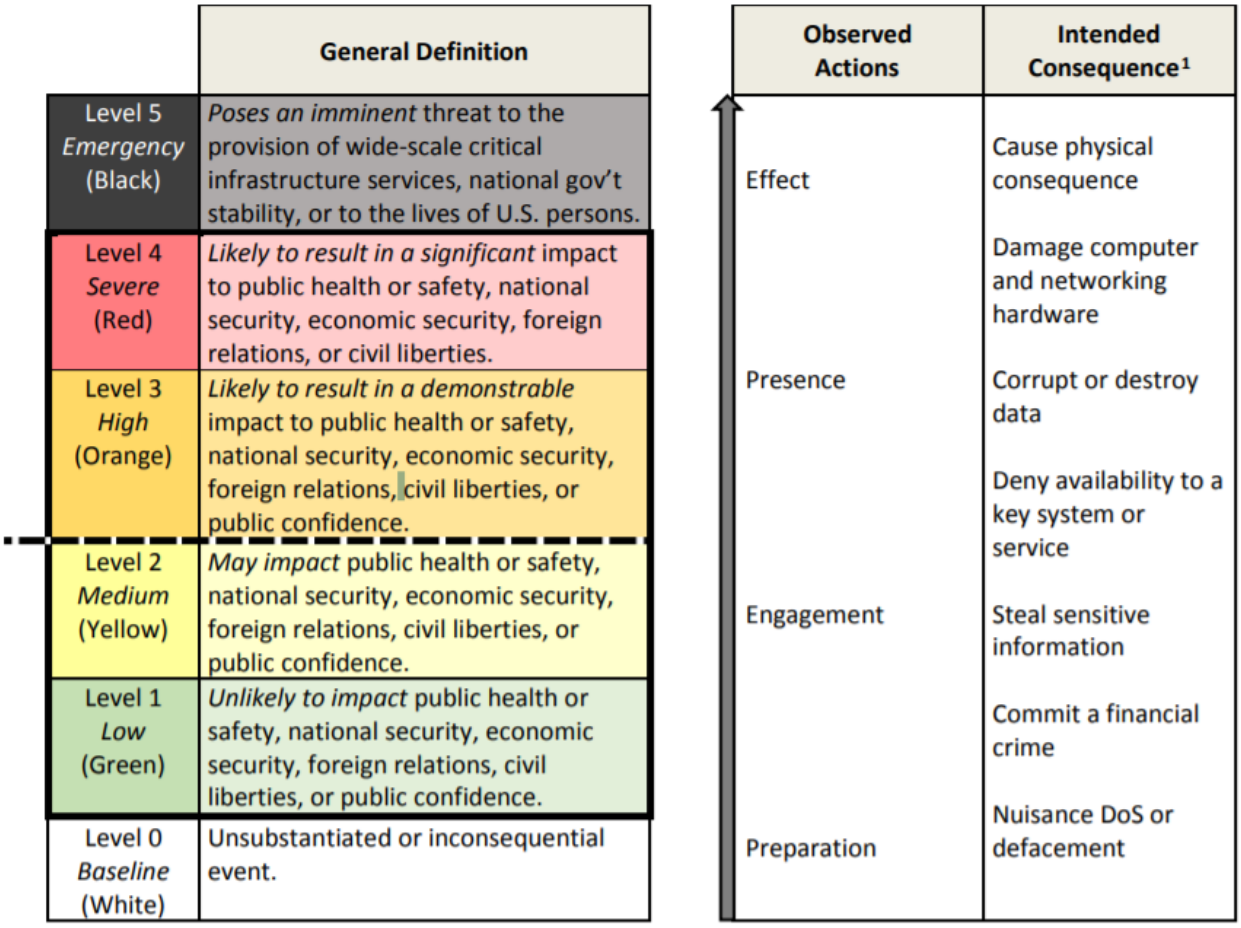
Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

framework for evaluating and assessing cyber incidents to ensure that all departments and agencies have a common view of the:

- The severity of a given incident;
- The urgency required for responding to a given incident;
- The seniority level necessary for coordinating response efforts; and
- The level of investment required of response efforts (United States Federal Cybersecurity Centers, N.D.).

The figure below depicts several key elements of the schema.

Figure 5.4.2-1. Cyber Incident Severity Schema



Source: United States Federal Cybersecurity Centers N.D.

Location

Cyber security incidents do not impact only a specific geographic location. Information systems are accessible all over the world. Potential threats can be foreign or domestic, internal or external, state-sponsored or a single rogue element. Terrorists, insiders, disgruntled employees, and hackers are included in this profile. Across New York State, countless systems rely on computers for day-to-day operations, including traffic signals, power

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

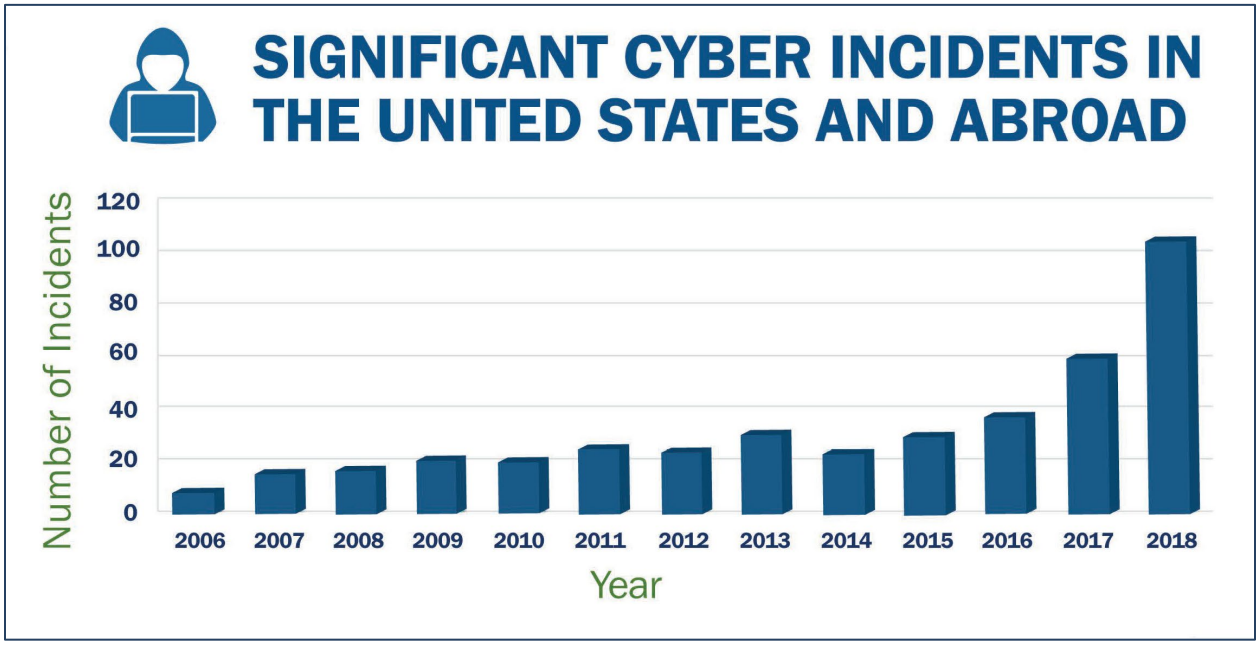
plants, and HVAC systems, as well as systems responsible for ensuring the state's government can operate. All of Erie County is at risk for cyber security incidents.

Previous Occurrences and Losses

While no major direct cyber-attacks have affected Erie County, cyber terrorism is an emerging hazard that can impact the state's computer infrastructure and the systems and services provided to the public. Across the United States and globally, concerns over cyber terrorism are growing (U.S. Department of Homeland Security 2019). Many smaller-scale attacks have occurred.

To date, no FEMA disaster declarations have been related to a cyber-attack. According to the U.S. Department of Homeland Security, significant cyber incidents have risen steadily in the last 5 years in the United States and abroad.

Figure 5.4.2-2. Significant Cyber Incidents in the United States and Abroad



Source: U.S. Department of Homeland Security 2019

Probability of Future Occurrences

The Department of Homeland Security has noted that cyber incidents are on the rise globally, as shown in the figure above (U.S. Department of Homeland Security 2019). The level of success of an attack and the subsequent damage it can create will vary greatly. With the growing popularity and use of computers, there has been a significant increase in investigations where computers are being utilized for the commission of fraud and identify theft. The probability of a cyber-attack that will affect Erie County is difficult to calculate; however, it is estimated that Erie County will continue to experience direct and indirect impacts of cyber-attacks.

In Section 5.3, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Partnership, the probability of occurrence for cyber-attacks in the county is considered to be "frequent."

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Climate Change Impacts

Because cyber-attacks are human-caused, no climate change impacts are associated with this hazard.

5.4.2.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed and vulnerable to the identified hazard. The following discusses Erie County's vulnerability, in a qualitative nature, to the cyber security hazard. Table 5.4.2-3 summarizes potential impacts on population, facilities, economy, and the environment.

Table 5.4.2-3. Cyber-Attack Impact Summary

Consideration	Description
General Public	No direct loss of life is expected from an attack. Indirect injuries or deaths may result from secondary effects to critical life-sustaining resources, such as energy and water, as well as loss of medical devices.
Response Personnel	No direct effects to the health and safety of response personnel are expected; however, critical response systems may be affected.
Property, Facilities, and Infrastructure	Effects can range from annoyance to complete shutdown of critical infrastructures caused by infiltration of supervisory control and data acquisition (SCADA) systems. Secondary effects could disturb public welfare and property by denying services or providing false readings.
Economic	Because of the heavy reliance on the electronic transfer of economic and commercial information, the economy could be affected by communication difficulties.
Environment	Generally, cyber terrorism has no direct effect on the environment; however, the environment may be affected should a release of a hazardous material occur because of critical infrastructure failure.
Continuity of Operations	Severe effects to continuity of operations could result if a cyber-attack reached critical operational systems or systems needed to carry out the operation.
Reputation of the Entity	If exposed vulnerabilities were known and not reduced or eliminated before the attack, the entity would suffer major damage to their reputation for not taking action before the incident.
Delivery of Services	Cyber-attacks may affect delivery of services if the system was infiltrated and directed to malfunction by self-destructing or overloading.
Regulatory and Contractual Operations	Cyber-attacks would have no significant effect on regulatory or contractual obligations, other than the possible elimination of electronic records, which would affect both.

Source: NJOEM 2019

Impact on Life, Health and Safety

Although no direct loss of life is expected from a cyber-attack, all residents in Erie County are exposed to this hazard. Commonly stolen personal information includes name, social security number, and drivers' license information. Because it is difficult to predict the particular target of cyber terrorism, assessing vulnerability to the hazard is also difficult. Generally, all populations who directly use a computer or those receiving services from automated systems are vulnerable to cyber terrorism. Although all individuals in Erie County are vulnerable to an attack, certain types of attacks would impact specific segments of the population.

If the cyber-attack targeted the state's power or utility grid, vulnerable populations could be most impacted. For example, individuals with medical needs are vulnerable because many of the life-saving systems they rely on require power. Also, if an attack occurred during months of extreme hot or cold weather, the county's elderly population (those 65 years of age and older; i.e., 158,532 total persons in the county) would be vulnerable to the effects of the lack of climate control. These individuals may require shelter or admission to a hospital. Young children are also vulnerable to the secondary effects of cyber terrorism.

Furthermore, households located near vulnerable facilities could experience greater impacts of a cyber-attack. If a cyber-attack targeted a facility storing or manufacturing hazardous materials, individuals living adjacent to

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

these facilities would be vulnerable to the secondary effects, should the attack successfully cause a critical failure at that facility. Individuals living within 10 miles of a nuclear power plant would be vulnerable if an attack occurred that caused a plant failure.

Impact on General Building Stock

Currently, about 360,925 buildings in Erie County are at risk of experiencing impacts from a cyber-attack. A cyber-attack can impact buildings ranging from annoyance to complete shutdown caused by infiltration of SCADA systems. Secondary effects could disturb public welfare and property by denying services or providing false readings (NJOEM 2019). If services are disrupted by a cyber-attack, damage may be incurred to physical assets. Should a cyber-attack target fire suppression systems, these structures are likely to be at higher risk for structural fire. In many cases, attacks on these systems are initially undetectable, and it may be some time before it is known that system impairment or failure is the result of a cyber event (NYC Emergency Management 2019).

Impact on Critical Facilities

Critical facilities and lifelines are vulnerable to cyber-attacks based on the significance of the facilities, and the potential to interrupt critical systems in the county. As previously mentioned, many critical facilities are reliant upon computer networks to monitor and control critical functions. This can include utilities, public safety facilities, medical facilities, or government buildings. A cyber-attack could result in catastrophic failure of one of these facilities. The power grid is reliant upon computer systems to distribute power to the county. An attack could disrupt power to all Erie County residents. This is just one example of how critical facilities are vulnerable to cyber-attacks. Given the importance of critical facilities to daily living activities, critical facilities are highly vulnerable to cyber-attacks.

Impact on the Economy

Cyber-attacks can have a damaging effect on public trust in systems that are traditionally considered stable and secure. Cyber-attacks can also have extensive economic impacts. Companies and government services can lose large sums of unrecoverable revenue from site down-time and possible compromise of sensitive confidential data. Further, the cost of malicious cyber activity involves more than the loss of financial assets or intellectual property. Cyber crimes can cause damage to a company's brand and reputation, consumer losses from fraud, the costs of service disruption and "cleaning up" after cyber incidents, and the cost of increased spending on cybersecurity (McAfee 2013).

Given the proliferation of electronic commerce and the reliance on electronics, virtually all elements of Erie County's economy are vulnerable to cyber-attacks. The secondary impacts of a significant attack would be devastating to the economy. For example, an attack that caused the loss of power to hundreds of thousands of businesses during peak holiday shopping months could potentially cost the state millions of dollars in tax revenue if these businesses were closed. Additionally, a disruption in New York's manufacturing, agricultural, or tourism sectors would have devastating impacts on the economy. While it is difficult to quantitatively measure the economic impact of a cyber terrorism attack, it is safe to say that the impact would be great, thus the economy is vulnerable to cyber- attacks and cyber terrorism.

According to FEMA, cyber-attack victims in the United States lost a collective $1.33 billion to cyber actors in 2016 (FEMA 2019). However, this estimate could be understated. In the United States, the costs of cyber terrorism are estimated somewhere between $24 billion and $120 billion annually. These costs represent approximately 0.2 percent to 0.8 percent of the total gross domestic product (GDP) in the United States (McAfee 2013).

Cyber crimes against banks and other financial institutions can cost many hundreds of millions of dollars every year. Cyber theft of intellectual property and business-confidential information can cost developed economies

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

billions of dollars—how many billions is an open question. These losses could be considered simply as the cost of doing business, or they could be a major new risk for companies and nations as these illicit acquisitions damage global economic competitiveness and undermine technological advantage (McAfee 2013).

Impact on the Environment

The impacts from cyber-attack are limited to infrastructure and people, as highlighted in earlier sections. Therefore, there are no known primary impacts to the environment.

Cascading Impacts to Other Hazards

Cyber-attacks may have cascading impacts causing other hazards, including threats to the utilities reliant on power as well as the potable water supply.

Future Changes that May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The county considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across Erie County. Any areas of growth could be potentially impacted by the cyber-attack hazard because the entire county is exposed and vulnerable. Additional development of structures or infrastructure reliant on computer systems could increase the county's risk to cyber-attack. Development of more structures using public power grids could also be affected by cyber-attacks and ultimately experience power outage. Therefore, understanding state requirements and recommendations may minimize risk for new development projects. For example, the New York Department of Financial Services issued a new set of cyber security regulations in 2017 for banks, lenders, mortgage companies, insurance companies, and service providers (NYS Department of Financial Services 2017). This regulation requires active protection against customer information by implementing a robust set of cybersecurity protocols, including the installation and use of a cybersecurity program, monitoring and testing of the selected program, and encryption of nonpublic information.

Projected Changes in Population

The population of Erie County is growing and is expected to increase until 2033 when it is expected to slowly decrease (Cornell University 2020). It is important to note that the population is aging (U.S. Census ACS 2010, ACS 2018) A growing population means that the number of persons vulnerable to cyber-attacks may increase for the county.

Climate Change

Because cyber-attacks are human-caused, no climate change impacts are associated with the cyber security hazard.

Change of Vulnerability Since the 2015 HMP

Cyber Security is a new hazard of concern for the 2022 Erie County HMP.

Attachment: 12-Section-5.4.2-Cyber-Security-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.3 Earthquake

This section provides profile information, including description, location, extent, previous occurrences and losses, probability of future occurrences, and climate change impacts, as well as the vulnerability assessment for the earthquake hazard in Erie County.

5.4.3.1 Hazard Profile

Description

An earthquake is the sudden movement of the earth's surface caused by the release of stress accumulated within or along the edge of the earth's tectonic plates, a volcanic eruption, or a manmade explosion (Federal Emergency Management Agency [FEMA] 2013; Shedlock and Pakiser 1995). Most earthquakes occur at the boundaries where the earth's tectonic plates meet (faults); however, less than 10 percent of earthquakes occur within plate interiors. New York State is in an area where plate interior-related earthquakes occur. As plates continue to move and plate boundaries change over geologic time, weakened boundary regions become part of the interiors of the plates. These zones of weakness within the continents can cause earthquakes from stresses that originate at the edges of the plate or in the deeper crust (Shedlock and Pakiser 1995).

According to the U.S. Geological Society (USGS) Earthquake Hazards Program, an earthquake hazard is anything associated with an earthquake that may affect a resident's normal activities. This includes surface faulting, ground shaking, landslides, liquefaction, tectonic deformation, tsunamis, and seiches. A description of each earthquake-related activity is provided below:

- *Surface faulting*: Displacement that reaches the earth's surface during slip along a fault. This commonly occurs with shallow earthquakes, which are those with an epicenter less than 20 kilometers.
- *Ground motion (shaking):* The movement of the earth's surface from earthquakes or explosions. Ground motion or shaking is produced by waves generated by sudden slip on a fault or sudden pressure at the explosive source; waves then travel through the earth and along its surface.
- *Landslide*: A movement of surface material down a slope.
- *Liquefaction*: A process by which water-saturated sediment temporarily loses strength and acts as a fluid (like wiggling your toes in the wet sand near the water at the beach). This effect can be caused by earthquake shaking.
- *Tectonic Deformation*: A change in the original shape of a material due to stress and strain.
- *Tsunami*: A sea wave of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands.
- *Seiche*: The sloshing of a closed body of water from earthquake shaking (USGS n.d.).

Extent

An earthquake's magnitude and intensity are used to describe the size and severity of the event. Magnitude describes the size at the focal point of an earthquake, and intensity describes the overall severity of shaking felt during the event. The earthquake's magnitude is a measure of the energy released at the source of the earthquake. Magnitude was formerly expressed by ratings on the Richter scale but is now most commonly expressed using the moment magnitude (Mw) scale. This scale is based on the total moment release of the earthquake (the product of the distance a fault moved and the force required to move it). The scale is as follows:

- Great Mw > 8
- Major Mw = 7.0 – 7.9
- Strong Mw = 6.0 – 6.9

- Moderate Mw = 5.0 – 5.9
- Light Mw = 4.0 – 4.9
- Minor Mw = 3.0 – 3.9
- Micro Mw = 3.0 – 3.9

The most commonly used intensity scale is the modified Mercalli intensity scale. Ratings of the scale, as well as the perceived shaking and damage potential for structures, are shown in Table 5.4.3-1. The modified Mercalli intensity scale is generally represented visually using shake maps, which show the expected ground shaking at any given location produced by an earthquake with a specified magnitude and epicenter. An earthquake has only one magnitude and one epicenter, but it produces a range of ground shaking at sites throughout the region, depending on the distance from the earthquake, the rock and soil conditions at sites, and variations in the propagation of seismic waves from the earthquake because of complexities in the structure of the earth's crust. Table 5.4.3-2 displays the Modified Mercalli Intensity (MMI) scale and its relationship to the areas peak ground acceleration.

Table 5.4.3-1. Modified Mercalli Intensity Scale

Mercalli Intensity	Shaking	Description
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations are similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation is similar to a heavy truck striking a building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate damage in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source(s): USGS 2020

Table 5.4.3-2. Modified Mercalli Intensity (MMI) and PGA Equivalents

Modified Mercalli Intensity	Acceleration (%g) (PGA)	Perceived Shaking	Potential Damage
I	< .17	Not Felt	None
II	.17 – 1.4	Weak	None
III	.17 – 1.4	Weak	None
IV	1.4 – 3.9	Light	None
V	3.9 – 9.2	Moderate	Very Light
VI	9.2 – 18	Strong	Light
VII	18 – 34	Very Strong	Moderate
VIII	34 – 65	Severe	Moderate to Heavy
IX	65-124	Violent	Heavy

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Modified Mercalli Intensity	Acceleration (%g) (PGA)	Perceived Shaking	Potential Damage
X	>124	Extreme	Very Heavy

Source: *Freeman et al. (Purdue University) 2004*
Note: *PGA* *Peak ground acceleration*

The ground experiences acceleration as it shakes during an earthquake. Peak ground acceleration (PGA) expresses the severity of an earthquake and is a measure of how hard the earth shakes, or accelerates, in each geographic area. PGA is expressed as a percent acceleration force of gravity (%g). For example, 1.0%g PGA in an earthquake (an extremely strong ground motion) means that objects accelerate sideways at the same rate as if they had been dropped from the ceiling. An earthquake with a 10%g PGA means that the ground acceleration is 10 percent that of gravity (Freeman, et al. 2004). Damage levels experienced in an earthquake vary with the intensity of ground shaking and with the seismic capacity of structures, as noted in Table 5.4.3-3.

Table 5.4.3-3. Damage Levels Experienced in Earthquakes

Ground Motion Percentage	Explanation of Damage
1-2%g	Motions are widely felt by people; hanging plants and lamps swing strongly, but damage levels, if any, are usually very low.
Below 10%g	Usually causes only slight damage, except in unusually vulnerable facilities.
10 - 20%g	May cause minor-to-moderate damage in well-designed buildings, with higher levels of damage in poorly designed buildings. At this level of ground shaking, only unusually poorly constructed buildings would be subject to potential collapse.
20 - 50%g	May cause significant damage in some modern buildings and very high levels of damage (including collapse) in poorly designed buildings.
≥50%g	May causes higher levels of damage in many buildings, even those designed to resist seismic forces.

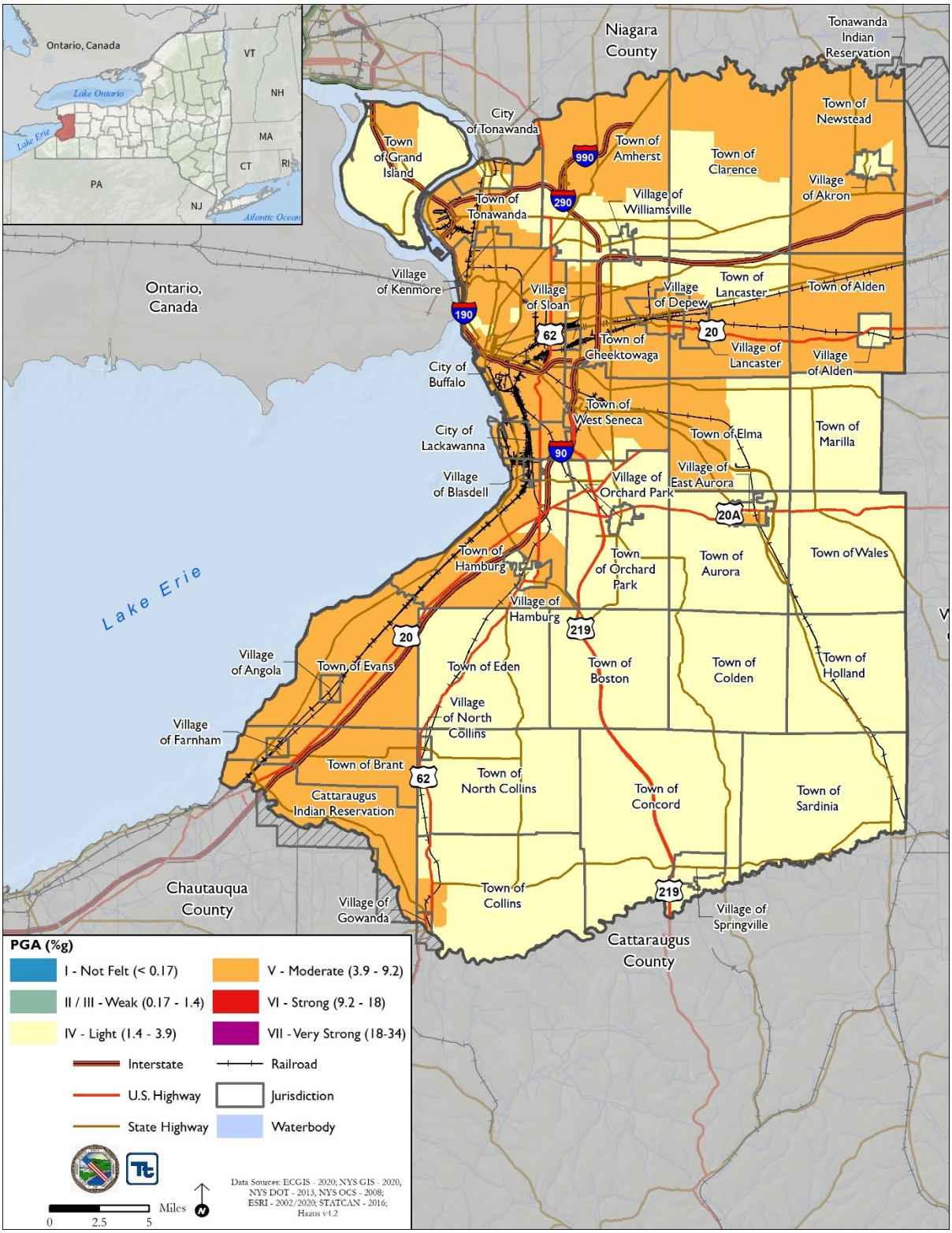
Source: *Freeman et al. (Purdue University) 2004*
Note: *%g* *Percent acceleration force of gravity*

National maps of earthquake shaking hazards have been produced since 1948. They provide information essential to creating and updating the seismic design requirements for building codes, insurance rate structures, earthquake loss studies, retrofit priorities, and land use planning used in the United States. Scientists frequently revise these maps to reflect new information and knowledge. Buildings, bridges, highways, and utilities built to meet modern seismic design requirements are typically able to withstand earthquakes better, with less damage and disruption. After thorough review of the studies, professional organizations of engineers update the seismic-risk maps and seismic design requirements contained in building codes (USGS 2016).

A probabilistic assessment was conducted for the 500-year mean return period (MRP) in Hazards U.S.—Multi-Hazard (Hazus) v4.2 to analyze the earthquake hazard for Erie County. The Hazus analysis evaluates the statistical likelihood that a specific event will occur and what consequences will occur. Figure 5.4.3-1 illustrates geographic distributions of the Modified Mercalli Scale based on PGAs (%*g*) across Erie County for a 500-year MRP event at the census-tract level. A 500-year MRP is an earthquake with 0.2 percent chance that mapped PGAs will be exceeded in any given year.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.3-1. Peak Ground Acceleration Modified Mercalli Scale for a 500-Year MRP Earthquake Event



Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The New York State Geological Survey conducted seismic shear-wave tests of the state's surficial geology. Based on these test results, the surficial geologic materials of New York State were categorized according to the National Earthquake Hazard Reduction Program's (NEHRP) Soil Site Classifications (Table 5.4.3-4). The NEHRP developed five soil classifications defined by their shear-wave velocity that impact the severity of an earthquake. The soil classification system ranges from A to E (as noted in Table 5.4.3-4), where A represents hard rock that reduces ground motions from an earthquake and E represents soft soils that amplify and magnify ground shaking and increase building damage and losses. Class E soils include water-saturated mud and artificial fill. The strongest amplification of shaking is expected for this soil type. Seismic waves travel faster through hard rock than through softer rock and sediments. As the waves pass from harder to softer rocks, the waves slow down and their amplitude increases. Shaking tends to be stronger at locations with softer surface layers where seismic waves move more slowly. Ground motion above an unconsolidated landfill or soft soils can be more than 10 times stronger than at neighboring locations on rock for small ground motions (NYS DHSES 2019).

Table 5.4.3-4. NEHRP Soil Classifications

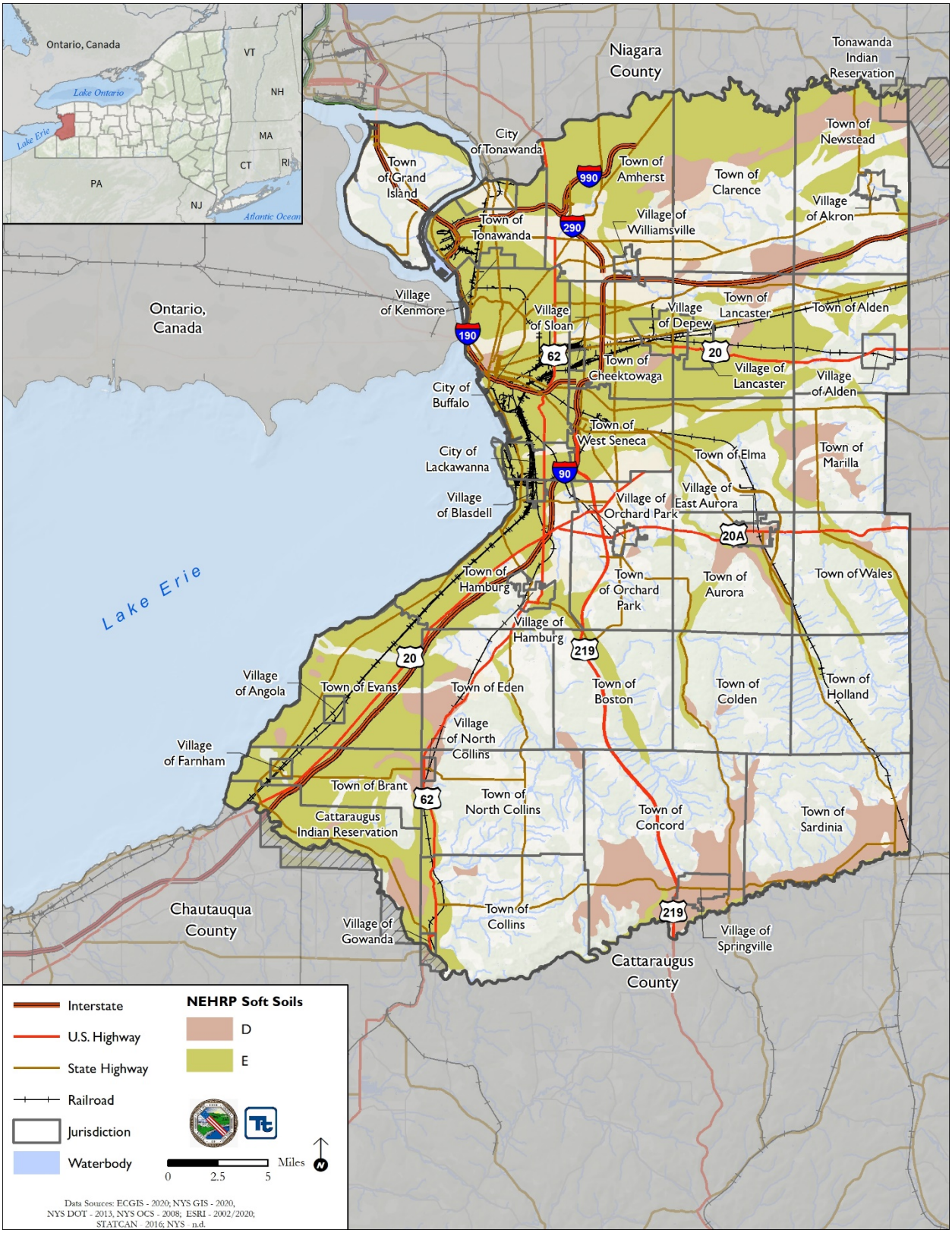
Soil Classification	Description
A	Very hard rock (e.g., granite, gneisses; and most of the Adirondack Mountains)
B	Rock (sedimentary) or firm ground
C	Stiff clay
D	Soft to medium clays or sands
E	Soft soil, including fill, loose sand, waterfront, lakebed clays

Source: NYS DHSES 2019

Figure 5.4.3-2 illustrates the NEHRP soils located throughout Erie County, according to NYS DHSES data. The available NEHRP soils information is incorporated into the Hazus v4.2 earthquake model for the risk assessment (discussed in further detail later in this section). Figure 5.4.3-2 shows that Erie County contains both D and E soft soils, with Class E being the predominate soft soil.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.3-2. NEHRP Soils in Erie County



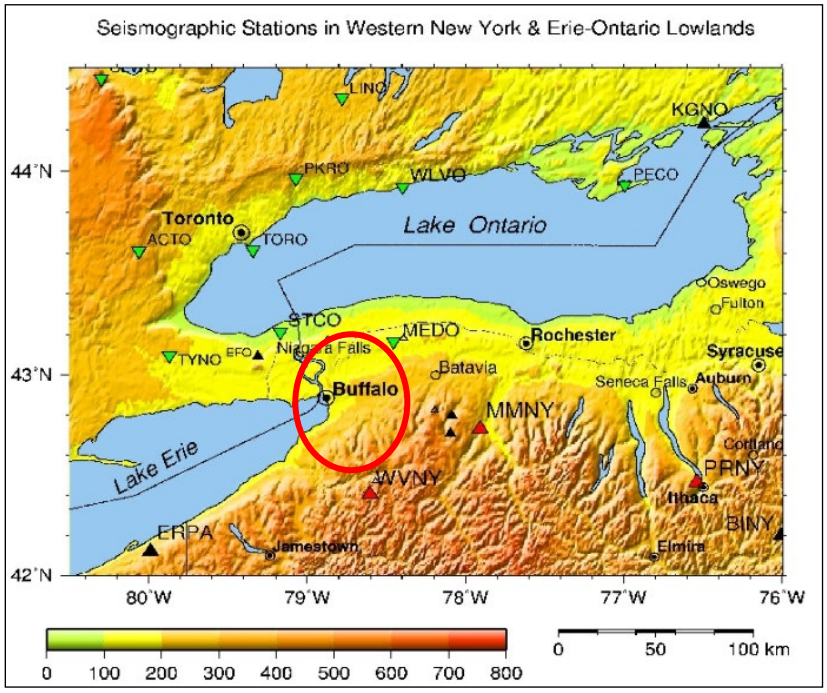
Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Location

The potential for earthquakes exists across all of New York State and four general regions would experience an amplification of ground motion during seismic activity. These regions are (1) Northwest NY – Northern Erie County, North Central; (2) Northeast NY – Jefferson, St. Laurence, and Northern Franklin Counties; (3) Upper Hudson River area of Eastern NY – Northern Saratoga, Washington, and Southern Warren Counties; and (4) Southeastern NY – Western Nassau County and New York City. Overall, these four regions are the most seismically active areas of the state. Erie County is located in Region 1 (NYS DHSES 2019).

The Lamont-Doherty Cooperative Seismographic Network (LCSN) monitors earthquakes that occur primarily in the northeastern United States. The goals of the monitoring project are to compile a complete earthquake catalog for this region, to assess the earthquake hazards, and to study the causes of the earthquakes in the region. The LCSN operates 40 seismographic stations in the following seven states: Connecticut, Delaware, Maryland, New Jersey, New York, Pennsylvania, and Vermont. No seismographic stations are present in Erie County; however, there are several within the vicinity of the county. Figure 5.4.3-3 shows the location of these stations in the western New York State area (LCSN 2014).

Figure 5.4.3-3. Lamont-Doherty Seismic Station Locations in the Western New York State Area



Source: *LCSN 2014*

Note: *The red oval indicates the approximate location of Erie County.*
The red triangles indicate secondary school, college, and university facility stations.
The black triangles indicate environmental research and education centers.
In addition to the Lamont-Doherty seismic stations, USGS operates a global network of seismic stations to monitor seismic activity. While no seismic stations are located in New York State, nearby stations are positioned
The green triangles indicate public places or state geological survey centers.

Figure 5.4.3-4 shows locations of USGS seismic stations near New York State, specifically in State College, Pennsylvania, and Oak Ridge, Massachusetts.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.3-4. USGS Seismic Stations Near New York State

Source: *USGS 2020*
Note: *The red circle indicates the approximate location of Erie County.*

Previous Occurrences and Losses

Many sources provided historical information on previous occurrences and losses associated with earthquakes throughout New York State. Therefore, with so many sources reviewed for the purpose of this HMP update, loss and impact information for many events could vary depending on the source.

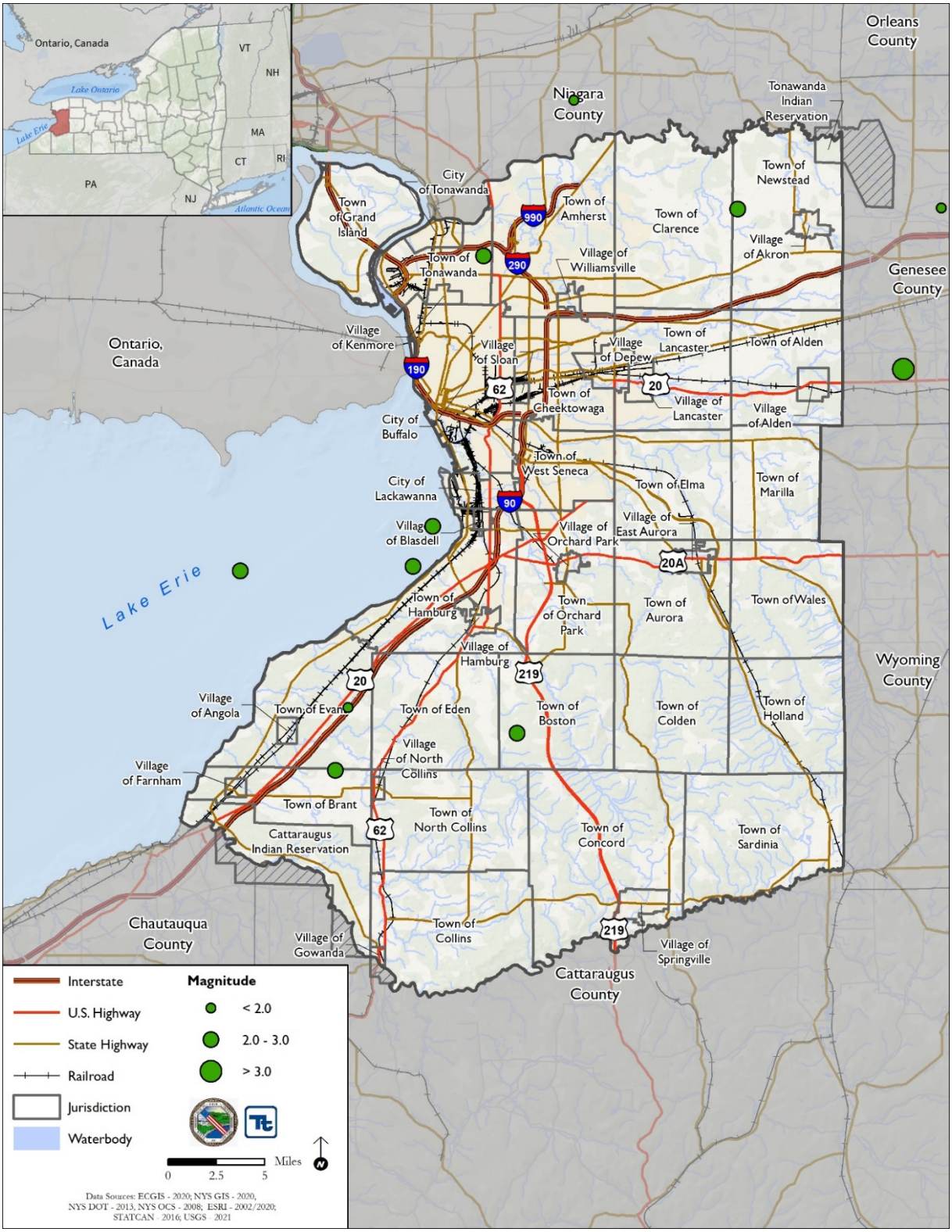
Between 1954 and 2019, New York State was included in one earthquake-related major disaster (DR) or emergency (EM) declaration; DR-1415: Earthquake. Generally, these disasters cover a wide region of the state; therefore, they may have impacted many counties. Erie County was not included in any earthquake-related DRs or EMs (FEMA 2020).

According to the NYS Geological Survey and the New York State 2019 HMP update, approximately 551 significant earthquakes affected New York State between 1737 and 2016 (NESEC 2020). as obtained from the New York State Hazard Mitigation Plan. There has been one significant seismic event in the vicinity of Erie County: an event of reported magnitude 5.2 to 5.8 (depending on the source) centered on Attica in Wyoming County in August 1929. Within Erie County, only one event is recorded in Buffalo in 1857, though this event is not deemed "significant" by nature of having a magnitude of 5.0 or above. A handful of minor earthquakes have been epicentered in and around Erie County since 1737, although details of these events were not readily available (NYS DHSES 2019).

Figure 5.4.3-5 illustrates historic earthquake epicenters in Erie County between 1950 and 2019. According to this figure, eight earthquakes with epicenters in Erie County (including epicenters in eastern Lake Erie) have occurred. In addition to these earthquakes in Erie County, numerous events have originated outside of the county that have been felt within the county. Table 5.4.3-5 includes details regarding these events.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.3-5. Earthquake Epicenters in Erie County and the Surrounding Area, 1950 – 2019



Note: Smallest magnitude shown: M1.62
Largest magnitude shown: M4.7

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

For this 2022 HMP update, known earthquake events that have impacted areas in and around Erie County between 1950 and 2020 are identified in Table 5.4.3-5. Loss and impact information could vary depending on the source. Therefore, the accuracy of monetary figures discussed is based only on the available information identified during research for this HMP update.

Table 5.4.3-5. Earthquake Events in Erie County, 1950 to 2019

Dates of Event	Magnitude (Modified Mercalli Scale)	Location	FEMA Declaration Number	County Designated?	Losses / Impacts
March 18, 2016	M1.7	Attica, NY	N/A	N/A	No damage reported.

Source(s): FEMA 2021; USGS 2020, NYS Hazard Mitigation Plan 2019
Note: All magnitudes listed refer to the, Modified Mercalli Scale, unless otherwise specified.
FEMA Federal Emergency Management Agency
N/A Not Applicable
USGS U.S. Geological Survey

Probability of Future Events

Earthquake hazard maps illustrate the distribution of earthquake shaking levels that have a certain probability of occurring over a given time period. According to the USGS, in 2017 (the date of the most recent analysis), Erie County had a PGA of 6%g to 10%g for earthquakes with a 2-percent probability of an occurrence within 50 years.

The New York State Disaster Preparedness Commission (NYS DPC) indicates that the earthquake hazard in New York State is often understated because other natural hazards occur more frequently (e.g., hurricanes, tornadoes, and flooding) and are much more visible. However, the potential for earthquakes does exist across the entire northeastern United States, and New York State is no exception.

In Section 5.3, the identified hazards of concern for Erie County were ranked. NYS DHSES conducts a similar ranking process for hazards that affect the state. The probability of occurrence, or likelihood of the event, is one parameter used for ranking hazards. Based on historical records and input from the Planning Partnership, the probability of occurrence for earthquakes in the county is considered "rare" (not likely to occur within 25 years, as presented in Table 5.3-1). However, for the 500-year mean return period (MRP) earthquake modeled in the Vulnerability Assessment section (below), the probability of occurrence is considered "rare" (not likely to occur within 100 years). With few incidents having occurred within Erie County, and few incidents reportedly affecting Erie County, it is anticipated that the county will experience few direct and indirect impacts from earthquakes in the future.

Climate Change

The potential impacts of global climate change on earthquake probability are unknown. Some scientists feel that melting glaciers could induce tectonic activity. As ice melts and water runs off, tremendous amounts of weight are shifted on the earth's crust. As newly freed crust returns to its original, pre-glacier shape, it could cause seismic plates to slip and stimulate volcanic activity according to research into prehistoric earthquakes and volcanic activity. National Aeronautics and Space Administration (NASA) and USGS scientists found that retreating glaciers in southern Alaska might be opening the way for future earthquakes (NASA 2007).

Secondary impacts of earthquakes could be magnified by future climate change. Soils saturated by repetitive storms could experience liquefaction during seismic activity because of the increased saturation. Dams storing increased volumes of water according to a revised hydrograph could fail during seismic events. During the 1989 Loma Prieta, California, earthquake, liquefaction of the soils and debris used to fill a lagoon caused major

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

subsidence, fracturing, and horizontal sliding of the ground surface (USGS n.d.). There are currently no models available to estimate these impacts.

5.4.3.2 Vulnerability Assessment

A probabilistic assessment was conducted for the 500-year MRPs through analysis in Hazus to analyze the earthquake hazard and provide a range of loss estimates. Figure 5.4.3-2 shows the geographic distribution of the NEHRP soil types in the county. Section 5.1 (Methodology and Tools) provides additional details on the methodology used to assess earthquake risk.

Impacts on Life, Health, and Safety

Overall, the entire population of Erie County is exposed to the earthquake hazard event. The impact of an earthquake on life, health, and safety is dependent upon the severity of the event. Risk to public safety and estimated loss of life from an earthquake in the county is minimal. However, populations inside or nearby unreinforced masonry construction are at higher risk due to greater potential for structural damage; people walking below building ornamentation and chimneys could be injured if those become loose and fall as a result of the earthquake.

Socially vulnerable populations, including the elderly (persons over age 65) and individuals living below the census poverty threshold, are most susceptible. Factors leading to this higher susceptibility include decreased mobility and financial ability to react or respond during a hazard, and the location and construction quality of their housing. There are 161,744 persons over the age of 65 and 126,806 persons living in poverty in Erie County (ACS 2019).

An exposure analysis was performed using the NEHRP soil data and the 2019 U.S. Census population data. As noted earlier, NEHRP Class D and E soils are soft soils that amplify and magnify ground shaking and increase building damage and losses; and thus, potentially increasing population at risk to the hazard event. The sum of the population (by Census block within the NEHRP Class D and E soil types) was calculated and summarized in Table 5.4.3-6 below. Overall, approximately 65.8-percent of the County's population is located on NEHRP Class D and E soils.

Table 5.4.3-6. Total Population Located in Class D and E NEHRP Soils

Jurisdiction	Total Population	Estimated Population Exposed to Class D and E NEHRP Soils Hazard Area	
		Number of People	Percent of Total
Akron (V)	2,871	0	0.0%
Alden (T)	7,418	2,514	33.9%
Alden (V)	2,577	0	0.0%
Amherst (T)	120,276	55,361	46.0%
Angola (V)	2,373	2,373	100.0%
Aurora (T)	7,599	2,244	29.5%
Blasdell (V)	2,645	2,645	100.0%
Boston (T)	8,042	2,838	35.3%
Brant (T)	1,541	1,361	88.3%
Buffalo (C)	256,480	232,768	90.8%
Cheektowaga (T)	73,129	54,869	75.0%
Clarence (T)	32,440	11,384	35.1%

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Population	Estimated Population Exposed to Class D and E NEHRP Soils Hazard Area	
		Number of People	Percent of Total
Colden (T)	3,328	505	15.2%
Collins (T)	5,418	2,205	40.7%
Concord (T)	4,186	1,634	39.0%
Depew (V)	15,102	14,550	96.3%
East Aurora (V)	6,184	5,036	81.4%
Eden (T)	7,631	1,445	18.9%
Elma (T)	11,732	4,883	41.6%
Evans (T)	13,782	13,228	96.0%
Farnham (V)	459	410	89.3%
Gowanda (V)	1,043	1,043	100.0%
Grand Island (T)	21,047	4,328	20.6%
Hamburg (T)	45,985	34,289	74.6%
Hamburg (V)	9,636	3,653	37.9%
Holland (T)	3,355	159	4.7%
Kenmore (V)	15,132	15,135	100.0%
Lackawanna (C)	17,831	13,871	77.8%
Lancaster (T)	27,625	19,634	71.1%
Lancaster (V)	10,144	9,432	93.0%
Marilla (T)	5,378	2,053	38.2%
Newstead (T)	5,804	2,014	34.7%
North Collins (T)	2,130	316	14.8%
North Collins (V)	1,370	1,370	100.0%
Orchard Park (T)	26,361	1,879	7.1%
Orchard Park (V)	3,148	0	0.0%
Sardinia (T)	2,780	1,138	40.9%
Sloan (V)	3,562	3,562	100.0%
Springville (V)	4,298	4,129	96.1%
Tonawanda (C)	14,830	3,049	20.6%
Tonawanda (T)	57,027	38,634	67.7%
Wales (T)	3,020	931	30.8%
West Seneca (T)	45,344	30,490	67.2%
Williamsville (V)	5,233	0	0.0%
Erie County Total	**917,296**	**603,360**	**65.8%**

Sources: NYS GIS n.d.; American Community Survey 2019
Note: C - City; T – Town; V – Village; % - Percent

Residents may be displaced or require temporary to long-term sheltering after an earthquake event. The number of people requiring shelter is generally less than the number displaced, as some displaced persons use hotels or stay with family or friends following a disaster event. Table 5.4.3-7 estimates the number of households displaced, and population that may require short-term sheltering as a result of the 500-year MRP earthquake event. It is an aggregate value of the entire County and estimates that one household would be displaced, and one person would require short-term shelter.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.3-7. Summary of Estimated Sheltering Needs for Erie County

Scenario	Displaced Households	People Requiring Short-Term Shelter
500-Year Earthquake	66	39

Sources: NYS GIS n.d.; Hazus v4.2

According to the 1999-2003 NYCEM Summary Report (*Earthquake Risks and Mitigation in the New York / New Jersey / Connecticut Region*), a strong correlation exists between structural building damage and the number of injuries and casualties from an earthquake event. Further, the time of day also exposes different sectors of the community to the hazard. For example, HAZUS considers the residential occupancy at its maximum at 2:00 a.m., where the educational, commercial, and industrial sectors are at their maximum at 2:00 p.m., and peak commute time is at 5:00 p.m. Whether directly impacted or indirectly impacted, the entire population will be affected to some degree. Business interruption could keep people from working, road closures could isolate populations, and loss of utilities could impact populations that suffered no direct damage from an event itself. Table 5.4.3-8 summarizes Countywide injuries and casualties estimated for the 500-year MRP earthquake event.

Table 5.4.3-8. Estimated Number of Injuries and Casualties from the 500-Year MRP Earthquake Event

Level of Severity	Time of Day		
	2:00 AM	2:00 PM	5:00 PM
Injuries	30	62	30
Hospitalization	4	9	4
Casualties	1	1	1

Sources: NYS GIS n.d.; Hazus v.4.2

Impacts on General Building Stock

The entire County's general building stock is considered at risk and exposed to this hazard. As stated earlier, soft soils (NEHRP Soil Classes D and E) can amplify ground shaking to damaging levels even during a moderate earthquake (NYCEM 2003). Therefore, buildings located on NEHRP Classes D and E soils are at increased risk of damage from an earthquake. Table 5.4.3-9 summarizes the number and replacement cost value of buildings in Erie County located on NEHRP soil classes D and E.

Table 5.4.3-9. Number and Replacement Cost Value of Buildings Located on NEHRP Class D and E Soils

Jurisdiction	Total Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Exposed to Class D and E NEHRP Soil Hazard Area			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	1	0.1%	$1,320,894	0.2%
Alden (T)	3,400	$1,748,473,245	1,170	34.4%	$677,152,419	38.7%
Alden (V)	1,102	$602,655,574	0	0.0%	$0	0.0%
Amherst (T)	38,528	$27,372,255,690	17,586	45.6%	$12,384,553,543	45.2%
Angola (V)	874	$525,704,230	874	100.0%	$525,704,230	100.0%
Aurora (T)	4,280	$2,496,885,036	1,270	29.7%	$670,683,376	26.9%
Blasdell (V)	1,026	$638,571,953	1,026	100.0%	$638,571,953	100.0%
Boston (T)	4,040	$1,702,475,276	1,470	36.4%	$682,577,130	40.1%
Brant (T)	1,325	$657,594,060	1,166	88.0%	$581,530,213	88.4%
Buffalo (C)	83,471	$58,603,851,634	75,648	90.6%	$52,674,127,383	89.9%
Cheektowaga (T)	30,938	$17,530,893,277	23,039	74.5%	$12,031,221,540	68.6%
Clarence (T)	13,660	$9,866,246,863	4,703	34.4%	$3,028,841,540	30.7%

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Exposed to Class D and E NEHRP Soil Hazard Area			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Colden (T)	2,110	$854,417,381	370	17.5%	$186,343,406	21.8%
Collins (T)	2,521	$1,189,158,504	976	38.7%	$509,391,402	42.8%
Concord (T)	3,245	$1,338,570,261	1,313	40.5%	$595,833,420	44.5%
Depew (V)	6,532	$3,841,823,815	6,239	95.5%	$3,283,049,383	85.5%
East Aurora (V)	2,441	$1,723,816,550	2,012	82.4%	$1,350,854,445	78.4%
Eden (T)	4,290	$2,180,455,513	787	18.3%	$394,939,063	18.1%
Elma (T)	6,093	$3,775,039,302	2,530	41.5%	$1,340,165,638	35.5%
Evans (T)	7,952	$3,335,060,692	7,643	96.1%	$3,192,262,346	95.7%
Farnham (V)	189	$87,990,422	169	89.4%	$81,364,324	92.5%
Gowanda (V)	396	$249,516,940	396	100.0%	$249,516,940	100.0%
Grand Island (T)	8,426	$4,674,517,058	1,673	19.9%	$753,023,987	16.1%
Hamburg (T)	19,130	$11,911,210,828	14,137	73.9%	$8,571,232,523	72.0%
Hamburg (V)	3,794	$2,005,172,252	1,431	37.7%	$699,202,903	34.9%
Holland (T)	2,182	$1,151,194,342	133	6.1%	$79,197,301	6.9%
Kenmore (V)	6,017	$2,305,529,001	6,018	100.0%	$2,305,727,486	100.0%
Lackawanna (C)	6,751	$4,030,622,400	5,232	77.5%	$3,155,944,351	78.3%
Lancaster (T)	10,973	$6,845,493,469	7,756	70.7%	$4,640,798,063	67.8%
Lancaster (V)	4,323	$2,217,331,122	3,997	92.5%	$1,918,292,835	86.5%
Marilla (T)	2,956	$1,099,846,031	1,116	37.8%	$431,863,131	39.3%
Newstead (T)	4,202	$2,181,758,974	1,211	28.8%	$500,381,299	22.9%
North Collins (T)	1,898	$889,517,676	288	15.2%	$159,078,273	17.9%
North Collins (V)	551	$383,968,909	551	100.0%	$383,968,909	100.0%
Orchard Park (T)	10,748	$8,174,650,530	735	6.8%	$362,433,473	4.4%
Orchard Park (V)	1,211	$867,347,745	0	0.0%	$0	0.0%
Sardinia (T)	2,184	$1,068,523,829	926	42.4%	$541,848,093	50.7%
Sloan (V)	1,674	$634,998,253	1,674	100.0%	$634,998,253	100.0%
Springville (V)	1,816	$1,354,905,864	1,753	96.5%	$1,333,521,872	98.4%
Tonawanda (C)	6,452	$3,291,492,557	1,334	20.7%	$892,223,232	27.1%
Tonawanda (T)	23,999	$14,694,684,404	16,473	68.6%	$11,507,058,387	78.3%
Wales (T)	1,923	$833,853,270	621	32.3%	$280,506,198	33.6%
West Seneca (T)	17,970	$9,583,482,689	12,150	67.6%	$6,394,050,726	66.7%
Williamsville (V)	2,057	$1,126,868,443	2	0.1%	$39,338,903	3.5%
Erie County Total	**360,925**	**$222,515,035,436**	**229,599**	**63.6%**	**$140,664,694,787**	**63.2%**

Source: NYS GIS n.d; RS Means 2020
C – City; T – Town; V – Village; % - Percent

There is a strong correlation between PGA and damage a building might undergo (NYCEM 2003). The Hazus model is based on best available earthquake science and aligns with these statements. The Hazus probabilistic earthquake model was applied to analyze effects from the earthquake hazard on general building stock in Erie County. Figure 5.4.3-1 in this profile illustrates the geographic distribution of PGA (g) across the County for 500-year MRP events at the Census-tract level.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

A building's construction determines how well it can withstand the force of an earthquake. The NYCEM report indicates that unreinforced masonry buildings are most at risk during an earthquake because the walls are prone to collapse outward, whereas steel and wood buildings absorb more of the earthquake's energy. Additional attributes that affect a building's capability to withstand an earthquake's force include its age, number of stories, and quality of construction. Hazus v4.2 considers building construction and age of building as part of the analysis. Because a custom general building stock was used for this analysis, the building ages and building types from the inventory were incorporated into the Hazus v4.2 model.

Potential building damage was evaluated by Hazus across the following damage categories (none, slight, moderate, extensive, and complete). Table 5.4.3-10 provides definitions of these five categories of damage for a light wood-framed building; definitions for other building types are included in Hazus technical manual documentation.

Table 5.4.3-10. Example of Structural Damage State Definitions for a Light Wood-Framed Building

Damage Category	Description
Slight	Small plaster or gypsum-board cracks at corners of door and window openings and wall-ceiling intersections; small cracks in masonry chimneys and masonry veneer.
Moderate	Large plaster or gypsum-board cracks at corners of door and window openings; small diagonal cracks across shear wall panels exhibited by small cracks in stucco and gypsum wall panels; large cracks in brick chimneys; toppling of tall masonry chimneys.
Extensive	Large diagonal cracks across shear wall panels or large cracks at plywood joints; permanent lateral movement of floors and roof; toppling of most brick chimneys; cracks in foundations; splitting of wood sill plates and/or slippage of structure over foundations; partial collapse of room-over-garage or other soft-story configurations.
Complete	Structure may have large permanent lateral displacement, may collapse, or be in imminent danger of collapse due to cripple wall failure or the failure of the lateral load-resisting system; some structures may slip and fall off the foundations; large foundation cracks occur.

Source: Hazus Technical Manual

Building damage as a result of the 500-year MRP earthquake events was estimated using Hazus. Damage loss estimates include structural and non-structural damage to the building and loss of contents. Table 5.4.3-11 summarizes the estimated damages for the County by building type for the 500-year MRP earthquake events. Hazus estimates that 165 structures in the County will be face extensive damaged because of a 500-year earthquake event. The majority of these structures are un-reinforced masonry buildings. Hazus estimates that 1,335 structures will be moderately damaged, and majority of the buildings are un-reinforced masonry (i.e., 904 total), followed by wood buildings (i.e., 274 total).

Table 5.4.3-11 Estimated Number of Buildings Damaged by Building Type for 500-year MRP Earthquake Event

	Expected Number of Buildings Within Damage State Categories by Building Type 500-Year MRP				
Building Category	None	Slight	Moderate	Extensive	Complete
Wood	305,990	3,179	274	15	0
Steel	6,207	125	36	1	0
Concrete	1,762	32	10	0	0
Precast	0	0	0	0	0
Reinforced Masonry	0	0	0	0	0
Un-reinforced Masonry	34,968	2,129	904	147	15
Manufactured housing	4,698	319	111	2	0

Source: NYS GIS n.d.; Hazus v4.2

Hazus also summarizes damage state estimates for buildings by general occupancy class. Table 5.4.3-12 lists the severity of damage state structures will experience by the 500-year MRP earthquake event by general

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

occupancy class. Table 5.4.3-13 also breaks down estimated damages by the structural general occupancy class for each jurisdiction.

Table 5.4.3-12. Estimated Buildings Damaged by General Occupancy for 500-year MRP Earthquake Events

Occupancy Class	Total Number of Buildings in Occupancy	Severity of Expected Damage	Earthquake 500-Year	
			Building Count	Percent Buildings in Occupancy Class
Residential Exposure (Single and Multi-Family Dwellings)	334,595	None	328,122	98.1%
		Minor	5,126	1.5%
		Moderate	1,184	0.4%
		Severe	149	<0.1%
		Complete Destruction	14	<0.1%
Commercial Buildings	18,761	None	18,176	96.9%
		Minor	480	2.6%
		Moderate	95	0.5%
		Severe	9	<0.1%
		Complete Destruction	1	<0.1%
Industrial Buildings	1,758	None	1,674	95.2%
		Minor	60	3.4%
		Moderate	22	1.3%
		Severe	2	0.1%
		Complete Destruction	0	<0.1%
Government, Religion, Agricultural, and Education Buildings	5,812	None	5,653	97.3%
		Minor	119	2.0%
		Moderate	33	0.6%
		Severe	5	0.1%
		Complete Destruction	1	<0.1%

Source: NYS GIS n.d.; Hazus v4.2

Table 5.4.3-13. Estimated Replacement Cost Value (Building and Contents) Damaged by the 500-Year MRP Earthquake Event

Jurisdiction	Replacement Cost Value (RCV)	500-Year MRP				
		Estimated Total Damage (Building & Content Loss)	Percent of Total	Estimated Residential Damage	Estimated Commercial Damage	Estimated Damages for All Other Occupancies
Akron (V)	$866,609,574	$87,100	<0.1%	$30,623	$12,494	$43,983
Alden (T)	$1,748,473,245	$645,897	<0.1%	$337,148	$95,294	$213,456
Alden (V)	$602,655,574	$126,572	<0.1%	$70,300	$25,734	$30,538
Amherst (T)	$27,372,255,690	$12,761,050	<0.1%	$7,109,573	$2,930,744	$2,720,733
Angola (V)	$525,704,230	$520,679	0.1%	$183,820	$110,915	$225,944
Aurora (T)	$2,496,885,036	$355,121	<0.1%	$210,042	$53,021	$92,058
Blasdell (V)	$638,571,953	$1,168,001	0.2%	$252,236	$143,509	$772,256
Boston (T)	$1,702,475,276	$134,261	<0.1%	$100,760	$17,652	$15,849
Brant (T)	$657,594,060	$296,916	<0.1%	$168,615	$55,395	$72,906
Buffalo (C)	$58,603,851,634	$55,329,241	0.1%	$22,708,580	$14,944,363	$17,676,297

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Replacement Cost Value (RCV)	500-Year MRP				
		Estimated Total Damage (Building & Content Loss)	Percent of Total	Estimated Residential Damage	Estimated Commercial Damage	Estimated Damages for All Other Occupancies
Cheektowaga (T)	$17,530,893,277	$16,976,978	0.1%	$8,251,974	$5,267,402	$3,457,601
Clarence (T)	$9,866,246,863	$2,369,093	<0.1%	$1,702,791	$360,924	$305,378
Colden (T)	$854,417,381	$47,591	<0.1%	$31,750	$4,532	$11,309
Collins (T)	$1,189,158,504	$265,123	<0.1%	$145,151	$55,777	$64,195
Concord (T)	$1,338,570,261	$103,559	<0.1%	$74,673	$10,583	$18,303
Depew (V)	$3,841,823,815	$4,343,543	0.1%	$1,607,697	$1,122,633	$1,613,214
East Aurora (V)	$1,723,816,550	$372,518	<0.1%	$200,938	$68,858	$102,723
Eden (T)	$2,180,455,513	$354,805	<0.1%	$158,699	$31,872	$164,234
Elma (T)	$3,775,039,302	$1,254,605	<0.1%	$783,903	$247,466	$223,236
Evans (T)	$3,335,060,692	$2,407,841	0.1%	$1,370,079	$479,418	$558,345
Farnham (V)	$87,990,422	$42,683	<0.1%	$24,247	$7,967	$10,469
Gowanda (V)	$249,516,940	$124,691	<0.1%	$49,352	$25,733	$49,607
Grand Island (T)	$4,674,517,058	$800,919	<0.1%	$461,784	$114,714	$224,421
Hamburg (T)	$11,911,210,828	$7,652,144	0.1%	$3,890,288	$1,360,820	$2,401,036
Hamburg (V)	$2,005,172,252	$704,201	<0.1%	$451,985	$111,906	$140,311
Holland (T)	$1,151,194,342	$74,669	<0.1%	$25,930	$8,343	$40,396
Kenmore (V)	$2,305,529,001	$2,223,090	0.1%	$1,568,890	$386,018	$268,181
Lackawanna (C)	$4,030,622,400	$4,179,985	0.1%	$2,007,918	$498,098	$1,673,968
Lancaster (T)	$6,845,493,469	$4,000,432	0.1%	$2,614,368	$754,927	$631,137
Lancaster (V)	$2,217,331,122	$2,603,086	0.1%	$1,301,071	$407,864	$894,151
Marilla (T)	$1,099,846,031	$164,429	<0.1%	$134,538	$7,814	$22,077
Newstead (T)	$2,181,758,974	$589,924	<0.1%	$309,716	$143,997	$136,211
North Collins (T)	$889,517,676	$76,814	<0.1%	$26,622	$13,939	$36,253
North Collins (V)	$383,968,909	$22,300	<0.1%	$7,728	$4,047	$10,525
Orchard Park (T)	$8,174,650,530	$769,777	<0.1%	$485,682	$123,421	$160,674
Orchard Park (V)	$867,347,745	$167,979	<0.1%	$85,371	$27,431	$55,178
Sardinia (T)	$1,068,523,829	$90,654	<0.1%	$38,626	$26,169	$25,859
Sloan (V)	$634,998,253	$719,689	<0.1%	$427,290	$144,959	$147,441
Springville (V)	$1,354,905,864	$373,141	<0.1%	$119,243	$133,605	$120,293
Tonawanda (C)	$3,291,492,557	$1,066,646	<0.1%	$342,189	$377,451	$347,006
Tonawanda (T)	$14,694,684,404	$14,073,232	0.1%	$5,996,845	$3,790,045	$4,286,342
Wales (T)	$833,853,270	$92,078	<0.1%	$60,790	$7,667	$23,621
West Seneca (T)	$9,583,482,689	$8,901,964	<0.1%	$5,037,937	$2,258,076	$1,605,951
Williamsville (V)	$1,126,868,443	$106,714	<0.1%	$61,056	$23,950	$21,708
Erie County Total	**$222,515,035,436**	**$149,541,734**	**0.1%**	**$71,028,818**	**$36,797,543**	**$41,715,372**

Source: NYS GIS n.d.; Hazus v4.2; RS Means 2020
C – City; T – Town; V – Village; % - Percent

Hazus estimated approximately $149.5 million in damage as a result of the 500-year earthquake event. This includes structural damage, non-structural damage, and loss of contents, representing 1-percent of the total replacement value for general building stock in Erie County. Residential buildings account for most of the damage for earthquake event.

Impact on Critical Facilities

After considering the general building stock exposed to, and damaged by, 500-year MRP earthquake event, critical facilities were evaluated. More than 60-percent of the critical facilities in Erie County are considered exposed to the earthquake hazard. Table 5.4.3-14 shows that of the 4,184 critical facilities in the County, 2,539 are located on NEHRP Class D and E soils. A total of 2,462 of these critical facilities are considered lifelines for the County. Table 5.4.3-15 through Table 5.4.3-17 summarize the number of critical facilities by type per jurisdiction in Erie County located on NEHRP Soil Class D and E hazard areas. The City of Buffalo has the

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

greatest number of critical facilities exposed to the earthquake hazard area, and majority of the exposed critical facilities are bridges.

Table 5.4.3-14. Number of Critical Facilities Located Exposed to NEHRP D & E Soils

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to Earthquake (NEHRP Soil D & E)			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	1	3.3%	1	3.8%
Alden (T)	76	68	36	47.4%	34	50.0%
Alden (V)	19	17	0	0.0%	0	0.0%
Amherst (T)	391	387	142	36.3%	141	36.4%
Angola (V)	20	18	20	100.0%	18	100.0%
Aurora (T)	95	81	43	45.3%	40	49.4%
Blasdell (V)	22	22	22	100.0%	22	100.0%
Boston (T)	81	75	35	43.2%	32	42.7%
Brant (T)	39	39	34	87.2%	34	87.2%
Buffalo (C)	751	748	676	90.0%	673	90.0%
Cheektowaga (T)	224	221	157	70.1%	154	69.7%
Clarence (T)	121	115	47	38.8%	46	40.0%
Colden (T)	67	56	23	34.3%	19	33.9%
Collins (T)	71	55	22	31.0%	19	34.5%
Concord (T)	84	68	29	34.5%	26	38.2%
Depew (V)	63	63	56	88.9%	56	88.9%
East Aurora (V)	42	41	36	85.7%	35	85.4%
Eden (T)	78	72	18	23.1%	16	22.2%
Elma (T)	83	75	36	43.4%	33	44.0%
Evans (T)	112	109	109	97.3%	106	97.2%
Farnham (V)	10	10	10	100.0%	10	100.0%
Gowanda (V)	7	7	7	100.0%	7	100.0%
Grand Island (T)	69	66	17	24.6%	16	24.2%
Hamburg (T)	189	181	158	83.6%	153	84.5%
Hamburg (V)	27	23	12	44.4%	8	34.8%
Holland (T)	90	70	9	10.0%	9	12.9%
Kenmore (V)	14	13	14	100.0%	13	100.0%
Lackawanna (C)	94	93	77	81.9%	77	82.8%
Lancaster (T)	109	103	67	61.5%	63	61.2%
Lancaster (V)	58	53	52	89.7%	47	88.7%
Marilla (T)	48	37	25	52.1%	20	54.1%
Newstead (T)	64	61	25	39.1%	23	37.7%
North Collins (T)	69	56	19	27.5%	18	32.1%
North Collins (V)	14	13	14	100.0%	13	100.0%
Orchard Park (T)	141	129	16	11.3%	15	11.6%
Orchard Park (V)	21	18	0	0.0%	0	0.0%
Sardinia (T)	78	57	31	39.7%	30	52.6%
Sloan (V)	8	8	8	100.0%	8	100.0%
Springville (V)	35	32	35	100.0%	32	100.0%
Tonawanda (C)	61	60	10	16.4%	10	16.7%
Tonawanda (T)	266	265	241	90.6%	240	90.6%
Wales (T)	82	68	35	42.7%	34	50.0%
West Seneca (T)	145	140	115	79.3%	111	79.3%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**2,539**	**60.7%**	**2,462**	**62.6%**

Source: NYS GIS n.d.; Erie County GIS 2020

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

C – City; T – Town; V – Village; % - Percent

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.3-15. Number of Critical Facilities (A-M) Located in the NEHRP Soil Class D and E

Jurisdiction	Critical Facilities Exposed to Earthquake Class D and E NEHRP Hazard Soils																		
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	11	0	0	0	0	1	3	0	0	0	0	3	0	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	0	57	0	0	2	1	0	1	4	0	0	8	16	1	0	1	0
Angola (V)	0	0	0	3	0	0	2	0	0	1	1	0	0	2	2	1	0	1	0
Aurora (T)	0	0	0	22	0	0	0	0	0	3	0	0	0	1	0	1	0	0	0
Blasdell (V)	0	0	0	7	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0
Boston (T)	0	0	0	13	0	0	1	0	0	2	0	1	0	3	1	0	0	1	0
Brant (T)	0	0	1	10	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Buffalo ©	0	0	0	212	7	0	18	48	2	3	7	1	1	23	87	6	4	1	12
Cheektowaga (T)	0	0	0	50	0	1	2	2	0	2	4	0	1	12	27	2	0	1	0
Clarence (T)	0	2	0	22	0	0	0	0	0	1	0	0	0	1	3	0	0	0	0
Colden (T)	0	0	0	6	0	0	0	0	0	4	0	0	0	1	1	1	0	0	0
Collins (T)	0	0	0	7	0	1	0	0	0	3	0	0	0	1	1	0	0	1	0
Concord (T)	0	0	1	11	0	0	0	0	0	4	0	0	0	2	0	1	0	0	0
Depew (V)	0	0	0	15	0	0	0	1	0	1	0	0	0	3	8	3	0	0	0
East Aurora (V)	0	0	0	9	0	0	1	1	0	3	0	0	0	2	3	1	0	1	0
Eden (T)	0	0	0	7	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0
Elma (T)	0	0	0	18	0	0	0	0	0	3	2	0	0	3	2	0	0	0	0
Evans (T)	0	1	0	42	0	1	1	0	0	3	1	0	0	6	2	1	0	0	0
Farnham (V)	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Gowanda (V)	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Grand Island (T)	0	0	0	9	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0

Jurisdiction	Critical Facilities Exposed to Earthquake Class D and E NEHRP Hazard Soils																		
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station
Hamburg (T)	1	1	0	55	0	0	1	0	0	5	0	0	0	9	15	1	0	0	0
Hamburg (V)	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
Holland (T)	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	1	0
Lackawanna ©	0	0	0	20	0	0	1	1	0	0	6	0	0	4	9	1	0	0	0
Lancaster (T)	1	2	0	24	0	0	1	0	0	4	1	0	0	3	14	2	0	0	0
Lancaster (V)	0	0	0	11	0	0	1	1	0	4	2	1	0	1	5	2	0	1	0
Marilla (T)	0	0	0	10	0	0	0	1	0	4	0	0	0	1	1	2	0	1	0
Newstead (T)	0	0	1	15	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0
North Collins (T)	0	0	0	3	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0
North Collins (V)	0	0	0	1	0	0	1	0	0	0	0	1	0	1	2	0	0	1	0
Orchard Park (T)	0	0	0	10	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	0	0	9	0	3	0	0	0	1	0	0	0	2	1	1	0	0	0
Sloan (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Springville (V)	0	0	0	2	0	0	1	1	0	2	0	0	0	3	3	2	1	1	0
Tonawanda ©	0	0	0	6	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Tonawanda (T)	0	0	0	34	0	0	1	2	0	2	14	1	0	9	49	4	1	0	0
Wales (T)	0	0	0	14	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0
West Seneca (T)	1	1	0	43	0	0	1	0	0	5	2	0	0	3	13	1	0	0	0
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**3**	**7**	**3**	**800**	**7**	**6**	**35**	**61**	**3**	**76**	**45**	**7**	**2**	**115**	**276**	**37**	**6**	**13**	**12**

Source: NYS GIS n.d.; Erie County GIS 2020
C – City; T – Town; V – Village; % - Percent

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.3-16. Number of Critical Facilities (N-Z) Located in the NEHRP Soil Class D and E

Jurisdiction	Critical Facilities Exposed to Earthquake Class D and E NEHRP Hazard Soils																	
	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Akron (V)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	2	0	0	0	0	0	11	2	0	0	0	0	2	1	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	1	1	0	0	0	3	14	0	0	25	0	5	0	1	1	0
Angola (V)	0	0	1	1	0	0	0	0	1	0	0	0	0	3	1	0	0	0
Aurora (T)	0	0	0	1	0	0	0	7	2	0	0	0	0	0	0	0	6	0
Blasdell (V)	0	0	1	0	0	0	0	2	1	0	1	0	0	2	1	1	3	0
Boston (T)	0	1	1	2	1	0	1	2	1	0	0	0	1	2	1	0	0	0
Brant (T)	0	0	1	1	1	0	0	10	0	0	0	0	1	1	1	0	5	0
Buffalo ©	0	4	9	9	10	0	0	4	98	1	0	75	4	26	1	1	2	0
Cheektowaga (T)	0	0	2	1	7	0	2	1	19	0	0	3	1	6	1	0	10	0
Clarence (T)	0	1	0	2	1	0	0	5	3	0	0	0	0	1	0	1	4	0
Colden (T)	1	0	0	1	0	0	0	4	1	0	0	0	1	1	1	0	0	0
Collins (T)	0	0	0	1	2	0	0	3	0	0	0	0	1	0	1	0	0	0
Concord (T)	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	1	1	0	0	0	1	8	0	0	0	1	4	1	0	8	0
East Aurora (V)	0	0	1	0	0	0	0	0	4	0	0	0	2	0	2	1	5	0
Eden (T)	0	0	0	0	0	1	0	2	0	0	0	0	0	2	0	0	3	0
Elma (T)	0	0	0	0	0	1	0	1	0	0	0	0	2	2	0	0	2	0
Evans (T)	0	0	1	2	9	1	0	6	6	0	0	0	2	4	1	1	18	0
Farnham (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	2	0
Gowanda (V)	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Grand Island (T)	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0
Hamburg (T)	1	0	0	3	3	0	0	3	11	0	0	16	0	0	0	1	32	0
Hamburg (V)	0	0	1	0	0	0	0	0	2	0	0	0	0	2	1	0	1	0

Jurisdiction	Critical Facilities Exposed to Earthquake Class D and E NEHRP Hazard Soils																	
	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Holland (T)	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
Kenmore (V)	0	0	1	1	0	0	0	0	2	0	0	0	0	2	2	0	0	0
Lackawanna ©	0	0	0	0	0	0	0	0	6	0	0	0	2	7	0	2	18	0
Lancaster (T)	0	0	0	1	2	0	0	1	1	0	0	1	0	2	0	0	7	0
Lancaster (V)	0	0	0	1	2	0	0	0	7	0	0	0	2	7	2	1	1	0
Marilla (T)	0	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0
Newstead (T)	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
North Collins (T)	0	2	0	1	1	0	0	5	2	0	0	0	1	0	0	0	0	0
North Collins (V)	0	0	1	1	0	0	0	0	2	0	0	0	0	1	2	0	0	0
Orchard Park (T)	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	1	0
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	0	0	2	0	0	0	11	0	0	0	0	0	0	1	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	1	0	0	0	1	3	1	0	0	0
Springville (V)	0	0	1	1	1	0	0	0	6	0	0	0	1	3	2	0	0	4
Tonawanda ©	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0
Tonawanda (T)	1	85	1	1	9	0	0	0	17	0	0	0	1	7	0	2	0	0
Wales (T)	0	0	0	2	0	0	0	12	0	0	0	0	0	2	1	0	0	0
West Seneca (T)	0	6	0	1	1	0	0	0	19	0	0	0	0	9	0	0	9	0
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**3**	**101**	**25**	**41**	**54**	**3**	**3**	**118**	**240**	**1**	**1**	**120**	**24**	**108**	**28**	**13**	**138**	**4**

Source: NYS GIS n.d.; Erie County GIS 2020
C – City; T – Town; V – Village; % - Percent

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.3-17 separates the critical facilities exposed to NEHRP soil by the lifeline category. A majority of the exposed lifelines fall under the transportation category.

Table 5.4.3-17. Number of Lifelines Exposed to NEHRP D Soils

FEMA Lifeline Category	Number of Lifelines	Number of Lifelines Exposed to Class D and E NEHRP Soils
Communications	59	41
Energy	176	151
Food, Water, Shelter	951	448
Hazardous Materials	398	276
Health and Medical	144	98
Safety and Security	1,047	615
Transportation	1,158	833
Erie County Total	**3,933**	**2,462**

Source: NYS GIS n.d.; Erie County GIS 2020; FEMA 2020

Hazus estimates the probability that critical facilities may sustain damage and the percent functionality as a result of 500-year MRP earthquake events (Table 5.4.3-18). As a result of a 500-Year MRP event, Hazus estimates that essential, utilities, and transportation facilities will be over 93-percent functional one day after the event. Furthermore, over 92-percent of these facilities will not sustain any damage.

Table 5.4.3-18. Estimated Damage and Loss of Functionality for Critical Facilities and Utilities for the 500-Year MRP Earthquake Event

Name	Percent Probability of Sustaining Damage					Percent Functionality			
	None	Slight	Mod.	Ext.	Com.	Day 1	Day 7	Day 30	Day 90
Essential Facilities									
EOC	93.9%-97.6%	1.8%-4.4%	0.5%-1.5%	0.2%	<0.1 %	93.8%-97.5%	98.1%-99.3%	99.9%	99.9%
Fire	93.4%-99.6%	0.3%-4.7%	<0.1%-1.6%	0.2%	<0.1 %	93.3%-99.5%	98.0%-99.9%	99.8%	99.8%
Medical	98.6%-99.9%	0.0%-1.2%	0.2%	0.1%	<0.1 %	98.5%-99.9%	99.8%	99.9%	99.9%
Police	93.8%-99.5%	0.4%-4.5%	<0.1%-1.5%	<0.1 %	<0.1 %	93.7%-99.5%	98.1%-99.8%	99.8%	99.9%
School	93.4%-99.6%	0.3%-4.7%	<0.1%-1.6%	<0.1 %	<0.1 %	93.4%-99.5%	98.0%-99.9%	99.8%	99.9%
Utilities									
Communication	92.2%-99.9%	0.1%-4.9%	0.0%-2.6%	<0.1 %	0.0%	98.4%-99.9%	99.9%	99.9%	99.9%
Electric Power	93.7%-99.6%	0.4%-4.6%	<0.1%-1.6%	<0.1 %	<0.1 %	96.1%-99.7%	99.8%	99.9%	99.9%
Natural Gas	98.6%-99.9%	<0.1%-1.1%	0.1%	<0.1 %	<0.1 %	99.6%	99.9%	99.9%	99.9%
Oil	98.4%-99.9%	<0.1%-1.3%	0.2%	<0.1 %	<0.1 %	99.3%	99.8%	99.9%	99.9%
Potable Water	94.8%-99.8%	0.1%-2.9%	<0.1%-1.9%	0.1%	0.0%	96.5%-99.9%	99.9%	99.9%	99.9%
Wastewater	93.6%-99.5%	0.4%-4.6%	<0.1%-1.6%	0.1%	<0.1 %	95.3%-99.6%	99.8%	99.9%	99.9%
Transportation									
Airport Facility	98.0%-99.9%	0.1%-1.9%	<0.1%	0.0%	0.0%	99.9%	99.9%	99.9%	99.9%

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Name	Percent Probability of Sustaining Damage					Percent Functionality			
	None	Slight	Mod.	Ext.	Com.	Day 1	Day 7	Day 30	Day 90
Airport Runway	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0 %	100.0 %
Bus	98.1%-99.7%	0.3%-1.8%	<0.1%	0.0%	0.0%	99.9%	99.9%	99.9%	99.9%
Highway Bridge	98.2%-100.0%	0.0%-1.4%	<0.1%	<0.1 %	<0.1 %	99.3%-100.0%	99.8%	99.9%	99.9%
Rail	98.1%-99.7%	0.3%-1.8%	0.1%	0.0%	0.0%	99.9%	99.9%	99.9%	99.9%

Source: NYS GIS n.d.; Hazus v4.2
Notes: Mod. = Moderate Ext. = Extensive Com. = Complete

Impact on the Economy

Earthquakes also impact the economy, including loss of business function, damage to inventory (buildings, transportation, and utility systems), relocation costs, wage loss, and rental loss due to repair and replacement of buildings. Hazus estimates building-related economic losses, including income losses (wage, rental, relocation, and capital-related losses) and capital stock losses (structural, non-structural, content, and inventory losses). Economic losses estimated by Hazus are summarized in Table 5.4.3-19.

Table 5.4.3-19. Building-Related Economic Losses from 500-Year MRP Earthquake Events

Mean Return Period (MRP)	Inventory Loss	Relocation Loss	Building and Content Losses	Wages Losses	Rental Losses	Capital-Related Loss
500-year MRP	$1,569,100	$19,172,800	$149,540,900	$8,645,000	$7,714,700	$3,835,900

Source: NYS GIS n.d.; Hazus v4.2

Although the Hazus analysis did not compute damage estimates for individual roadway segments and railroad tracks, assumedly these features would undergo damage due to ground failure resulting in interruptions of regional transportation and of distribution of materials. Losses to the community that would result from damage to lifelines could exceed costs of repair (FEMA 2012). Earthquake events can significantly affect road bridges, many of which provide the only access to certain neighborhoods. Because softer soils generally follow floodplain boundaries, bridges that cross watercourses should be considered vulnerable. Another key factor in degree of vulnerability is age of facilities and infrastructure, which correlates with standards in place at time of construction.

Additionally, Hazus estimates volume of debris that may be generated as a result of an earthquake event to enable the study region to prepare for and rapidly and efficiently manage debris removal and disposal. Debris estimates were divided into two categories: (1) reinforced concrete and steel that require special equipment to break up before transport can occur, and (2) brick, wood, and other debris that can be loaded directly onto trucks by use of bulldozers (Hazus Earthquake User's Manual).

Hazus estimated the generation of over 68,611 tons of total debris during the 500-year MRP event (Table 5.4.3-20)

Table 5.4.3-20. Estimated Debris Generated by the 500-year MRP Earthquake Event

Jurisdiction	500 Year MRP Debris (Tons)		
	Wood and Concrete	Metal and Steel	Total Debris
Akron (V)	49	8	58

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	500 Year MRP Debris (Tons)		
	Wood and Concrete	Metal and Steel	Total Debris
Alden (T)	257	51	307
Alden (V)	78	16	94
Amherst (T)	4,791	954	5,745
Angola (V)	248	54	302
Aurora (T)	168	28	197
Blasdell (V)	154	86	240
Boston (T)	82	13	94
Brant (T)	51	11	62
Buffalo (C)	15,703	4,191	19,893
Cheektowaga (T)	8,817	2,135	10,952
Clarence (T)	961	168	1,129
Colden (T)	26	4	30
Collins (T)	80	18	98
Concord (T)	34	6	40
Depew (V)	2,293	530	2,824
East Aurora (V)	121	25	146
Eden (T)	197	33	230
Elma (T)	521	98	619
Evans (T)	757	170	928
Farnham (V)	7	2	9
Gowanda (V)	55	12	67
Grand Island (T)	376	64	440
Hamburg (T)	2,474	654	3,128
Hamburg (V)	320	61	381
Holland (T)	46	7	53
Kenmore (V)	685	150	835
Lackawanna (C)	2,104	489	2,593
Lancaster (T)	1,386	283	1,670
Lancaster (V)	1,425	311	1,735
Marilla (T)	63	11	74
Newstead (T)	165	36	202
North Collins (T)	36	6	42
North Collins (V)	10	2	12
Orchard Park (T)	464	75	539
Orchard Park (V)	106	17	124
Sardinia (T)	37	6	44
Sloan (V)	316	68	385
Springville (V)	169	38	207
Tonawanda (C)	277	70	347
Tonawanda (T)	4,779	1,318	6,096
Wales (T)	38	6	45
West Seneca (T)	4,483	1,020	5,504
Williamsville (V)	82	12	94
Erie County Total	**55,294**	**13,317**	**68,611**

Source: NYS GIS n.d.; Hazus v4.2
C – City; T – Town; V – Village; % - Percent

Impact on the Environment

According to USGS, earthquakes can cause damage to the surface of the Earth in various forms depending on the magnitude and distribution of the event (USGS 2020a). Surface faulting is one of the major seismic components to earthquakes that can create wide ruptures in the ground. Ruptures can have a direct impact on the landscape and natural environment because it can disconnect habitats for miles isolating animal species or tear apart plant roots.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Furthermore, ground failure as a result of soil liquefaction can have an impact on soil pores and retention of water resources (USGS 2020b). The greater the seismic activity and liquefaction properties of the soil, the more likely drainage of groundwater can occur which depletes groundwater resources. In areas where there is higher pressure of groundwater retention, the pores can build up more pressure and make soil behave more like a fluid rather than a solid increasing risk of localized flooding and deposition or accumulation of silt.

Cascading Impacts to Other Hazards

The Global Geoengineering Research Group in USGS has been investigating the relationship earthquakes have with ground failure, and coastal erosion (USGS n.d.). As mentioned in earlier sections, soft and loose soils are more susceptible to earthquake events. Ground failure can become exacerbated due to earthquake events, causing land sliding and coastal erosion. Areas of steep slopes are at greater risk of ground failure and potential erosion during earthquakes (USGS n.d.). Further, residual impacts from earthquakes could alter the floodplain extent for the County if ground failure and erosion occur. Damage could occur at coastal levees or canals may become breached as a result of an earthquake event, which could create flooding in the impacted areas. Refer to Sections 5.4.1, 5.4.6, and 5.4.8 for additional information.

Future Changes that May Impact Vulnerability

Understanding future changes that effect vulnerability in the County can assist in planning for future development and ensure establishment of appropriate mitigation, planning, and preparedness measures. The County considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County increased by a negligible amount between 2010 and 2019 (U.S. Census Bureau 2020). Estimated population projections provided by the Cornell Program on Applied Demographics indicates that the County's population will rise into 2040, increasing total population to approximately 945,891 persons (Cornell Program on Applied Demographics 2018). As population increases, persons that move into older structures in the County are at greater risk of being impacted by earthquake events because older structures are more vulnerable to ground shaking. Section 4 (County Profile) includes a more thorough discussion about population trends for the County.

Projected Development

As discussed and illustrated in Section 4 (County Profile), areas targeted for future growth and development have been identified across the County. Development built in areas with softer NEHRP soil classes, liquefaction, and landslide-susceptible areas may experience shifting or cracking in the foundation during earthquakes because of the loose soil characteristics of these soil classes. However, current building codes require seismic provisions that should render new construction less vulnerable to seismic impacts than older, existing construction that may have been built to lower construction standards. Refer to Section 4, and Volume II Section 9 for more information about the potential new development in Erie County.

Climate Change

Because the impacts of climate change on earthquakes are not well understood, a change in the County's vulnerability as the climate continues to change is difficult to determine. However, climate change has the

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

potential to magnify secondary impacts of earthquakes. As a result of the climate change projections discussed above, the County's assets located on areas of saturated soils and on or at the base of steep slopes, are at a higher risk of landslides/mudslides because of seismic activity. Refer to Section 5.4.8 for additional discussion of the landslide hazard.

Change of Vulnerability

Since the 2015 HMP analysis, population statistics have been updated using the 5-Year 2015-2019 American Community Survey Population Estimates (American Community Survey 2019). The general building stock was also established using RS Means 2020 building valuations that estimated replacement cost value for each building in the inventory. Additionally, a critical facility dataset was provided from the County. Exposure to the earthquake hazard was determined by overlaying critical facilities and building centroids on New York State NEHRP soil layer. This layer was also imported into Hazus along with the building stock and critical facility data in order to determine the effects of a 500-year MRP event on both the County and individual jurisdictions.

Overall, this vulnerability assessment uses a more precise and thorough approach, which provides increased accuracy for estimated exposure and potential losses for Erie County.

Attachment: 13-Section-5.4.3-Earthquake-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.4 Expansive Soils

This section provides a hazard profile and vulnerability assessment of the expansive soils hazard.

5.4.4.1 Hazard Profile

This section presents the expansive soils hazard description, extent, location, previous occurrences and losses, and probability of future occurrences.

Hazard Description

Soils and soft rock that tend to swell or shrink due to changes in moisture content are known as expansive soils. Expansive soils are often referred to as swelling clays because clay materials are most susceptible to swelling and shrinking. Changes in soil volume present a hazard primarily to structures built on expansive soils. The most extensive damage occurs to highways and streets (FEMA 1997).

In the U.S., two major groups of rocks serve as parent materials of expansive soils and these are most common in the western portion of the country. The first group consists of ash, glass, and rocks of volcanic origin. The aluminum silicate minerals in these volcanic materials often decompose to form expansive clay minerals, known as montmorillonite. The second group consists of sedimentary rocks containing clay minerals, for example, the shales of the semiarid west-central states (FEMA 1997).

The current New York State Hazard Mitigation Plan (HMP) does not profile expansive soils. However, according to the 2014 NYS HMP update, expansive soils are any soil that expands when wet and shrinks when dry. Soils are tested using an accepted standard of measurement to determine swell potential. Expansive soils can exert pressures up to 14,000 pounds per foot, causing the breakdown of building foundations and structural integrity. Roadbeds may also be affected and could lead to avalanche and collapse when cutting into mountains and hillsides (NYS DHSES 2014).

Expansive soils contain minerals, such as smectite clays, that are capable of absorbing water. As these clays absorb water, they increase in volume. The more water absorbed, the more their volume increases. Expansions of 10% or more are not uncommon. This change in volume can exert enough force on a building or other structure to cause damage. When dry, expansive soils shrink and can remove support from buildings or other structures and result in damaging subsidence. Fissures in the soil can also develop. Fissures can facilitate the deep penetration of water when moist conditions or runoff occurs. This produces a cycle of shrinkage and swelling that places repetitive stress on structures (NYS DHSES 2014).

Issues associated with expansive soils include:

- Foundation cracks
- Heaving and cracking on floor slabs and walls
- Jammed doors and windows
- Ruptured pipelines
- Heaving and cracking of sidewalks and roads
- Damage to the upper floors of the building (when motion in the structure is significant) (NYS DHSES 2014)

Extent

The extent to which soil expansion is present in an area or site can be measured using the Soil Expansion Potential standard (ASTM D-4829). The expansion index (EI) provides an indication of swelling potential of a compacted soil. The EI test is not used to duplicate any particular field conditions such as soil density, water content, loading, in-place soil structure, or soil water chemistry.

Table 5.4.4-1. Soil Expansion Index

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

Source: *ASTM 2013*
Note: *The Uniform Building Code (UBC) mandates that special foundation design consideration be employed if the EI is 20 or greater.*

Based on the expansion potential rating, mitigation may be required for building construction or repairs. The UBC mandates that special foundation design consideration be employed if the EI is 20 or greater. The New York Residential Building Code (Section R403.1.8) addresses consideration of expansive soils. Construction dangers are reduced when engineers incorporate cement or lime or other salts into expansive soils. These help to lessen the effects of expansion. Other methods of reducing expansive soil danger include replacing the top three to four feet of expansive soil with non-expansive soils or compacting existing expansive soil.

Linear extensibility is also used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent (refer to Table 5.4.4-2.). If linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and plant roots. As noted, special design is commonly needed; however, this data does not replace a geotechnical exploration and report used to determine expansive soil potential (USDA Natural Resource Conservation Services, 2020).

Table 5.4.4-2. Linear Extensibility Ratings

Percent Linear Extensibility	Shrink-Swell Potential
0-3	Low
3-6	Moderate
6-9	High
9-13	Very High

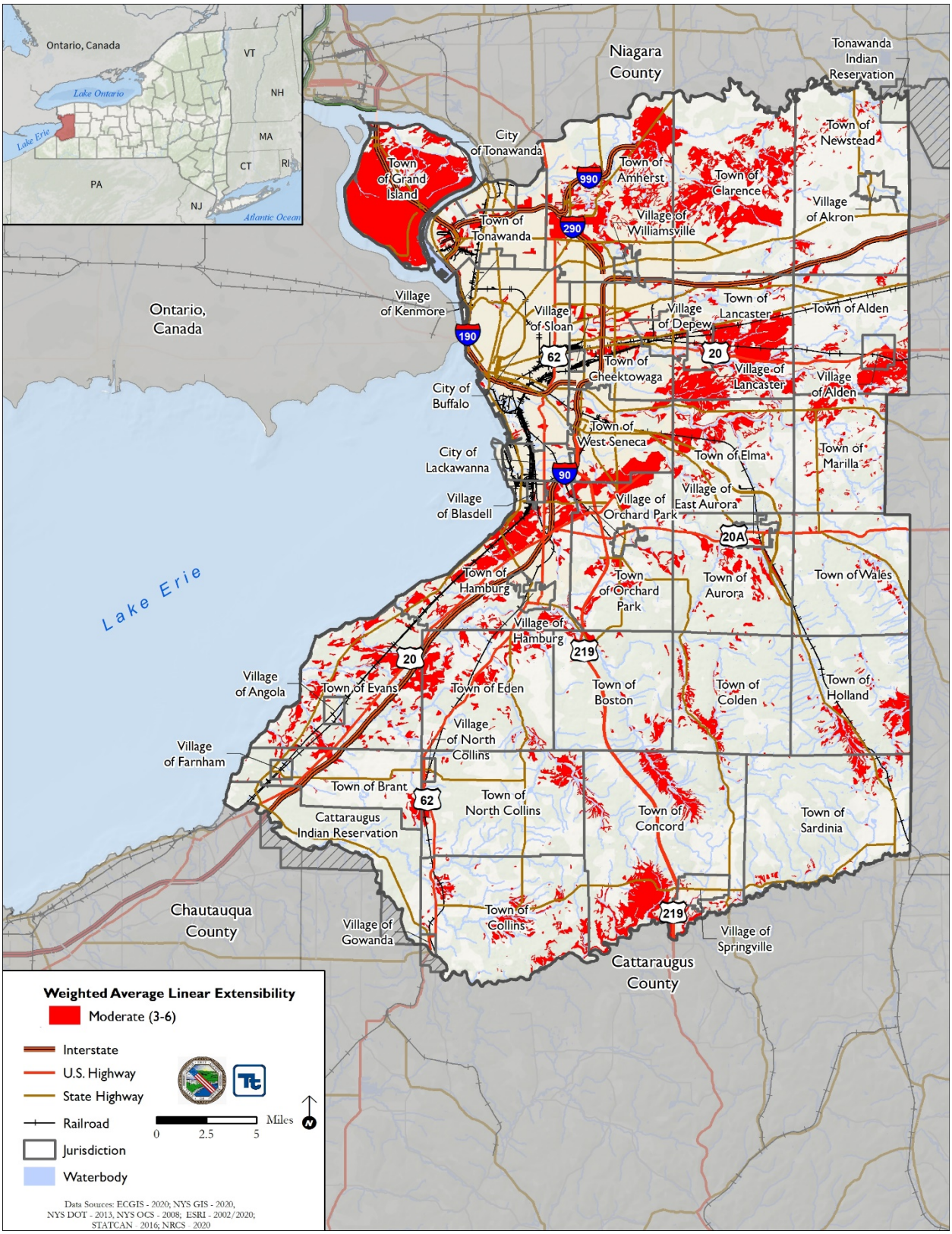
Source: *USDA NRCA 2020*

Location

A custom soil report was run for Erie County using USDA Natural Resources Conservation Area soils data. Out of the 211 types of soils in Erie County, 31 are considered to have moderate linear extensibility potential. These soils primarily occur in the northern half of the county and cover approximately 96,917 acres or 14.2 percent of the entire county. The highest-rated soils are Odessa Lakemont complex and Odessa silt loam soils, which have a median percent linear extensibility of 5.7 percent. This is considered to be moderate shrink-swell potential. Figure 5.4.4-1 illustrates the location of the linear extensibility potential in Erie County.

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.4-1. Expansive Soils in Erie County



Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Previous Occurrences and Losses

There have been no federally declared disasters for expansive soils in New York State. According to the New York State Geological Survey (NYSGS), historical records, including scientific study data for land subsidence in the state, is either sparse, not readily available, or does not exist in summary form. There may have been incidents of expansive soils causing damage, but these incidents have not been reported (NYS DHSES 2013).

Historic occurrences of damage caused by expansive soils are only known to be located in the Town of Amherst, generally in the area north of Main Street. In the 2015 Erie County HMP, the United States Armey Corps of Engineers (USACE) reported that between the years 1987 and 2005 – 3 to 4 percent of the total residential structures in the town reported slight to severe foundation-related damage and/or structural damage, in part due to building on expansive soils. New development generally has few reported problems. At that time, the USACE also determined that average total repair costs for damaged homes is about $7,900 but ranges from about $500 to $71,000.

Probability of Future Occurrences

In Section 5.3, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Committee, the probability of occurrence for expansive soils in Erie County is considered "occasional".

Although no reported incidents have occurred within the county, it is anticipated that Erie County may experience indirect impacts from expansive soils that may affect the general building stock and the local economy and may induce secondary hazards, such as fires and utility failure.

Climate Change Impacts

Climate change is beginning to affect both people and resources of Erie County, and the impacts of climate change will continue. Impacts related to increasing temperatures are already being felt in the county. ClimAID: the Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision-makers with information on the state's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge. Each region in New York State, as defined by ClimAID, contains attributes that will be affected by climate change. Erie County is part of Region 1, Western New York, Great Lakes Plain. In Region 1, it is estimated that temperatures will increase by 3.0 ºF to 5.5 ºF by the 2050s and 4.5 ºF to 8.5 ºF by the 2080s (baseline of 48.0 ºF, mid-range projection). Precipitation totals will increase between 0 and 10% by the 2050s and 0 to 15% by the 2080s (baseline of 37.0 inches, mid-range projection). w displays the projected seasonal precipitation change for ClimAID Region 1 (NYSERDA 2014).

Table 5.4.4-3. Projected Seasonal Precipitation Change in Region 1, 2050s (% change)

Winter	Spring	Summer	Fall
+5 to +15	0 to +10	-5 to +10	-5 to +10

Source: NYSERDA 2014

By the end of the century, the greatest increases in precipitation are projected to be in the northern parts of the state. Although seasonal projections are less certain than annual results, much of this additional precipitation is projected to occur during the winter months. During the late summer and early fall, in contrast, total precipitation is slightly reduced in many climate models. The projected increase in precipitation is expected to fall in heavy downpours and less in light rains. The increase in heavy downpours has the potential to affect drinking water;

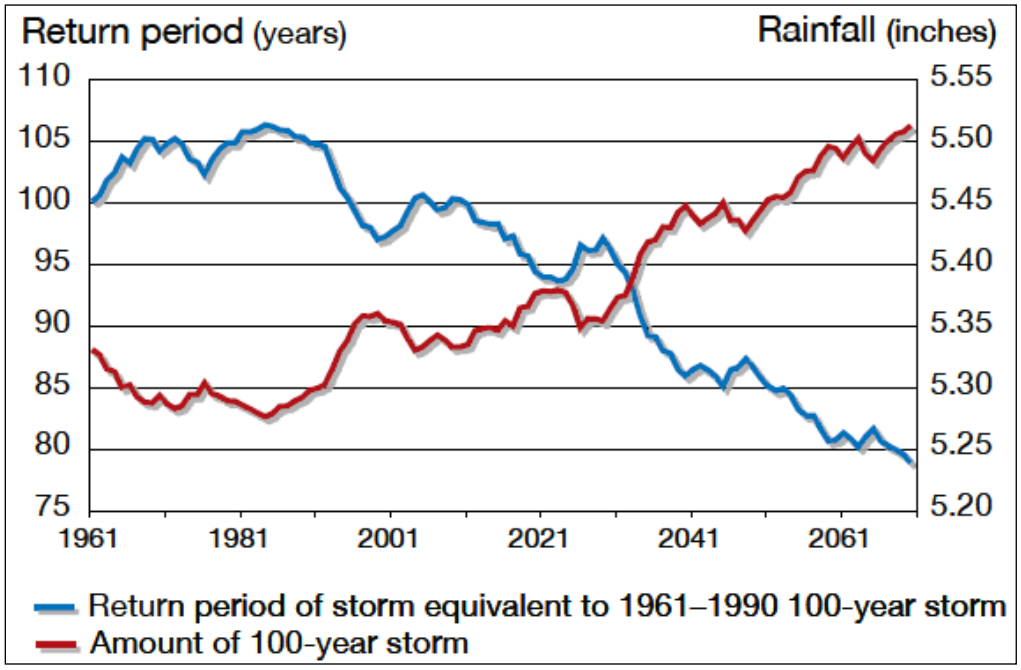
Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

heighten the risk of riverine flooding; flood key rail lines, roadways, and transportation hubs; and increase delays and hazards related to extreme weather events (NYSERDA 2018).

Average annual temperatures are projected to increase across New York State by 2.0–3.4 ˚F by the 2020s, 4.1–6.8 ˚F by the 2050s, and 5.3–10.1 ˚F by the 2080s. By the end of the century, the greatest warming is projected to be in the northern parts of the state. The state's growing season could lengthen by about a month, with summers becoming more intense and winters milder (NYSERDA 2018).

Increasing air temperatures intensify the water cycle by increasing evaporation and precipitation. This can cause an increase in rain totals during events with longer dry periods in between those events. These changes can have a variety of effects on the state's water resources (NYSERDA 2011). Figure 5.4.4-2 displays the project rainfall and frequency of extreme storms in New York State. The amount of rainfall in a 100-year event is projected to increase, while the number of years between such storms (return period) is projected to decrease. Rainstorms will become more severe and more frequent (NYSERDA 2011).

Figure 5.4.4-2. Projected Rainfall and Frequency of Extreme Storms



Source: NYSERDA 2011

Total precipitation amounts have slightly increased in the Northeast U.S. by approximately 3.3 inches over the last 100 years. There has also been an increase in the number of two-inch rainfall events over a 48-hour period since the 1950s (a 67 percent increase). The number and intensity of extreme precipitation events are increasing in New York State as well. More rain heightens the danger of localized flash flooding, streambank erosion, and storm damage (Cornell University College of Agriculture and Life Sciences 2011).

Increased heavy precipitation events are expected in New York State due to climate change. As previously stated, as expansive soils absorb more water, they increase in volume, creating the potential to exert enough force on a building or other structure to cause damage. Temperatures are expected to increase throughout New York State. Increasing temperatures can increase the rate at which soils dry. When expansive soils are dry, they shrink and can remove support from buildings or other structures, resulting in damaging subsidence.

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.4.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed and vulnerable in the identified hazard area. An exposure analysis was conducted in GIS for the expansive soils hazard area utilizing Canadice silt loam soils. Refer to Section 5.1 (Methodology and Tools) for additional details on the methodology used to assess expansive soil hazard area risk.

As indicated by earlier sections, there are 31 soils considered to have moderate shrink-swell potential. The soils with the greatest median linear extensibility are Odessa silt loam and Odessa Lakemont complex (0 to 3 percent slopes). There are no soils with a median extensibility greater than moderate in the county.

Impact on Life, Health and Safety

According to the 2019 ACS annual estimate, Erie County had a population of 919,355 people. The Town of Amherst has the greatest population at risk of events caused by expansive soils (24,209 people). The Town of Grand Island has the greatest percentage of population exposed to expansive soils (78.2 percent of the total population). Table 5.4.4-4 shows that an estimated 7 residents and 92 residents live on the expansive soils hazard area in the Town of Southampton and Town of Southold, respectively.

Table 5.4.4-4. Population Exposed to Expansive Soil Hazard Areas

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population Exposed to Expansive Soils Moderate Expansive Soils	
		Number of People	Percent of Total
Akron (V)	2,871	0	0.0%
Alden (T)	7,418	660	8.9%
Alden (V)	2,577	966	37.5%
Amherst (T)	120,276	24,209	20.1%
Angola (V)	2,373	70	3.0%
Aurora (T)	7,599	743	9.8%
Blasdell (V)	2,645	0	0.0%
Boston (T)	8,042	650	8.1%
Brant (T)	1,541	105	6.8%
Buffalo (C)	256,480	2,384	0.9%
Cheektowaga (T)	73,129	4,217	5.8%
Clarence (T)	32,440	8,442	26.0%
Colden (T)	3,328	281	8.4%
Collins (T)	5,418	332	6.1%
Concord (T)	4,186	408	9.7%
Depew (V)	15,102	916	6.1%
East Aurora (V)	6,184	772	12.5%
Eden (T)	7,631	1,165	15.3%
Elma (T)	11,732	2,147	18.3%
Evans (T)	13,782	2,535	18.4%
Farnham (V)	459	11	2.4%
Gowanda (V)	1,043	0	0.0%
Grand Island (T)	21,047	16,456	78.2%
Hamburg (T)	45,985	17,156	37.3%
Hamburg (V)	9,636	71	0.7%
Holland (T)	3,355	319	9.5%
Kenmore (V)	15,132	0	0.0%
Lackawanna (C)	17,831	576	3.2%
Lancaster (T)	27,625	12,789	46.3%
Lancaster (V)	10,144	2,837	28.0%
Marilla (T)	5,378	290	5.4%
Newstead (T)	5,804	60	1.0%

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population Exposed to Expansive Soils Moderate Expansive Soils Number of People	Percent of Total
North Collins (T)	2,130	129	6.1%
North Collins (V)	1,370	186	13.6%
Orchard Park (T)	26,361	5,507	20.9%
Orchard Park (V)	3,148	29	0.9%
Sardinia (T)	2,780	53	1.9%
Sloan (V)	3,562	73	2.1%
Springville (V)	4,298	51	1.2%
Tonawanda (C)	14,830	199	1.3%
Tonawanda (T)	57,027	1,163	2.0%
Wales (T)	3,020	56	1.8%
West Seneca (T)	45,344	10,670	23.5%
Williamsville (V)	5,233	309	5.9%
Erie County Total	**917,296**	**119,992**	**13.1%**

Source: American Community Survey 2019; USDA/NRCS 2020
Notes: T = Town, V = Village, C = City, % = percent
** Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Impact on General Building Stock

Because of differences in building construction, residential structures and one-story commercial structures are more susceptible to damage by expansive soils compared to multi-story buildings. Multi-story buildings are heavier and can generally counter the swelling pressures. The exception is when multi-story buildings are built on wet clay and may experience damage by shrinkage of the clay if moisture levels are substantially reduced (by evapotranspiration or by evaporation from under heated buildings) (FEMA 1997).

FEMA's Coastal Construction Manual recommends that any development along the coast should follow the 2012 IBC requirements (FEMA n.d.). The 2012 IBC requires that geotechnical investigations are conducted if expansive soils are likely to be present. Subsurface testing includes boring, creating test pits, soil sampling, and laboratory tests. If an expansive soil is present, it is recommended that development does not occur. Table 5.4.4-5. summarizes the estimated number of buildings currently built on expansive soil hazard areas. The Town of Amherst has the greatest number of buildings and associated replacement cost value within the expansive soil hazard area (7,726 buildings and $5.8 billion). The Town of Grand Island has the greatest percentage of its buildings exposed to expansive soils (77.8 percent).

Table 5.4.4-5. Estimated Building Exposure to the Expansive Soils Hazard Areas

Wildfire Hazard Area	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Exposed to Moderate Expansive Soils			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%
Alden (T)	3,400	$1,748,473,245	298	8.8%	$128,622,043	7.4%
Alden (V)	1,102	$602,655,574	396	35.9%	$185,379,522	30.8%
Amherst (T)	38,528	$27,372,255,690	7,726	20.1%	$5,813,313,261	21.2%
Angola (V)	874	$525,704,230	24	2.7%	$9,014,159	1.7%
Aurora (T)	4,280	$2,496,885,036	417	9.7%	$265,538,480	10.6%
Blasdell (V)	1,026	$638,571,953	6	0.6%	$24,596,890	3.9%
Boston (T)	4,040	$1,702,475,276	321	7.9%	$125,218,929	7.4%
Brant (T)	1,325	$657,594,060	81	6.1%	$21,483,054	3.3%
Buffalo (C)	83,471	$58,603,851,634	756	0.9%	$337,807,970	0.6%

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Wildfire Hazard Area	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Exposed to Moderate Expansive Soils			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Cheektowaga (T)	30,938	$17,530,893,277	1,876	6.1%	$1,626,137,655	9.3%
Clarence (T)	13,660	$9,866,246,863	3,452	25.3%	$2,524,048,964	25.6%
Colden (T)	2,110	$854,417,381	182	8.6%	$77,558,949	9.1%
Collins (T)	2,521	$1,189,158,504	175	6.9%	$74,129,751	6.2%
Concord (T)	3,245	$1,338,570,261	292	9.0%	$102,561,460	7.7%
Depew (V)	6,532	$3,841,823,815	453	6.9%	$682,322,037	17.8%
East Aurora (V)	2,441	$1,723,816,550	290	11.9%	$211,464,460	12.3%
Eden (T)	4,290	$2,180,455,513	656	15.3%	$470,796,887	21.6%
Elma (T)	6,093	$3,775,039,302	1,104	18.1%	$557,499,664	14.8%
Evans (T)	7,952	$3,335,060,692	1,423	17.9%	$492,675,750	14.8%
Farnham (V)	189	$87,990,422	4	2.1%	$1,548,017	1.8%
Gowanda (V)	396	$249,516,940	0	0.0%	$0	0.0%
Grand Island (T)	8,426	$4,674,517,058	6,552	77.8%	$3,563,177,171	76.2%
Hamburg (T)	19,130	$11,911,210,828	7,030	36.7%	$3,531,403,260	29.6%
Hamburg (V)	3,794	$2,005,172,252	26	0.7%	$7,279,494	0.4%
Holland (T)	2,182	$1,151,194,342	250	11.5%	$119,412,106	10.4%
Kenmore (V)	6,017	$2,305,529,001	0	0.0%	$0	0.0%
Lackawanna (C)	6,751	$4,030,622,400	208	3.1%	$67,179,569	1.7%
Lancaster (T)	10,973	$6,845,493,469	5,006	45.6%	$2,738,580,914	40.0%
Lancaster (V)	4,323	$2,217,331,122	1,245	28.8%	$868,235,822	39.2%
Marilla (T)	2,956	$1,099,846,031	163	5.5%	$60,177,050	5.5%
Newstead (T)	4,202	$2,181,758,974	34	0.8%	$14,132,607	0.6%
North Collins (T)	1,898	$889,517,676	91	4.8%	$32,629,027	3.7%
North Collins (V)	551	$383,968,909	72	13.1%	$33,965,891	8.8%
Orchard Park (T)	10,748	$8,174,650,530	2,311	21.5%	$1,728,383,735	21.1%
Orchard Park (V)	1,211	$867,347,745	10	0.8%	$4,680,599	0.5%
Sardinia (T)	2,184	$1,068,523,829	49	2.2%	$21,987,877	2.1%
Sloan (V)	1,674	$634,998,253	32	1.9%	$9,403,845	1.5%
Springville (V)	1,816	$1,354,905,864	22	1.2%	$24,631,650	1.8%
Tonawanda (C)	6,452	$3,291,492,557	109	1.7%	$134,382,200	4.1%
Tonawanda (T)	23,999	$14,694,684,404	631	2.6%	$1,183,390,054	8.1%
Wales (T)	1,923	$833,853,270	40	2.1%	$23,157,231	2.8%
West Seneca (T)	17,970	$9,583,482,689	4,118	22.9%	$1,810,406,742	18.9%
Williamsville (V)	2,057	$1,126,868,443	114	5.5%	$35,127,170	3.1%
Erie County Total	**360,925**	**$222,515,035,436**	**48,045**	**13.3%**	**$29,743,441,914**	**13.4%**

Source: Erie County GIS 2020; RS Means 2020; USDA/NRCS 2019
Notes: RCV = Total replacement cost value (structure and contents)
T = Town, V = Village, C = City, % = percent
** Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Impact on Critical Facilities

Approximately 11.3 percent of the critical facilities in Erie County are considered exposed to the expansive soils hazard area. Of the 474 critical facilities in the county exposed to expansive soils, 441 are considered lifelines. Table 5.4.4-6. summarizes the number of critical facilities by type per jurisdiction in Erie County located on expansive soil hazard areas. Table 5.4.4-7 summarizes the number of critical facilities exposed to the expansive soil hazard area by FEMA's lifeline categories. Table 5.4.4-8. summarizes the type of critical facilities exposed to expansive soils. Bridges, hazardous material sites, and secondary education locations are the three types of critical facilities that are the most exposed.

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.4-6. Critical Facilities Located on Expansive Soils

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities in Expansive Soils			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	0	0.0%	0	0.0%
Alden (T)	76	68	6	7.9%	4	5.9%
Alden (V)	19	17	1	5.3%	1	5.9%
Amherst (T)	391	387	98	25.1%	97	25.1%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	14	14.7%	12	14.8%
Blasdell (V)	22	22	2	9.1%	2	9.1%
Boston (T)	81	75	6	7.4%	5	6.7%
Brant (T)	39	39	2	5.1%	2	5.1%
Buffalo (C)	751	748	5	0.7%	5	0.7%
Cheektowaga (T)	224	221	27	12.1%	27	12.2%
Clarence (T)	121	115	26	21.5%	25	21.7%
Colden (T)	67	56	3	4.5%	3	5.4%
Collins (T)	71	55	6	8.5%	6	10.9%
Concord (T)	84	68	8	9.5%	7	10.3%
Depew (V)	63	63	12	19.0%	12	19.0%
East Aurora (V)	42	41	4	9.5%	4	9.8%
Eden (T)	78	72	9	11.5%	9	12.5%
Elma (T)	83	75	5	6.0%	4	5.3%
Evans (T)	112	109	11	9.8%	10	9.2%
Farnham (V)	10	10	0	0.0%	0	0.0%
Gowanda (V)	7	7	0	0.0%	0	0.0%
Grand Island (T)	69	66	41	59.4%	38	57.6%
Hamburg (T)	189	181	48	25.4%	47	26.0%
Hamburg (V)	27	23	1	3.7%	0	0.0%
Holland (T)	90	70	9	10.0%	4	5.7%
Kenmore (V)	14	13	0	0.0%	0	0.0%
Lackawanna (C)	94	93	0	0.0%	0	0.0%
Lancaster (T)	109	103	25	22.9%	22	21.4%
Lancaster (V)	58	53	23	39.7%	21	39.6%
Marilla (T)	48	37	0	0.0%	0	0.0%
Newstead (T)	64	61	0	0.0%	0	0.0%
North Collins (T)	69	56	5	7.2%	3	5.4%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	15	10.6%	14	10.9%
Orchard Park (V)	21	18	0	0.0%	0	0.0%
Sardinia (T)	78	57	3	3.8%	0	0.0%
Sloan (V)	8	8	0	0.0%	0	0.0%
Springville (V)	35	32	2	5.7%	1	3.1%
Tonawanda (C)	61	60	1	1.6%	1	1.7%
Tonawanda (T)	266	265	36	13.5%	36	13.6%
Wales (T)	82	68	4	4.9%	3	4.4%
West Seneca (T)	145	140	16	11.0%	16	11.4%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**474**	**11.3%**	**441**	**11.2%**

Source: Erie County GIS 2020; USDA/NRCS 2019

T = Town, V = Village, C = City, % = percent

** Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.4-7. Number of Lifelines Located on Expansive Soils

Lifeline Categories	Total Lifelines in the County	Expansive Soils Exposure
Communication	126	0
Energy	397	3
Food, Water, Shelter	1,458	1
Health and Medical	1,081	1
Safety and Security	1,956	0
Transportation	3,099	1
Total	**8,117**	**6**

Source: Erie County GIS 2020; FEMA 2020; USDA/NRCS 2019

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 5.4.4-8. Critical Facility Types Located on Expansive Soils

Jurisdiction	Critical Facilities Exposed to Moderate Expansive Soils																											
	Airport	Airport Runway	Bridge	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Material	Highway Garage	Library	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	17	0	3	0	1	2	6	7	0	0	0	0	0	3	0	0	0	0	5	51	0	3	0	0	0	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	4	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Boston (T)	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Brant (T)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Buffalo (C)	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Cheektowaga (T)	0	0	6	1	0	1	0	1	4	8	0	0	0	0	1	0	0	0	0	0	2	0	1	2	0	0	0	0
Clarence (T)	0	0	3	0	1	0	0	0	0	6	0	1	0	1	0	1	0	0	0	5	2	0	0	2	1	0	3	0
Colden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0
Collins (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	1	0	0	0	0
Concord (T)	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Depew (V)	0	0	4	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
East Aurora (V)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
Eden (T)	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	1	0	0	2	0
Elma (T)	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Evans (T)	0	0	5	0	0	0	1	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	0	9	0	1	0	2	1	2	11	0	1	0	0	0	0	1	0	0	2	6	0	2	2	0	1	0	0
Hamburg (T)	0	0	16	0	1	0	1	0	1	10	0	0	0	0	0	1	1	0	0	0	7	0	0	0	0	0	10	0
Hamburg (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holland (T)	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Jurisdiction	Critical Facilities Exposed to Moderate Expansive Soils																										
	Airport	Airport Runway	Bridge	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Material	Highway Garage	Library	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Lancaster (T)	1	2	3	0	2	0	3	0	1	6	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	3
Lancaster (V)	0	0	0	0	2	1	2	2	1	6	1	1	0	0	0	1	0	0	0	0	1	0	0	2	2	1	0
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Collins (T)	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	5	0	0	0	1	0	2	1	0	0	0	0	0	0	0	1	1	1	2	0	0	0	0	0	1
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Tonawanda (T)	0	0	12	0	0	0	0	5	0	12	0	0	1	3	0	0	1	0	0	0	1	0	1	0	0	0	0
Wales (T)	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
West Seneca (T)	0	0	6	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	2
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**1**	**2**	**10 1**	**1**	**10**	**3**	**31**	**13**	**24**	**75**	**4**	**3**	**1**	**4**	**1**	**9**	**12**	**3**	**1**	**39**	**32**	**51**	**4**	**16**	**4**	**2**	**27**

Source: Erie County GIS 2020; USDA/NRCS 2019

T = Town, V = Village, C = City, % = percent

** Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Critical facilities will experience similar impacts from expansive soils as highlighted in the general building stock section. Smaller structures built on expansive soils may be more susceptible to damages caused by the shrinking and swelling properties of expansive soils. Furthermore, roadways built on expansive soils that are major transportation routes leading to critical facilities or connect essential services to the community could also be affected. Roadways that become damaged from expansive soils could create a disruption to critical services. There are 892.1 miles of roadway exposed to the expansive soil hazard area out of a total of 5,818 miles of evacuation routes in the county.

Impact on the Economy

Expansive soils may impact the economy where structures and roadways are damaged. Businesses built on the hazard area may need to shut down for repairs or move to a new, potentially less profitable, location if the building does not meet the 2012 IBC code (FEMA n.d.). As discussed earlier, expansive soils may also cause damage to highways and roads. Damages result from differential vertical movement that occurs as clay moisture content adjusts to the changed environment. For pavement, differential movement of 0.4 inches with a horizontal distance of 20 feet can pose an engineering problem for fast travel (FEMA 1997). Infrastructure damage is costly and can impact the local and regional economy.

Impact on the Environment

As discussed in earlier sections, expansive soils shrink and swell based on available water content. Absorbing available water could reduce water availability for surrounding ecosystems. Shrinking soils from a lack of water could create cracks in the ground, impacted rooted plants. The instability of this soil type may not be the most ideal habitat for species in the county.

Cascading Impacts to Other Hazards

There are no known cascading impacts expansive soils cause to other hazards of concern for the county.

Future Changes That May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. Any areas of growth in the three jurisdictions where expansive soils exist could potentially be impacted by this hazard.

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across Erie County. The county areas targeted for potential future growth and development in the next five years have been identified across the county at the municipal level.

New development projects within the county will be advised to follow the 2012 IBC requirements (FEMA n.d.). The 2012 IBC requires that geotechnical investigations are conducted if expansive soils are likely to be present. Subsurface testing includes boring, creating test pits, soil sampling, and laboratory tests. If an expansive soil is present, it is recommended that development does not occur.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has remained stable between 2010 and 2019 (919,040 persons in 2010 and 919,355 persons in 2019). Estimated population projections provided by the Cornell Program on Applied Demographics indicate that the county's population will increase into 2040, bringing total population to approximately 945,891 persons (Cornell Program on Applied Demographics 2017).

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

More housing units in the jurisdictions most vulnerable to expansive soil impacts suggests that a greater number of persons will be at risk of being exposed to expansive soil hazard areas.

Climate Change

Most studies project that the State of New York will see an increase in average annual temperatures. Additionally, the state is projected to experience more frequent droughts, which may affect the availability of water supplies, primarily placing an increased stress on the population and their available potable water. A decrease in water supply or increase in water supply demand may increase the county's vulnerability to expansive soil impacts. Critical water-related service sectors may need to adjust management practices and actively manage resources to accommodate for future changes.

Vulnerability Change Since the 2015 HMP

Since the 2015 HMP analysis, population statistics have been updated using the 5-Year 2015–2019 American Community Survey Population Estimates (American Community Survey 2019). The general building stock was also established using RS Means 2020 building valuations that estimated RCV for each building in the inventory. Additionally, a critical facility dataset was provided from the county. The most significant change is that a quantitative analysis was complete for the county using soils data from USGS/NRCS.

Attachment: 14-Section-5.4.4-Expansive-Soil-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.5 Extreme Temperature

This section provides a hazard profile (description, location, extent, previous occurrences and losses, probability of future occurrences, and impact of climate change) and vulnerability assessment of the extreme temperature hazard for the Erie County Hazard Mitigation Plan (HMP).

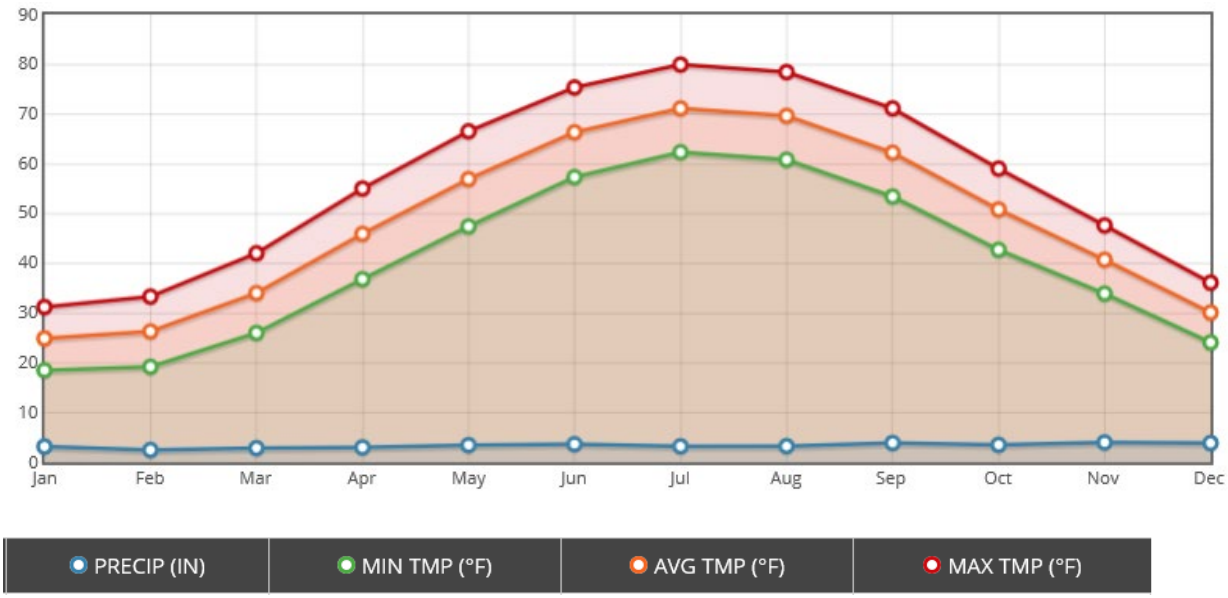
5.4.5.1 Hazard Profile

This section presents information regarding the extreme temperature hazard (heat and cold) description, extent, location, previous occurrences and losses, and probability of future occurrences.

Hazard Description

Extreme temperature includes both heat and cold events, which can have a significant impact to human health, commercial/agricultural businesses, and primary and secondary effects on infrastructure (e.g., burst pipes and power failure). What constitutes "extreme cold" or "extreme heat" can vary across different areas of the country, based on what the population is accustomed to. Figure 5.4.5-1 and Figure 5.4.5-2 show the average low and high temperatures each month at the Buffalo Niagara International station and Dunkirk Chautauqua County Airport station located in Erie County.

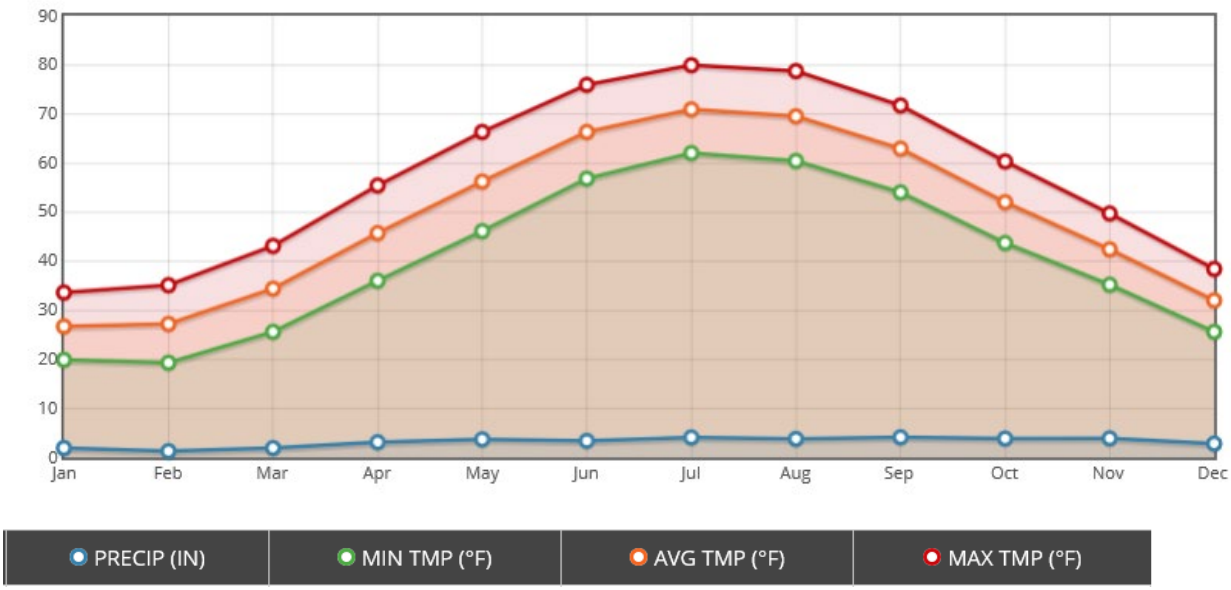
Figure 5.4.5-1. Average Temperatures at Buffalo Niagara International



Source: NOAA NCEI 2020

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Figure 5.4.5-2. Average Temperatures at Dunkirk Chautauqua County Airport



Source: NOAA NCEI 2020

Extreme Cold

Extreme cold events are when temperatures drop well below normal in an area. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered "extreme cold." Extreme cold temperatures are characterized by the ambient air temperature dropping to approximately 0 degrees Fahrenheit (ºF) or below (National Weather Service [NWS] 2015). Extensive exposure to extreme cold temperatures can cause frostbite or hypothermia and can become life-threatening. Infants and the elderly are most susceptible to the effects of extreme changes in temperatures. Extreme cold also can cause emergencies in susceptible populations, such as those without shelter, those who are stranded, or those who live in a home that is poorly insulated (such as a mobile home) or without heat. Infants and the elderly are particularly at risk, but anyone can be affected (Centers of Disease Control and Prevention [CDC] 2007). In New York State, extreme cold days are defined to reflect the state's regional climate variations. Extreme cold days in the state are defined as individual days with minimum temperatures at or below 32° F or 0° C (NYSERDA 2014).

Several health hazards are related to extreme cold temperatures and include wind chill, frostbite, and hypothermia.

- *Wind chill* is not the actual temperature but rather how wind and cold feel on exposed skin. As the wind increases, heat is carried away from the body at an accelerated rate, driving down the body temperature.
- *Frostbite* is damage to body tissue caused by extreme cold. A wind chill of -20°F will cause frostbite in just 30 minutes. Frostbite can cause a loss of feeling and a white or pale appearance in extremities.
- *Hypothermia* is a condition brought on when the body temperature drops to less than 95°F and it can be deadly. Warning signs of hypothermia include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness and apparent exhaustion.

Extreme Heat

Extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for a region and that last for several weeks (CDC 2016). Humid or muggy conditions occur when a 'dome' of high

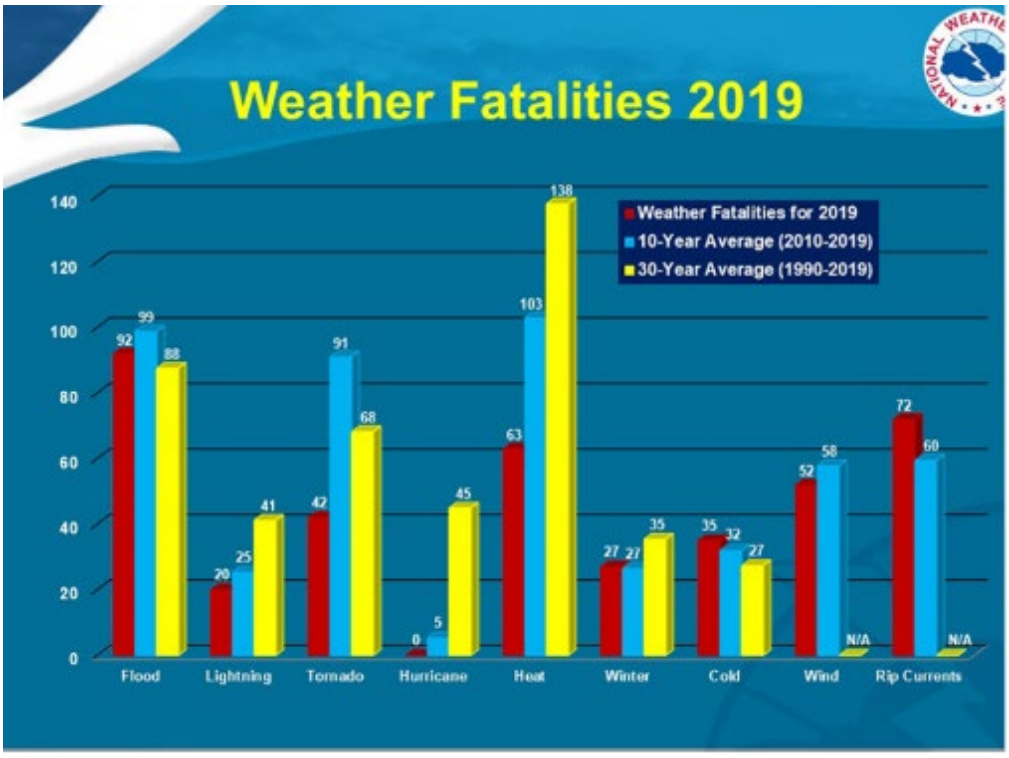
Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

atmospheric pressure traps hazy, damp air near the ground. An extended period of extreme heat of three or more consecutive days is typically called a heat wave and is often accompanied by high humidity (NWS 2013). In New York State, high temperatures and heat waves are defined in several ways to reflect the diversity of conditions experienced across the state. Extreme hot days in New York State are defined as individual days with maximum temperatures at or above 90° F. Heat waves are defined as three consecutive days with maximum temperatures above 90° F (NYSERDA 2014).

Depending on severity, duration, and location; extreme heat events can create or provoke secondary hazards including, but not limited to, dust storms, droughts, wildfires, water shortages and power outages (CDC 2016). This could result in a broad and far-reaching set of impacts throughout a local area or entire region. Impacts could include significant loss of life and illness; economic costs in transportation, agriculture, production, energy, and infrastructure; and losses of ecosystems, wildlife habitats, and water resources (Adams n.d.; Meehl and Tebaldi 2004; CDC 2016; NYS DHSES 2014).

Extreme heat is one of the leading weather-related causes of death in the United States. On a 10-year average, 103 people die each year from excessive heat. Figure 5.4.5-3 shows the number of weather fatalities based on a 10-year average and 30-year average. Heat had the highest average of weather-related fatalities between 1990 and 2019.

Figure 5.4.5-3. Average Number of Weather Related Fatalities in the United States



Source: NWS 2019

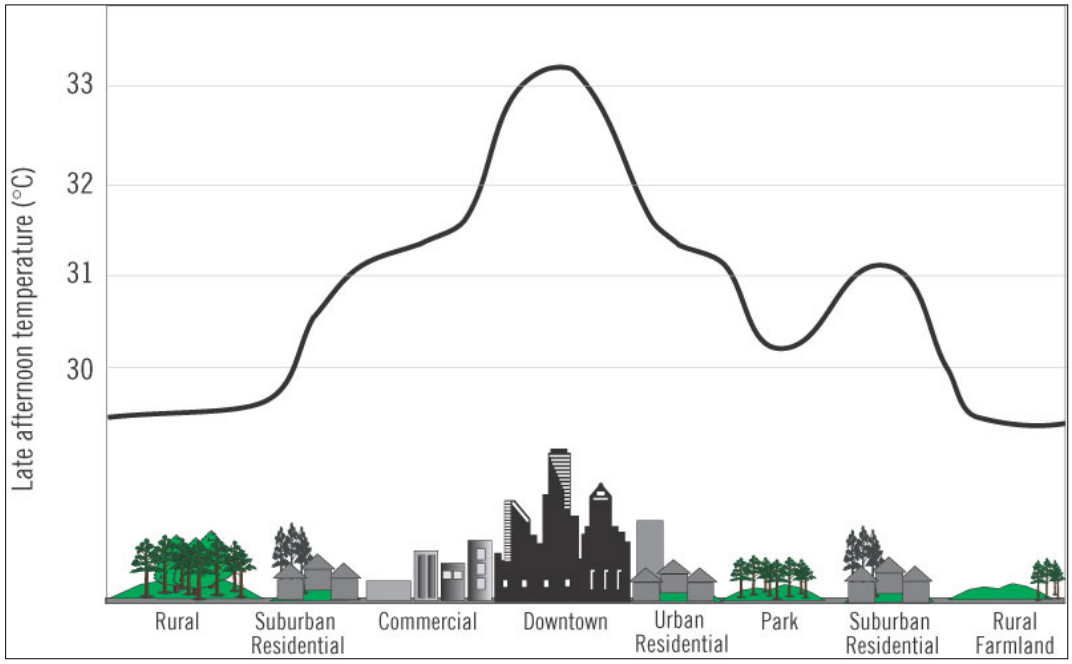
Urbanized areas and urbanization create an exacerbated type of risk during an extreme heat event, compared to rural and suburban areas. As these urban areas develop and change, so does the landscape. Buildings, roads, and other infrastructure replace open land and vegetation. Surfaces that were once permeable and moist are now impermeable and dry. These changes cause urban areas to become warmer than the surrounding areas. This forms an 'island' of higher temperatures (U.S. Environmental Protection Agency [EPA] 2019).

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

The term 'heat island' describes built-up areas that are hotter than nearby rural areas. The annual mean air temperature of a city with more than 1 million people can be between 1.8 ºF and 5.4ºF warmer than its surrounding areas. In the evening, the difference in air temperatures can be as high as 22ºF. Heat islands occur on the surface and in the atmosphere. On a hot, sunny day, the sun can heat dry, exposed urban surfaces to temperatures 50ºF to 90ºF hotter than the air. Heat islands can affect communities by increasing peak energy demand during the summer; thereby escalating air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and death, and water quality degradation (U.S. EPA 2019).

Figure 5.4.5-4 below illustrates an urban heat island profile. The graphic demonstrates that heat islands are typically most intense over dense urban areas. Further, vegetation and parks within a downtown area may help reduce heat islands (U.S. EPA 2019).

Figure 5.4.5-4. Urban Heat Island Profile



Source: EPA 2019
ºC degrees Celsius

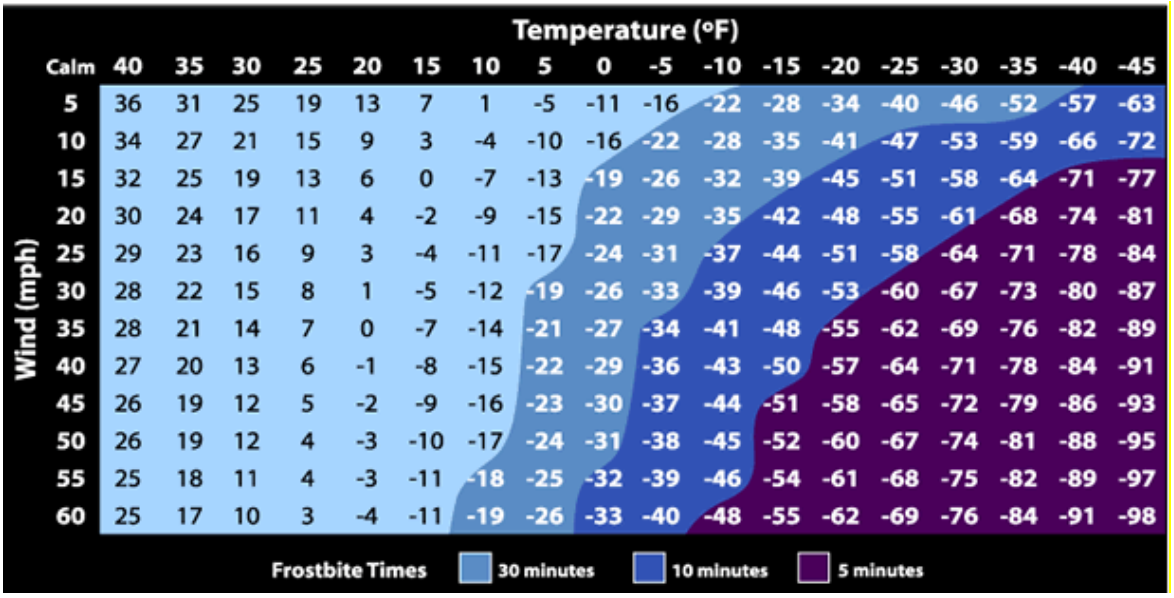
Extent

Extreme Cold

The extent (severity or magnitude) of extreme cold temperatures are generally measured through the Wind Chill Temperature (WCT) Index. The Index uses advances in science, technology, and computer modeling to provide an accurate, understandable, and useful formula for calculating the dangers from wind chill. For details regarding the WCT, refer to: https://www.weather.gov/safety/cold-wind-chill-chart. The WCT is presented in Figure 5.4.5-5.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Figure 5.4.5-5. NWS Wind Chill Index



Source: NWS 2016b

The National Weather Service (NWS) issues the nation's Wind Chill Warning, Watch, and Advisory:

- Wind Chill Warning: NWS issues a wind chill warning when dangerously cold wind chill values are expected or occurring.
- Wind Chill Watch: NWS issues a wind chill watch when dangerously cold wind chill values are possible.
- Wind Chill Advisory: NWS issues a wind chill advisory when seasonably cold wind chill values, but not extremely cold values, are expected or occurring (NYS DHSES 2019)

Cold weather can also impact the County's crops. In late spring or early fall, cold air outbreaks can damage or kill produce for farmers, as well as residential plants and flowers. A freeze occurs when the temperature drops below 32°F. Freezes and their effects are significant during the growing season. Frost develops on clear, calm nights and can occur when the air temperature is in the mid-30s. Each plant species has a different tolerance to cold temperatures (NYS DHSES 2019).

The NWS issues the nation's Freeze Watch, Warning, and Frost Advisory:

- Hard Freeze Warning: NWS issues a hard freeze warning when temperatures are expected to drop below 28°F for an extended period of time, killing most types of commercial crops and residential plants.
- Freeze Warning: When temperatures are forecasted to go below 32°F for a long period of time, NWS issues a freeze warning. This temperature threshold kills some types of commercial crops and residential plants.
- Freeze Watch: NWS issues a freeze watch when there is a potential for significant, widespread freezing temperatures within the next 24-36 hours. A freeze watch is issued in the autumn until the end of the growing season and in the spring at the start of the growing season.
- Frost Advisory: A frost advisory means areas of frost are expected or occurring, posing a threat to sensitive vegetation (NYS DHSES 2019).

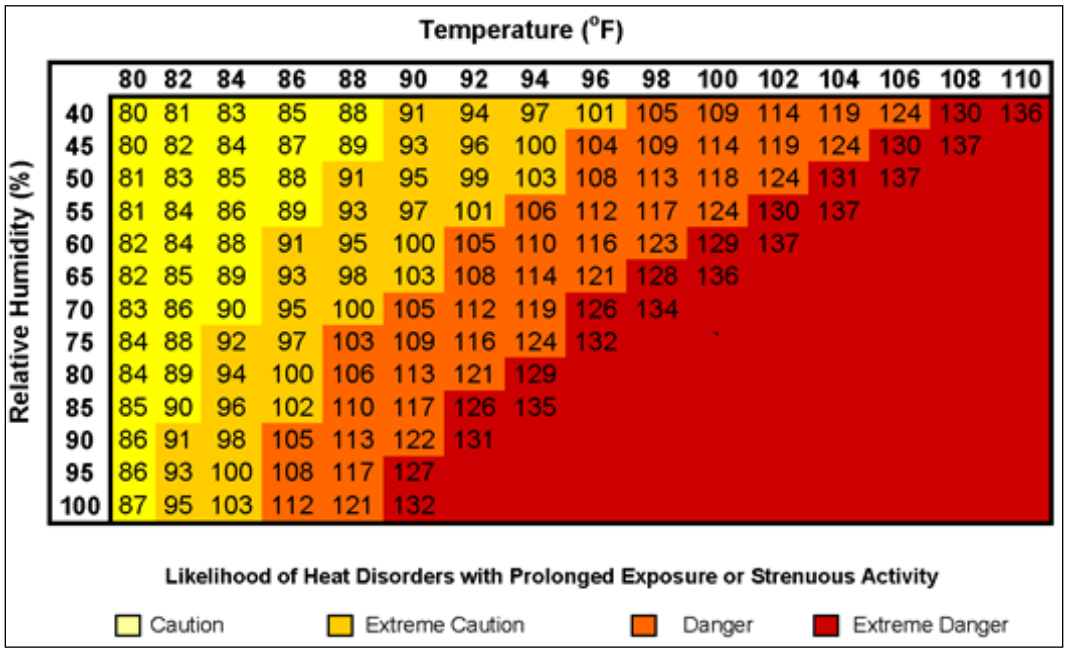
Extreme Heat

The extent of extreme heat temperatures is generally measured through the Heat Index, identified in Table 5.4.5-1. Created by the NWS, the Heat Index is a chart that accurately measures apparent temperature of the air

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

as it increases with the relative humidity. To determine the Heat Index, the temperature and relative humidity are needed. Once both values have been identified, the Heat Index is the corresponding number of both values (as seen in Table 5.4.5-1). This provides a measure of how temperatures actually feel; however, the values are devised for shady, light wind conditions. Exposure to full sun can increase the Index by up to 15 degrees (NYS DHSES 2014).

Table 5.4.5-1. Heat Index Chart



Source: NWS 2016c

Table 5.4.5-2 describes the adverse effects that prolonged exposure to heat and humidity can have on an individual.

Table 5.4.5-2. Adverse Effects of Prolonged Exposures to Heat on Individuals

Category	Heat Index	Health Hazards
Extreme Danger	130 °F – Higher	Heat Stroke / Sunstroke is likely with continued exposure.
Danger	105 °F – 129 °F	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Extreme Caution	90 °F – 105 °F	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Caution	80 °F – 90 °F	Fatigue possible with prolonged exposure and/or physical activity.

Source: NYS DHSES 2014

The National Weather Service (NWS) provides alerts when Heat Indices approach hazardous levels. Table 5.4.5-3 explains these alerts. In the event of an extreme heat advisory, the NWS:

- Includes Heat Index values and city forecasts
- Issues special weather statements including who is most at risk, safety rules for reducing risk, and the extent of the hazard and Heat Index values
- Provides assistance to state/local health officials in preparing Civil Emergency Messages during severe heat waves (NYS DHSES 2019).

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 5.4.5-3. National Weather Service Alerts

Alert	Criteria
Heat Advisory	Issued 12-24 hours before the onset of the following conditions: heat index of at least 100°F but less than 105°F for at least 2 hours per day
Excessive Heat Watch	Issued by the NWS when heat indices of 105°F or greater are forecast in the next 24 to 72 hours
Excessive Heat Warning	Issued within 12 hours of the onset of the following criteria: heat index of at least 105°F for more than 3 hours per day for two consecutive days, or heat index more than 115°F for any period of time

Source: NYS DHSES 2014

Location

Varying land elevations, character of the landscape, and proximity to large bodies of water play a significant role in the state's temperatures. Erie County is susceptible to both extreme cold and extreme heat temperature events.

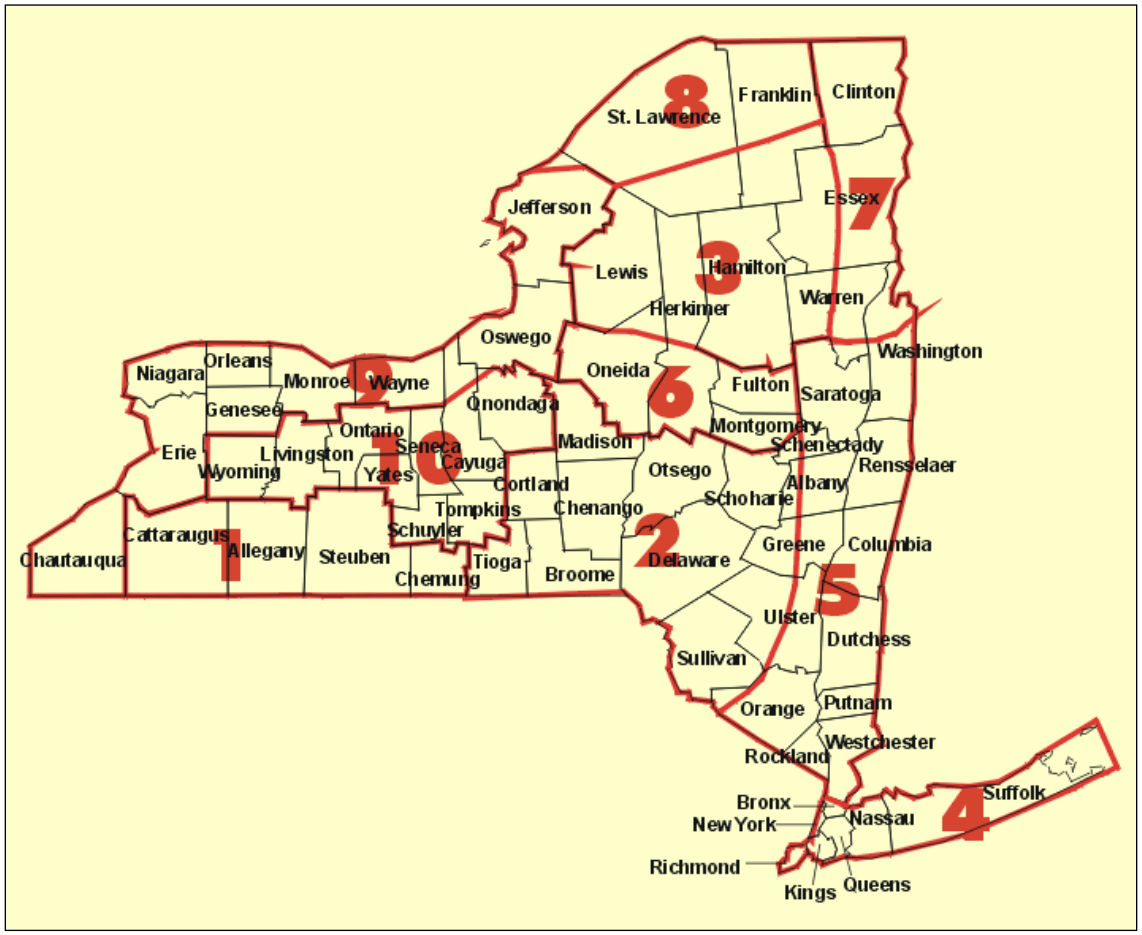
Extensive periods of extreme cold temperatures are a result from movement of great high-pressure systems into and through the eastern United States. Under higher than normal atmospheric pressures when arctic air masses are present, extreme winter temperatures hover over New York. New York State's location in the northeast makes it highly susceptible to extreme cold that can cause impact to human life and property (NYS DHSES 2019). Extreme cold temperatures occur throughout most of the winter season and generally accompany most winter storm events throughout the state. The NYSC Office of Cornell University indicates that cold temperatures prevail over the state whenever arctic air masses, under high barometric pressure, flow southward from central Canada or from Hudson Bay (Cornell University Date Unknown).

Excessive heat can occur anywhere, and occurrences of excessive heat are generally widespread and will cover an entire county. However, there can be spot locations that are somewhat cooler (e.g. a shady park near a stream) or hotter (e.g. urban areas because of their built environment holds the heat) (NYS DHSES 2019). Extreme heat temperatures of varying degrees exist throughout the state for most of the summer season, except for areas with high altitudes (Cornell University Date Unknown).

New York State is divided into 10 climate divisions: Western Plateau, Eastern Plateau (Catskill Mountains), Northern Plateau (Adirondack Mountains), Coastal, Hudson Valley, Mohawk Valley, Champlain Valley, St. Lawrence Valley, Great Lakes, and Central Lakes. According to NCDC, "Climatic divisions are regions within each state that have been determined to be reasonably climatically homogeneous" (CPC 2005). Erie County is located within the Great Lakes Division (Division 9); Figure 5.4.5-6 depicts the climate divisions in New York State.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Figure 5.4.5-6. New York State Climate Divisions



Source: CPC, 2005

Notes: (1) Western Plateau; (2) Eastern Plateau (Catskill Mountains); (3) Northern Plateau (Adirondack Mountains); (4) Coastal; (5) Hudson Valley; (6) Mohawk Valley; (7) Champlain Valley; (8) St. Lawrence Valley; (9) Great Lakes; and (10) Central Lakes

Previous Occurrences and Losses

Between 1954 and 2020, New York State and Erie County did not experience any extreme temperature FEMA disaster (DR) or emergency (EM) classifications. The Secretary of Agriculture from the U.S. Department of Agriculture (USDA) is authorized to designate counties as disaster areas to make emergency loans available to producers suffering losses in those counties and in counties that are contiguous to a designated county. Between 2014 and 2020, Erie County has been included in three USDA disaster declarations in relation to extreme temperature in 2016: S4023, S4031, and S4037: Drought; Wind, high winds; Fire, wildfire; Heat, excessive heat, high temperature; and insects.

USDA tracks drought losses on agriculture that often accompany extreme heat events. In 2016, heat-related crop losses totaled $5,096. In 2017, heat-related crop losses totaled $6,867. In 2018, heat-related crop losses totaled $27,811. In 2020, heat-related crop losses totaled $47,778 (USDA 2021).

Table 5.4.5-4 summarizes the known extreme temperature events that have impacted Erie County from 1999 to 2020.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 5.4.5-4. Extreme Temperature Events in Erie County, 1999 to 2020

Dates of Event	Event Type	FEMA Declaration Number (if applicable)	Erie County Designated?	Location	Description
January 30, 2019	Extreme Cold/Wind Chill	N/A	N/A	Northern Erie, Southern Erie	Blowing and drifting snow across Northern Erie, temperatures dipped below zero. Wind gusts of 35-50 mph dropped winds chills substantially below zero. One homeless man died of exposure in Williamsville during the cold outbreak. Most schools and churches closed in the area.
January 5, 2018	Extreme Cold/Wind Chill	N/A	N/A	Southern Erie	A bitterly cold artic airmass entrenched across the region brought cold temperatures and dangerous wind chills across the southern tier and north country. Low temperatures dropped to -15 to -35 degrees Fahrenheit across the southern tier and as low as -50 degrees across the north country.
February 13, 2016	Extreme Cold/Wind Chill	N/A	N/A	Northern Erie, Southern Erie	Cold and brisk westerly winds produced wind chills of -25 to -30 degrees Fahrenheit. Warming shelters were opened and some outdoor activities were cancelled. Minimum wind chill temperatures reached -26 degrees.
July 13, 2005	Heat	N/A	N/A	Northern Erie	A 25-year old construction worker collapsed and died from heat stroke as he was walking home from his construction job.
February 1, 2003	Extreme Cold	N/A	N/A	Erie County	Extreme cold event reported to have caused $50,000 in crop damage.

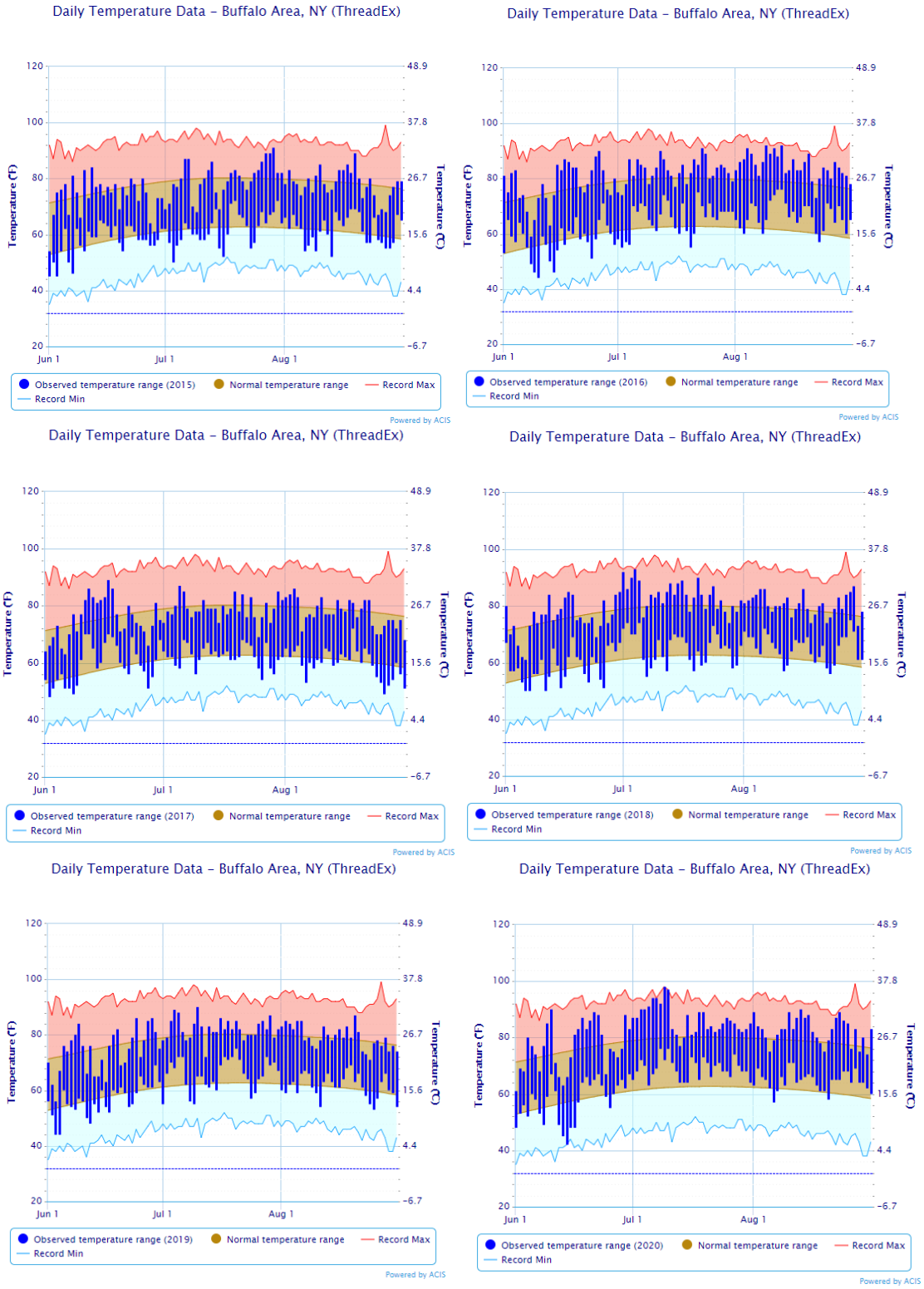
Source: NOAA NCEI 2020; FEMA 2020

Note: With temperature documentation for New York State and Erie County being so extensive, not all sources have been identified or researched. Therefore, Table 5.4.4-4 may not include all events that have occurred in the County.

Figure 5.4.5-7 shows daily temperatures for the summer months from 2015 to 2020. The record highs and record lows are shown by the far top and bottom red and blue lines.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Figure 5.4.5-7. Daily Temperatures for Summer Months from 2015 to 2020



Source: National Weather Service 2021

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Probability of Future Occurrences

It is estimated that Erie County will continue to experience extreme temperatures annually that may induce secondary hazards and associated impacts such as snow, hail, ice or wind storms, thunderstorms, drought, utility failure and transportation accidents. Some of these secondary hazards could affect human health.

According to the NOAA-NCEI database, Erie County experienced five extreme temperature events between 1950 and 2020. Table 5.4.5-5 summarizes the annual average number of events and the percent chance of these individual extreme temperature events occurring in Erie County in future years (NOAA NCEI 2021).

Table 5.4.5-5. Probability of Occurrences of Extreme Temperature Events

Hazard Type	Number of Occurrences Between 1950 and 2020	Recurrence Interval (in years) (# Years/Number of Events)	Percent (%) chance of occurrence in any given year
Cold/Wind Chill	0	0.00	0.00
Excessive Heat	0	0.00	0.00
Extreme Cold/Wind Chill	4	17.50	5.71
Heat	1	70.00	1.43
Total	**5**	**14.00**	**7.14**

Source: NOAA NCEI 2020
Note: Probability was calculated using the available data provided in the NOAA-NCEI storm events database.

Based on historical records and input from the Planning Committee, the probability of occurrence for extreme temperatures in Erie County is considered "rare."

Climate Change Impacts

Temperatures in New York State are warming, with an average rate of warming over the past century of 0.25° F per decade. Average annual temperatures are projected to increase across New York State by 2° F to 3.4° F by the 2020s, 4.1° F to 6.8° F by the 2050s, and 5.3° F to 10.1° F by the 2080s. By the end of the century, the greatest warming is projected to be in the northern section of the state (NYSERDA 2014). The total number of hot days in New York State is expected to increase as this century progresses. The frequency and duration of heat waves, defined as three or more consecutive days with maximum temperatures at or above 90 ˚F, are also expected to increase (Table 5.4.5-6). In contrast, extreme cold events, defined both as the number of days per year with minimum temperature at or below 32 ˚F and those at or below 0 ˚F, are expected to decrease as average temperatures rise (NYSERDA 2011).

Each region in New York State, as defined by ClimAID, has attributes that will be uniquely affected by climate change. Erie County is part of Region 1. In Region 1, it is estimated that temperatures will increase by 3.0ºF to 5.5ºF by the 2050s and 4.5ºF to 8.5ºF by the 2080s (middle range estimate, baseline of 48ºF).

The frequency of heat waves is projected to increase while cold events are projected to fall in Region 1. With the increase in temperatures, heat waves will become more frequent and intense, increasing heat-related illness and death and posing new challenges to the energy system, air quality and agriculture (NYSERDA 2014). Table 5.4.5-6 displays the projected changes in extreme events and includes the minimum, central range, and maximum days per year.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 5.4.5-6. Changes in Extreme Events in Region 1 – Heat Waves and Intense Precipitation

Event Type	# Days Per Year	Baseline	2020s	2050s	2080s
Heat Waves	**Number of Days per year with maximum temperature exceeding minimum, (central range), and maximum**				
	90°F	8	8 (10 to 17) 23	12 (17 to 30) 44	16 (22 to 52) 68
	Number of heat waves per year	0.8	0.9 (1 to 2) 3	2 (2 to 4) 6	2 (3 to 7) 8
	Average duration	4	4 (4 to 4) 5	4 (4 to 5) 5	4 (4 to 5) 7
Extreme Cold	**Number of days per year: minimum, (central range), and maximum**				
	Below 32°F	133	99 (104 to 116) 124	76 (90 to 103) 108	55 (75 to 97) 106

Source: NYSERDA 2014
Note: Based upon the middle range (25th to 75th percentile estimate)

Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed and vulnerable to the identified hazard. The following discusses Erie County's vulnerability, in a qualitative nature, to the extreme temperature hazard.

Impact on Life, Health and Safety

The entire population of Erie County is exposed to extreme temperature events (population of 917,296 people, according to the 2015-2019 ACS population estimates). Extreme temperature events may cause potential health impacts, including injury or possibly death. According to the CDC, populations most at risk to extreme cold and heat events include the following: 1) the elderly, who are less able to withstand temperatures extremes because of their age, health conditions, and limited mobility to access shelters; 2) infants and children up to 4 years of age; 3) individuals with chronic medical conditions (e.g., heart disease, high blood pressure); 4) low-income persons that cannot afford proper heating and cooling; and 5) the general public who may overexert during work or exercise during extreme heat events or experience hypothermia during extreme cold events (CDC 2016).

According to the 2019 ACS 5-Year population estimate, persons over the age of 65 are more vulnerable to extreme temperature events, which accounts for approximately 17.6-percent of Erie County's total population (161,498 persons). Furthermore, the homeless and residents below the poverty level might not have access to housing or their housing could be less able to withstand extreme temperatures (e.g., homes with poor insulation and heating supply). As of 2019, a total of 126,041 persons were living in poverty in the County (ACS 2019).

The CDC 2016 Social Vulnerability Index (SVI) ranks U.S. Census tracts on socioeconomic status, household composition and disability, minority status and language, and housing and transportation. Erie County's overall score is 0.3986, indicating that its communities have low vulnerability (CDC 2016). This map shows that areas likely to be more vulnerable to extreme temperature events are fairly distributed throughout the County but are generally concentrated in the interior and southern coastal municipalities.

Risk of structural fire in the winter months is elevated with approximately 30 percent of all deaths caused by fire occurring in the winter months. Cooking and heat sources too close to combustible materials are leading factors in winter home fires (U.S. Fire Administration 2018). Often times, power outages occur during extreme cold events. Individuals powering their homes with generators are subjected to carbon monoxide poisoning if proper ventilation procedures are not followed (NYC 2019). Improperly connected portable generators are capable of 'back feeding' power lines, which may cause injury or death to utility workers attempting to restore power and may damage house wiring and/or generators.

Meteorologists can accurately forecast extreme heat and cold event development and the severity of the associated conditions with several days of lead time. These forecasts provide an opportunity for public health

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

and other officials to notify vulnerable populations, implement short-term emergency response actions, and focus on surveillance and relief efforts on those at greatest risk. Adhering to extreme temperature warnings can significantly reduce the risk of temperature-related deaths.

Impact on General Building Stock

All buildings are exposed to the extreme temperature hazard. Extreme heat generally does not impact buildings; however, elevated summer temperatures increase the energy demand for cooling. Losses can be associated with the overheating of heating, ventilation, and air conditioning (HVAC) systems. Extreme cold temperature events can damage buildings through freezing/bursting pipes and freeze/thaw cycles, as well as increasing vulnerability to home fires. Additionally, manufactured homes (mobile homes) and antiquated or poorly constructed facilities can have inadequate capabilities to withstand extreme temperatures.

Older buildings constructed under less stringent building codes are more vulnerable to extreme cold events because of cracks and leaks in the walls. Roof damage can also occur after excessive snow fall and extreme temperature change. Extreme heat may also be damaging to older structures. Further, structures with glass exposed to sunlight and structures exposed to heat on all four sides are more susceptible to damage, including interior damage from overheating (NYC 2019).

Impact on Critical Facilities and Lifelines

All critical facilities and lifelines in the County are exposed to the extreme temperature hazard. Impacts to critical building facilities will experience similar issues as described for the general building stock. It is essential that critical facilities remain operational during natural hazard events. Extreme heat events can sometimes cause short periods of utility failures, commonly referred to as *brown-outs*, because of increased usage from air conditioners and other energy-intensive appliances. Similarly, heavy snowfall and ice storms, associated with extreme cold temperature events, can cause power interruption. Backup power is recommended for critical facilities and infrastructure.

Transportation infrastructure may experience damage from extreme temperature events. This is particularly the case with ground transportation systems at risk of cracking, buckling, or sagging during periods of high temperatures (NYC 2019). This can cause disruptions to essential services that travel along these routes.

Impact on Economy

Extreme temperature events also impact the economy, including loss of business function and damage to and loss of inventory. Business owners can be faced with increased financial burdens from unexpected repairs needed to the building (e.g., pipes bursting), higher than normal utility bills, or business interruption due to power failure (i.e., loss of electricity, telecommunications). Disruptions in public transportation service will also impact the economy for both commuters and customers alike.

Impact on the Environment

Extreme temperature events can also impact the environment. For example, freezing and warming weather patterns create changes in natural processes. An excess amount of snowfall and earlier warming periods may affect natural processes, such as flow within water resources (USGS n.d.). Likewise, rain-on-snow events also exacerbate runoff rates with warming winter weather.

Extreme heat events can have particularly negative impacts on coastal marine aquatic systems, contributing to fish kills, aquatic plant die offs, and increased likelihood of harmful algal blooms.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Cascading Impacts to Other Hazards

Extreme heat events can increase the potential risk of wildfires. Refer to Section 5.4.13 for more information about the impacts of wildfires.

Future Changes that May Impact Vulnerability

Understanding future changes that may impact County vulnerability can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The County considered the following factors that may affect hazard vulnerability:

- Potential or projected development.
- Projected changes in population.
- Other identified conditions as relevant and appropriate, including the impacts of climate change.

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across Erie County. The ability of new development to withstand extreme temperature impacts lies in sound land use practices, building design considerations (e.g. Leadership in Energy and Environmental Design [LEED]), and consistent enforcement of codes and regulations for new construction. New development will change the landscape where buildings, roads, and other infrastructure potentially replace open land and vegetation. Surfaces that were once permeable and moist are now impermeable and dry. These changes cause urban areas to become warmer than the surrounding areas forming heat islands (as described above). Specific areas of recent and new development are indicated in tabular form and/or on the hazard maps included in the jurisdictional annexes in Volume II, Section 9 (Jurisdictional Annexes) of this plan.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has remained stable between 2010 and 2019 (917,173 persons in 2010 and 917,296 persons in 2019). Estimated population projections provided by the 2017 Cornell Program on Applied Demographics indicates that the County's population will decrease into 2040, decreasing the total population to approximately 769,396 persons (Cornell Program on Applied Demographics 2017). While vulnerable populations (i.e., persons over 65) are decreasing, a number of people are still at great risk of impacts from extreme temperature events, which will increase.

Climate Change

As discussed above, most studies project that the State of New York will see an increase in average annual temperatures (NYC 2019). As the climate warms, extreme cold events might decrease in frequency, while extreme heat events might increase in frequency; the shift in temperatures could also result in hotter extreme heat events. With increased temperatures, susceptible populations could face increased vulnerability to extreme heat and its associated illnesses, such as heatstroke and cardiovascular and kidney disease. Additionally, as temperatures rise, more buildings, facilities, and infrastructure systems may exceed their ability to cope with the heat.

Change of Vulnerability Since the 2015 HMP

The 2015 HMP included a quantitative assessment of the County's population and number of events. Extreme temperature events (heat and cold) were included in Erie County's 2015 HMP. As existing development and infrastructure continue to age, utility and transportation systems will be at increased risk to fail if they are not properly maintained and do not adapt to the changing environment.

Attachment: 15-Section-5.4.5-Extreme-Temperature-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.6 Flood

The following section provides the hazard profile and vulnerability assessment of the flood hazard for Erie County Hazard Mitigation Plan (HMP).

5.4.6.1 Hazard Profile

This section provides information regarding the description, extent, location, previous occurrences and losses, climate change projections, and the probability of future occurrences for the flood hazard.

Hazard Description

Many floods fall into three categories: riverine, coastal, and shallow (FEMA 2007). Other types of floods may include ice-jam floods, alluvial fan floods, dam failure floods, and floods associated with local drainage or high groundwater.

Floods are one of the most common natural hazards in the United States. They can develop slowly over a period of days or develop quickly, with disastrous effects that can be local (impacting a neighborhood or community) or regional (affecting entire river basins, coastlines, and multiple counties or states) (Federal Emergency Management Agency [FEMA] 2007). As defined in the New York State (NYS) HMP (NYS Division of Homeland Security and Emergency Services [DHSES] 2014), flooding is a general and temporary condition of partial or complete inundation of water on normally dry land caused by the following:

- Riverine overbank flooding
- Flash floods
- Alluvial fan floods
- Mudflows or debris floods
- Dam- and levee-break floods
- Local draining or high groundwater levels
- Fluctuating lake levels
- Ice jams
- Coastal flooding

For the purpose of this HMP and as deemed appropriate by the Erie County Steering Committee, riverine, shallow flooding, flash flooding, ice jam, and dam and levee failure flooding are the main flood types of flooding that are of concern to the county. These types of floods are further discussed below.

Flooding can occur in Erie County during any season of the year, but it most likely occurs in the late winter – early spring months when melting snow may combine with intense rainfall to produce increased runoff. Ice jams and debris have often increased flood heights by impeding water flow at bridges and culverts. Floods can result from precipitation within falling within the watershed, from sharp rises in temperature in the spring that melt the snow cover of the basin and are followed by rains, and from localized thunderstorms.

Riverine (Inland) and Flash Flooding

Erie County is subject to both riverine and flash flooding. Riverine floods are the most common flood type. They occur along a channel and include overbank and flash flooding. Channels are defined as ground features that carry water through and out of a watershed, as defined as rivers, creeks, streams, or ditches. When a channel receives too much water, the excess water flows over its banks and inundates low-lying areas (Illinois Association for Floodplain and Stormwater Management 2006). Many areas of Erie County are also susceptible to urban (stormwater) flooding. Erie County communities bordering Lake Erie (the Cities of Buffalo and

Lackawanna, and the Towns of Hamburg, Brant, and Evans) are also potentially susceptible to coastal flooding from Lake Erie as a result of storm-induced rises and seiches.

Flash floods are defined by the National Weather Service (NWS) as, "a flood caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Flash floods are usually characterized by raging torrents after heavy rains that rip through riverbeds, urban streets, or mountain canyons sweeping everything before them. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen; for instance, after a levee or dam has failed, or after a sudden release of water by a debris or ice jam" (NWS 2009).

Shallow Flooding

Shallow flooding includes stormwater flooding, which is caused by local drainage issues and high groundwater levels. Locally, heavy precipitation may produce flooding in areas other than delineated floodplains or along recognizable channels. If local conditions cannot accommodate intense precipitation through a combination of infiltration and surface runoff, water may accumulate and cause flooding problems. During winter and spring, frozen ground and snow accumulations may contribute to inadequate drainage and localized ponding. Flooding issues of this nature generally occur in areas with flat gradients and generally increase with urbanization, which speeds the accumulation of floodwaters because of impervious areas. Shallow street flooding can occur unless channels have been improved to account for increased flows (FEMA 1997).

High groundwater levels can be a concern and cause problems even where there is no surface flooding. Basements are susceptible to high groundwater levels. Seasonally high groundwater is common in many areas, while elsewhere, high groundwater occurs only after a long period of above-average precipitation (FEMA 1997).

Urban drainage flooding is caused by increased water runoff due to urban development and drainage systems. Drainage systems are designed to remove surface water from developed areas as quickly as possible to prevent localized flooding on streets and other urban areas. They make use of a closed conveyance system that channels water away from an urban area to surrounding streams. This bypasses the natural processes of water filtration through the ground, containment, and evaporation of excess water. Because drainage systems reduce the amount of time the surface water takes to reach surrounding streams, flooding in those streams can occur more quickly and reach greater depths than prior to development in that area (FEMA 2007).

Ice Jam Flooding

An ice jam occurs when pieces of floating ice are carried with a stream's current and accumulate behind any obstruction to the stream flow. Obstructions may include river bends, mouths of tributaries, points where the river slope decreases as well as dams and bridges. The water held back by this obstruction can cause flooding upstream, and if the obstruction suddenly breaks, flash flooding can occur as well (National Oceanic and Atmospheric Administration [NOAA] 2013). The formation of ice jams depends on the weather and physical condition of the river and stream channels. They are most likely to occur where the channel slope naturally decreases, in culverts, and along shallows where channels may freeze solid. Ice jams and resulting floods can occur during different times of the year: fall freeze-up from the formation of frazil ice; mid-winter periods when stream channels freeze solid, forming anchor ice; and spring breakup when rising water levels from snowmelt or rainfall break existing ice cover into pieces that accumulate at bridges or other types of obstructions (NYS DHSES 2014).

Ice Jams

- ✓ **Freeze-up jams occur when floating ice may slow or stop due to a change in water slope as it reaches an obstruction to movement.**
- ✓ **Breakup jams occur during periods of thaw, generally in late winter and early spring.**

(NYS DHSES 2014).

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dam and Levee Failure Flooding

A dam or a levee is an artificial barrier that can impound water, wastewater, or any liquid-borne material for the purpose of storage or control of water (FEMA 2007). Dams are man-made structures built across a stream or river that impound water and reduce the flow downstream (FEMA 2003). They are built for the purpose of power production, agriculture, water supply, recreation, and flood protection. Dam failure is any malfunction or abnormality outside of the design that adversely affects a dam's primary function of impounding water (FEMA 2007). Levees typically are earthen embankments constructed from a variety of materials ranging from cohesive to cohesion-less soils (U.S. Bureau of Reclamation 2012).

Dams and levees can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam (inadequate spillway capacity)
- Prolonged periods of rainfall and flooding
- Deliberate acts of sabotage (terrorism)
- Structural failure of materials used in dam construction
- Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams
- Piping and internal erosion of soil in embankment dams
- Inadequate or negligent operation, maintenance, and upkeep
- Failure of upstream dams on the same waterway
- Earthquake (liquefaction/landslides) (FEMA 2018a)

The Springville dam is county-owned and is designated a High Hazard Dam. The county assumed ownership of the former power dam from the Village of Springville and converted the parcel into a park. The county regularly reports to New York State Department of Environmental Conservation (NYSDEC) that the dam is serviceable, and an inundation map has been completed. The U.S. Army Corps of Engineers (USACE) plans to install a fish passage on the dam that will aid in fish migration in the 70 miles of Cattaraugus Creek above the dam. This project is on hold due to resource constraints imposed by the COVID-19 emergency. The creek bed has been tested for possible radiation contamination from the West Valley Nuclear materials storage site.

Flood Control Measures

Nine levee systems exist in the county that provide the community with some degree of protection against flooding. According to the USACE National Levee Database, Erie County is home to nine levee systems, made up of 111 structures encompassing 15 miles. Levees protect portions of the Scajaquada, Ellicott, Cayuga, and Blasdell creeks (USACE 2019).

Extent

In the case of riverine flood hazard, once a river reaches flood stage, the flood extent or severity categories used by the NWS include minor flooding, moderate flooding, and major flooding. Each category has a definition based on property damage and public threat:

- Minor Flooding - minimal or no property damage, but possibly some public threat or inconvenience.
- Moderate Flooding - some inundation of structures and roads near streams. Some evacuations of people and/or transfer of property to higher elevations are necessary.
- Major Flooding - extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations (NWS 2011).

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The severity of a flood depends not only on the amount of water that accumulates in a period, but also on the land's ability to manage this water. The size of rivers and streams in an area and infiltration rates are significant factors. When it rains, soil acts as a sponge. When the land is saturated or frozen, infiltration rates decrease, and any more water that accumulates must flow as runoff (Harris 2008).

According to the NYSDEC Division of Water Bureau of Flood Protection and Dam Safety, the hazard classification of a dam is assigned according to the potential impacts of a dam failure pursuant to 6 NYCRR Part 673.3 (NYSDEC 2009). Dams are classified in terms of potential for downstream damage if the dam were to fail. These hazard classifications are identified and defined below:

- *Low Hazard (Class A)* is a dam located in an area where failure will damage nothing more than isolated buildings, undeveloped lands, or township or county roads and/or will cause no significant economic loss or serious environmental damage. Failure or mis-operation would result in no probable loss of human life. Losses are principally limited to the owner's property.
- *Intermediate Hazard (Class B)* is a dam located in an area where failure may damage isolated homes, main highways, minor railroads, interrupt the use of relatively important public utilities, and/or will cause significant economic loss or serious environmental damage. Failure or mis-operation would result in no probable loss of human life, but can cause economic loss, environment damage, disruption of lifeline facilities, or impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be in areas with population and significant infrastructure.
- *High Hazard (Class C)* is a dam located in an area where failure may cause loss of human life, serious damage to homes, industrial or commercial buildings, important public utilities, main highways, or railroads and/or will cause extensive economic loss. This is a downstream hazard classification for dams in which excessive economic loss (urban area including extensive community, industry, agriculture, or outstanding natural resources) would occur as a direct result of dam failure.
- *Negligible or No Hazard (Class D)* is a dam that has been breached or removed, or has failed or otherwise no longer materially impounds waters, or a dam that was planned but never constructed. Class "D" dams are defunct dams posing negligible or no hazard. The department may retain pertinent records regarding such dams.

Location

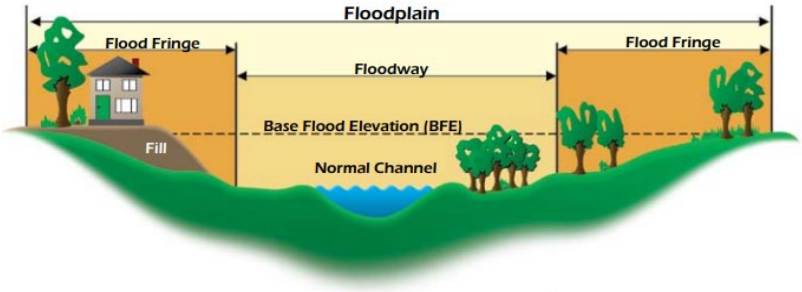
Nearly all areas in Erie County could experience a flash flooding event. This depends on the intensity and duration of rainfall, the steepness of the watershed, the number of impervious surfaces within the watershed and vegetation. Flooding potential is influenced by climatology, meteorology, and topography (elevations, latitude, and water bodies and waterways). Flooding potential for each type of flooding that affects Erie County is described in the subsections below.

Floodplains

A floodplain is defined as the land adjoining the channel of a river, stream, ocean, lake, or other watercourse or water body that becomes inundated with water during a flood. In Erie County, floodplains line the rivers and streams as well as the Laker Erie shore. The boundaries of the floodplains are altered as a result of changes in land use, the amount of impervious surface, placement of obstructing structures in floodways, changes in precipitation and runoff patterns, improvements in technology for measuring topographic features, and utilization of different hydrologic modeling techniques. Figure 5.4.6-1 depicts the flood hazard area, the flood fringe, and the floodway areas of a floodplain.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.6-1. Characteristics of a Floodplain



Most often floodplains are referred to as 100-year floodplains. A 100-year floodplain is not a flood that will occur once every 100 years; the designation indicates a flood that has a 1 percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time. Due to this misleading term, FEMA has properly defined it as the 1 percent annual chance flood. Similarly, the 500-year floodplain will not occur every 500 years but is an event with a 0.2 percent chance of being equaled or exceeded each year. The "1 percent annual chance flood" is now the standard term used by most federal and state agencies and by the National Flood Insurance Program (NFIP) (FEMA 2003). The 1 percent annual chance floodplain establishes the area that has flood insurance and floodplain management requirements and is also referenced as the regulatory floodplain.

Locations of flood zones in Erie County as depicted from the FEMA Q3 data are illustrated in Figure 5.4.6-2 and the total land area in the floodplain, inclusive of waterbodies, is summarized in Table 5.4.6-1. Section 9 (Jurisdictional Annexes) includes a map of each jurisdiction depicting the floodplains. As depicted in Figure 5.4.6-2, flood hazard zones are present in differing amounts in communities throughout the county. Large areas of floodplain are found in the northern portions of Amherst, Clarence, Newstead, Lancaster, and Cheektowaga. Notable floodplain extents are also found along the Eighteenmile and Buffalo creek valleys.

The Digital Flood Insurance Rate Map (DFIRM) data provided by FEMA for Erie County show the following flood hazard areas:

- 1 Percent Annual Chance Flood Hazard: Areas subject to inundation by the 1 percent-annual-chance flood event. This includes both effective and preliminary, as well as AE and VE Zones. Mandatory flood insurance requirements and floodplain management standards apply.
- 0.2 Percent Annual Chance Flood Hazard: Area of minimal flood hazard, usually depicted on FIRMs as the 500-year flood level or Shaded X Zone.

Table 5.4.6-1. Number of Acres Erie County Is Exposed to 1 Percent and 0.2 Percent Annual Chance Flood

Jurisdiction	Total Land Area	Estimated Land Area Exposed to the Flood Hazard Areas (Acres)					
		1 percent Annual Chance Flood - A Zones	Percent of Total	1 percent Annual Chance Flood - V Zones	Percent of Total	0.2 percent Annual Chance Flood	Percent of Total
Akron (V)	1,228	102	8.3%	0	0.0%	120	9.8%
Alden (T)	20,394	947	4.6%	0	0.0%	1,039	5.1%
Alden (V)	1,712	90	5.2%	0	0.0%	90	5.2%
Amherst (T)	33,489	5,928	17.7%	0	0.0%	14,225	42.5%
Angola (V)	870	61	7.0%	0	0.0%	63	7.3%
Aurora (T)	21,739	645	3.0%	0	0.0%	745	3.4%
Blasdell (V)	636	8	1.2%	0	0.0%	8	1.2%

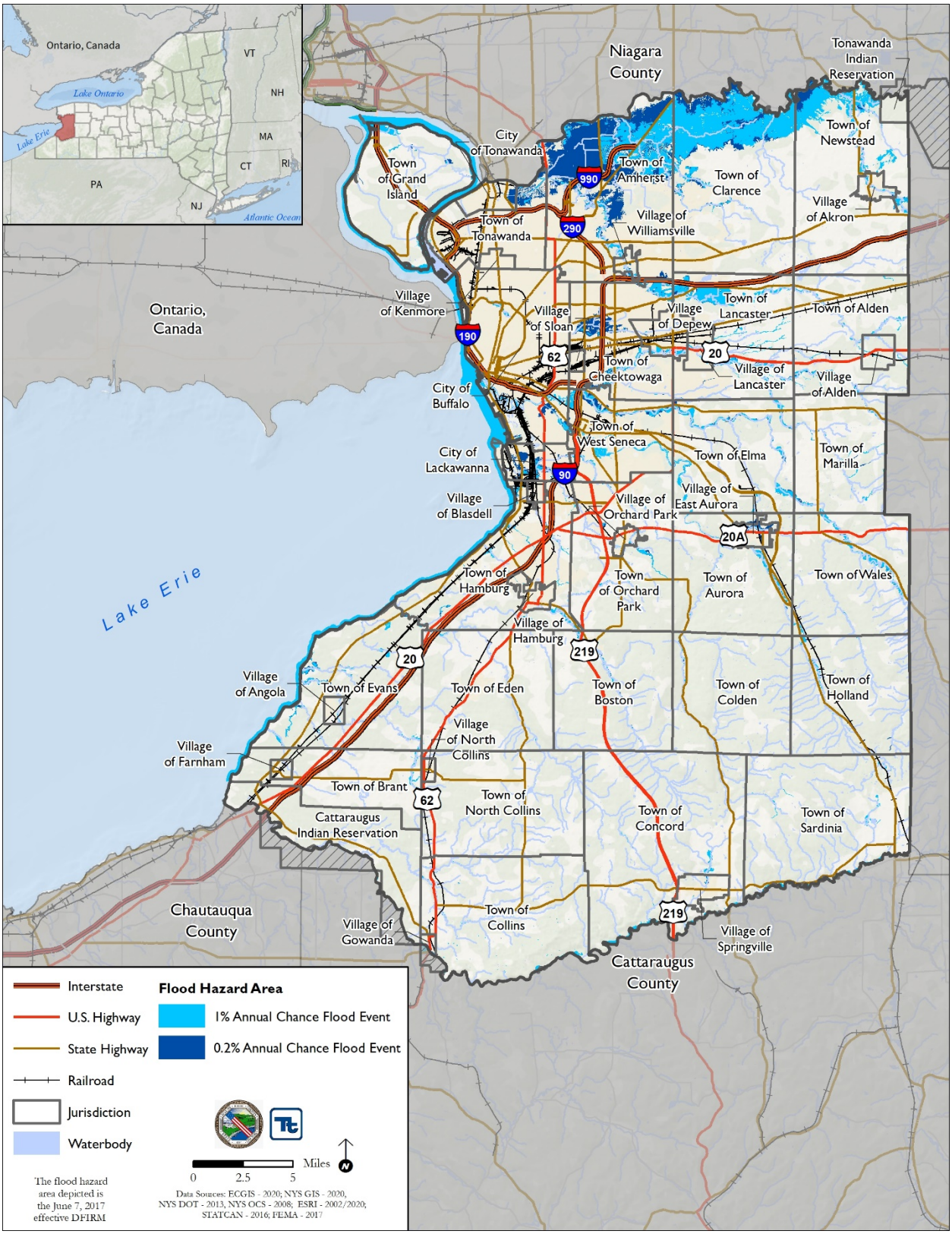
Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Land Area	Estimated Land Area Exposed to the Flood Hazard Areas (Acres)					
		1 percent Annual Chance Flood - A Zones	Percent of Total	1 percent Annual Chance Flood - V Zones	Percent of Total	0.2 percent Annual Chance Flood	Percent of Total
Boston (T)	22,926	342	1.5%	0	0.0%	375	1.6%
Brant (T)	14,901	182	1.2%	40	0.3%	222	1.5%
Buffalo (C)	26,275	1,187	4.5%	9	<0.1%	1,454	5.5%
Cheektowaga (T)	16,292	1,068	6.6%	0	0.0%	1,995	12.2%
Clarence (T)	34,321	8,339	24.3%	0	0.0%	9,946	29.0%
Colden (T)	22,831	193	0.8%	0	0.0%	211	0.9%
Collins (T)	30,406	743	2.4%	0	0.0%	761	2.5%
Concord (T)	42,641	853	2.0%	0	0.0%	858	2.0%
Depew (V)	3,228	264	8.2%	0	0.0%	326	10.1%
East Aurora (V)	1,590	109	6.9%	0	0.0%	339	21.3%
Eden (T)	25,518	256	1.0%	0	0.0%	257	1.0%
Elma (T)	22,116	1,591	7.2%	0	0.0%	1,728	7.8%
Evans (T)	25,727	1,219	4.7%	174	0.7%	1,536	6.0%
Farnham (V)	652	0	0.0%	0	0.0%	0	0.0%
Gowanda (V)	360	36	10.0%	0	0.0%	44	12.2%
Grand Island (T)	18,181	865	4.8%	0	0.0%	944	5.2%
Hamburg (T)	24,225	1,166	4.8%	124	0.5%	1,444	6.0%
Hamburg (V)	1,524	23	1.5%	0	0.0%	24	1.6%
Holland (T)	22,874	440	1.9%	0	0.0%	470	2.1%
Kenmore (V)	916	0	0.0%	0	0.0%	0	0.0%
Lackawanna (C)	4,232	447	10.6%	36	0.8%	1,035	24.5%
Lancaster (T)	21,394	2,989	14.0%	0	0.0%	3,217	15.0%
Lancaster (V)	1,759	131	7.5%	0	0.0%	144	8.2%
Marilla (T)	17,546	608	3.5%	0	0.0%	683	3.9%
Newstead (T)	31,405	3,371	10.7%	0	0.0%	3,839	12.2%
North Collins (T)	27,009	0	0.0%	0	0.0%	0	0.0%
North Collins (V)	502	0	0.0%	0	0.0%	0	0.0%
Orchard Park (T)	23,808	697	2.9%	0	0.0%	785	3.3%
Orchard Park (V)	863	72	8.3%	0	0.0%	81	9.4%
Sardinia (T)	32,215	975	3.0%	0	0.0%	977	3.0%
Sloan (V)	503	0	0.0%	0	0.0%	0	0.0%
Springville (V)	2,325	45	2.0%	0	0.0%	56	2.4%
Tonawanda (C)	2,379	83	3.5%	0	0.0%	261	11.0%
Tonawanda (T)	11,173	234	2.1%	0	0.0%	695	6.2%
Wales (T)	22,861	936	4.1%	0	0.0%	969	4.2%
West Seneca (T)	13,743	1,484	10.8%	0	0.0%	1,775	12.9%
Williamsville (V)	768	86	11.2%	0	0.0%	109	14.1%
Erie County Total	**652,056**	**38,814**	**6.0%**	**383**	**0.1%**	**53,849**	**8.3%**

Source: Erie County GIS 2021; Erie County Q3 Data from FEMA, 2021
Note: The area presented includes the area of inland waterways.
C = City, T = Town, V = Village, % = Percent

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.6-2. FEMA Flood Hazard Areas in Erie County

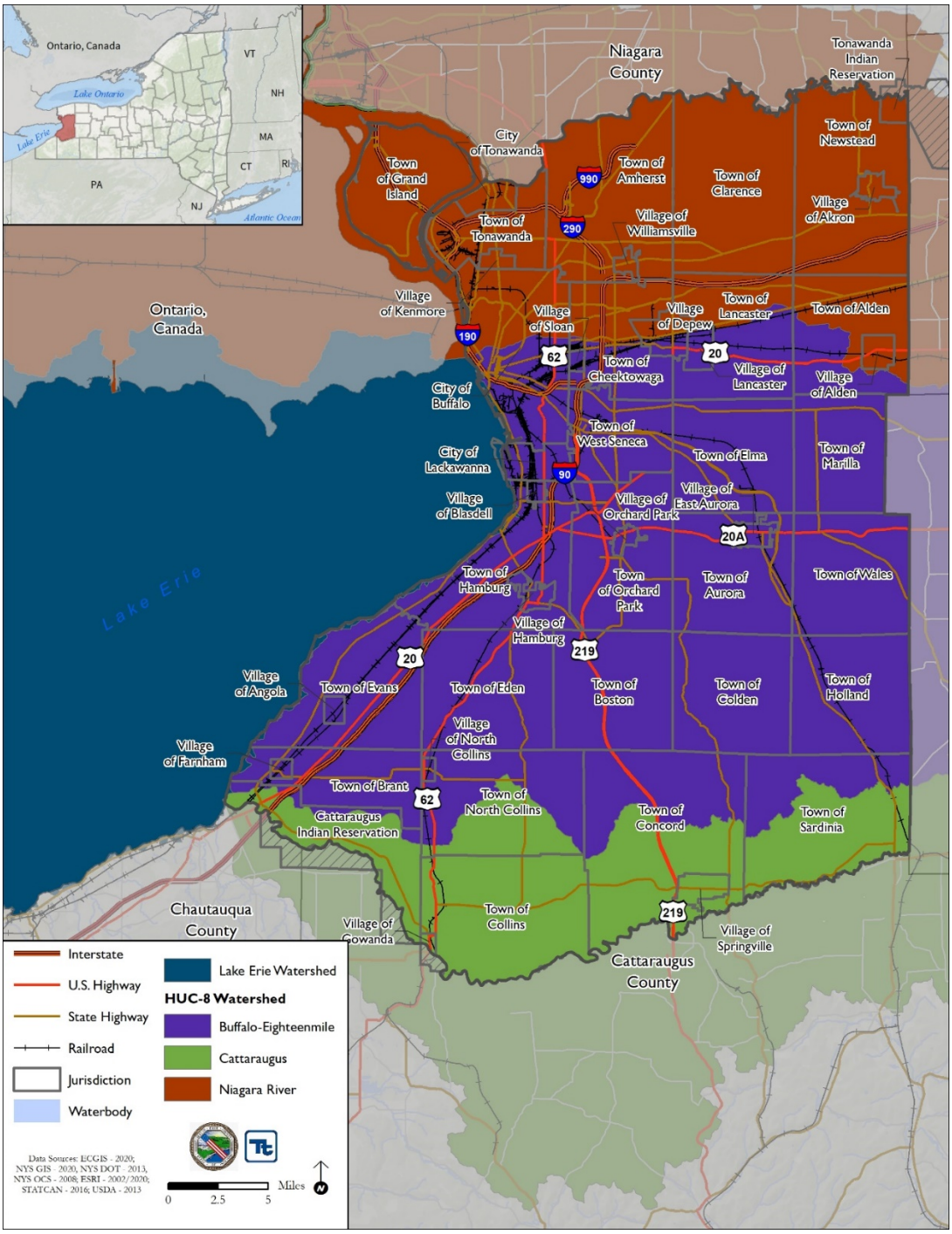


Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Riverine/Flash Flooding/Stormwater Flooding

Erie County includes parts of three major watershed that drain into the Great Lakes Basin and the Allegheny River Basin. The Niagara River watershed drains the county's northern tier. The Buffalo-Eighteenmile creek watershed is the county's largest and drains its central and a large portion of southern territory. The Cattaraugus Creek watershed drains the county's southernmost areas from Lake Erie to its eastern boundary (Erie County 2015).

Figure 5.4.6-3. Erie County Watersheds



Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Ice Jam Flooding

An ice jam occurs when pieces of floating ice are carried with a stream's current and accumulate behind any obstruction to stream flow. Obstructions may occur at river bends, mouths of tributaries, points where the river slope decreases, as well as dams and bridges. Water held back by this obstruction can cause flooding upstream, and if the obstruction suddenly breaks, flash flooding can occur as well (NOAA 2011). Formation of ice jams depends on weather and physical condition of river and stream channels. Ice jams are most likely to occur where channel slope naturally decreases, in culverts, and along shallows where channels may freeze solid. Ice jams and resulting floods can occur at different times of the year: fall freeze-up from formation of frazil ice; mid-winter periods when stream channels freeze solid, forming anchor ice; and spring breakup when rising water levels from snowmelt or rainfall break existing ice cover into pieces that accumulate at bridges or other types of obstructions (NYS DHSES 2014).

The two main types of ice jams are freeze-up and breakup. Freeze-up jams occur when floating ice slows or stops due to a change in water slope as it reaches an obstruction to movement. Breakup jams occur during periods of thaw, generally in late winter and early spring. Ice cover breakup is usually associated with rapid increase in runoff and corresponding river discharge due to a heavy rainfall, snowmelt, or warmer temperatures (NWS 2011; NYS DHSES 2014).

Ice jams can occur along many of Erie County's rivers and streams. According to the Ice Jam Database maintained by the Ice Engineering Group at the USACE Cold Regions Research and Engineering Laboratory (CRREL), Erie County experienced 43 ice jam events between 1780 and 2020. These ice jam events have occurred within many jurisdictions within the county.

Dam Failure

According to USACE, the level of impact that a dam failure would have can be predicted based upon the hazard potential classification (USACE 2020). Table 5.4.6-2 outlines the recommended hazard classifications.

Table 5.4.6-2. U.S. Army Corps of Engineers Hazard Potential Classification for Dams

Urgency of Action	Actions for Dams in This Class	Characteristics of This Class
Very High (1)	Take immediate action to avoid failure. Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite investigations to support remediation using all resources and funding necessary. Initiate intensive management and situation reports.	Critically near failure: Dam is almost certain to fail under normal operations within a few years without intervention. OR Extremely high incremental risk: Combination of life or economic consequences with likelihood of failure is very high. USACE considered this level of life-risk to be unacceptable except in extraordinary circumstances.
High (2)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions as warranted. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite confirmation of classification. Give very high priority for investigations to support the need for remediation.	Failure initiation foreseen: For confirmed and unconfirmed dam safety issues, failure could begin during normal operations or be initiated as the consequence of an event. The likelihood of failure from one of these occurrences, prior to remediation, is too high to ensure public safety. OR Very high incremental risk: The combination of life or economic consequences with likelihood of failure

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Urgency of Action	Actions for Dams in This Class	Characteristics of This Class
		is high. USACE considered this level of life-risk to be unacceptable except in extraordinary circumstances.
Moderate (3)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions as warranted. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Prioritize investigations to support the need for remediation informed by consequences and other factors.	Moderate to high incremental risk: For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with likelihood of failure is moderate. USACE considers this level of life-risk to be unacceptable except in unusual circumstances.
Low (4)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Conduct elevated monitoring and evaluation. Give normal priority to investigations to validate classification but do not plan for risk reduction measures currently.	Low incremental risk: For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with likelihood of failure is low to very low, and the dam may not meet all essential USACE guidelines. USACE considers this level of life-risk to be in the range of tolerability, but the dam does not meet all essential USACE guidelines.
Normal (5)	Continue routine dam safety activities and normal operations, maintenance, monitoring, and evaluation.	Very low incremental risk: The combination of life, economic, or environmental consequences with likelihood of failure is low to very low and the dam meets all essential USACE guidelines. USACE considers this level of life-safety risk to be tolerable.

Source: USACE 2020

New York State uses four classifications to identify hazardous dams. These classifications - negligible, low, intermediate, and high - build upon each other, adding the consequences of the lower levels on the higher levels. According to the New York Inventory of Dams, Erie has 248 dams (Figure 5.4.6-4). These are classified as 164 low hazard, 6 intermediate hazard, 3 high hazard, 63 negligible hazard, and 12 with no classification code. This differs from the National Inventory of Dams, which identifies 25 dams: 16 low hazard, 6 significant hazard, and 3 high hazard.

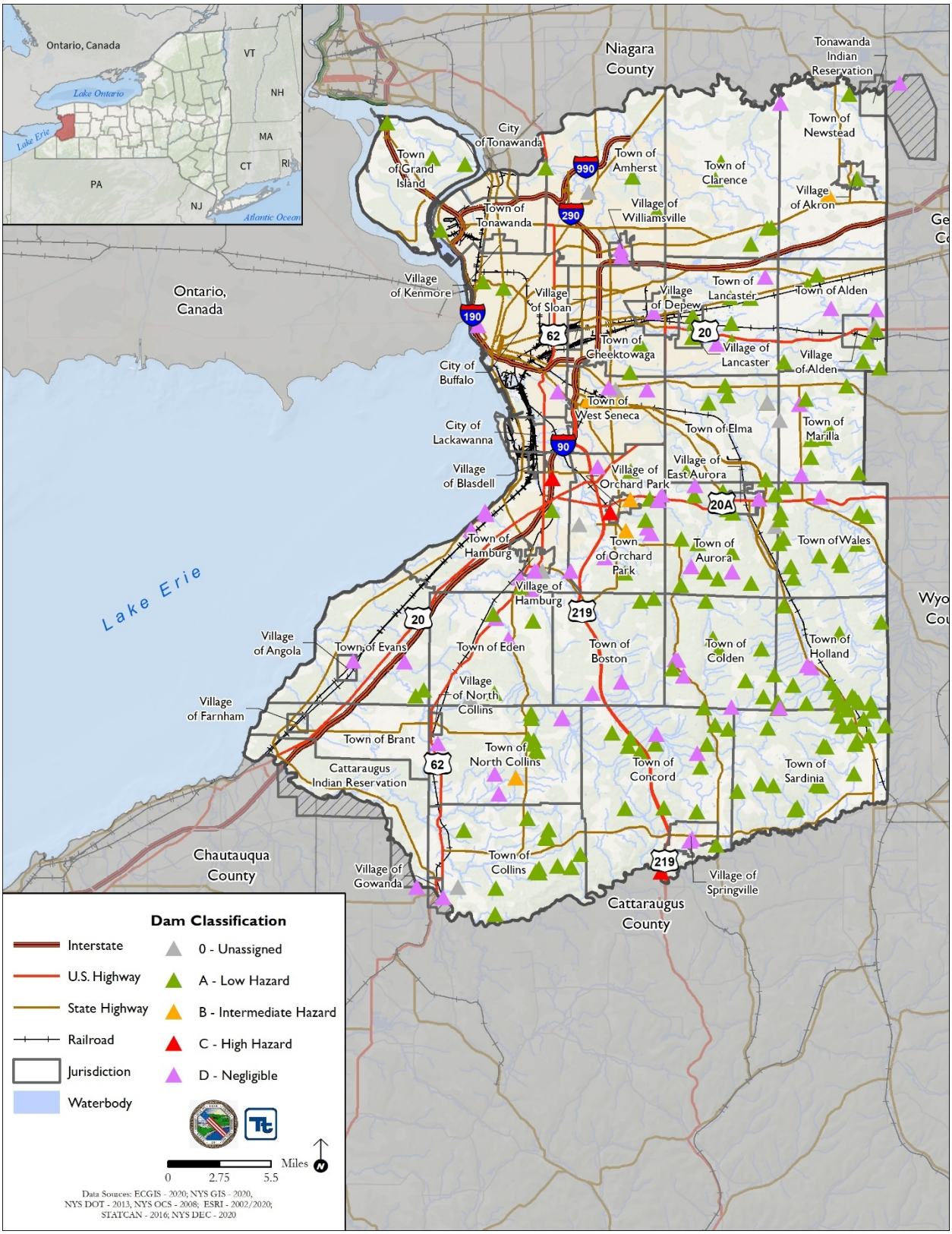
Table 5.4.6-3. NYSDEC Dam Classifications

Code	Classification	Description
A	Low Hazard	A dam failure is unlikely to result in damage to anything more than isolated or unoccupied buildings, undeveloped lands, minor roads such as town or county roads; is unlikely to result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; and/or is otherwise unlikely to pose the threat of personal injury, substantial economic loss, or substantial environmental damage.
B	Intermediate Hazard	A dam failure is unlikely to result in damage to anything more than isolated or unoccupied buildings, undeveloped lands, minor roads such as town or county roads; is unlikely to result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; and/or is otherwise unlikely to pose the threat of personal injury, substantial economic loss, or substantial environmental damage.
C	High Hazard	A dam failure may result in widespread or serious damage to home(s); damage to main highways, industrial or commercial buildings, railroads, and/or important utilities, including water supply, sewage treatment, fuel, power, cable, or telephone infrastructure; or substantial environmental damage; such that the loss of human life or widespread substantial economic loss is likely.
D	Negligible or No Hazard	A dam that has been breached or removed, or has failed or otherwise no longer materially impounds waters, or a dam that was planned but never constructed. Class "D" dams are considered to be defunct dams posing negligible or no hazard. The department may retain pertinent records regarding such dams.
0	Hazard Code has not been assigned	NA

Source: NYS DEC 2020

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.6-4. New York State Inventory of Dams in Erie County



Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Levee Failure

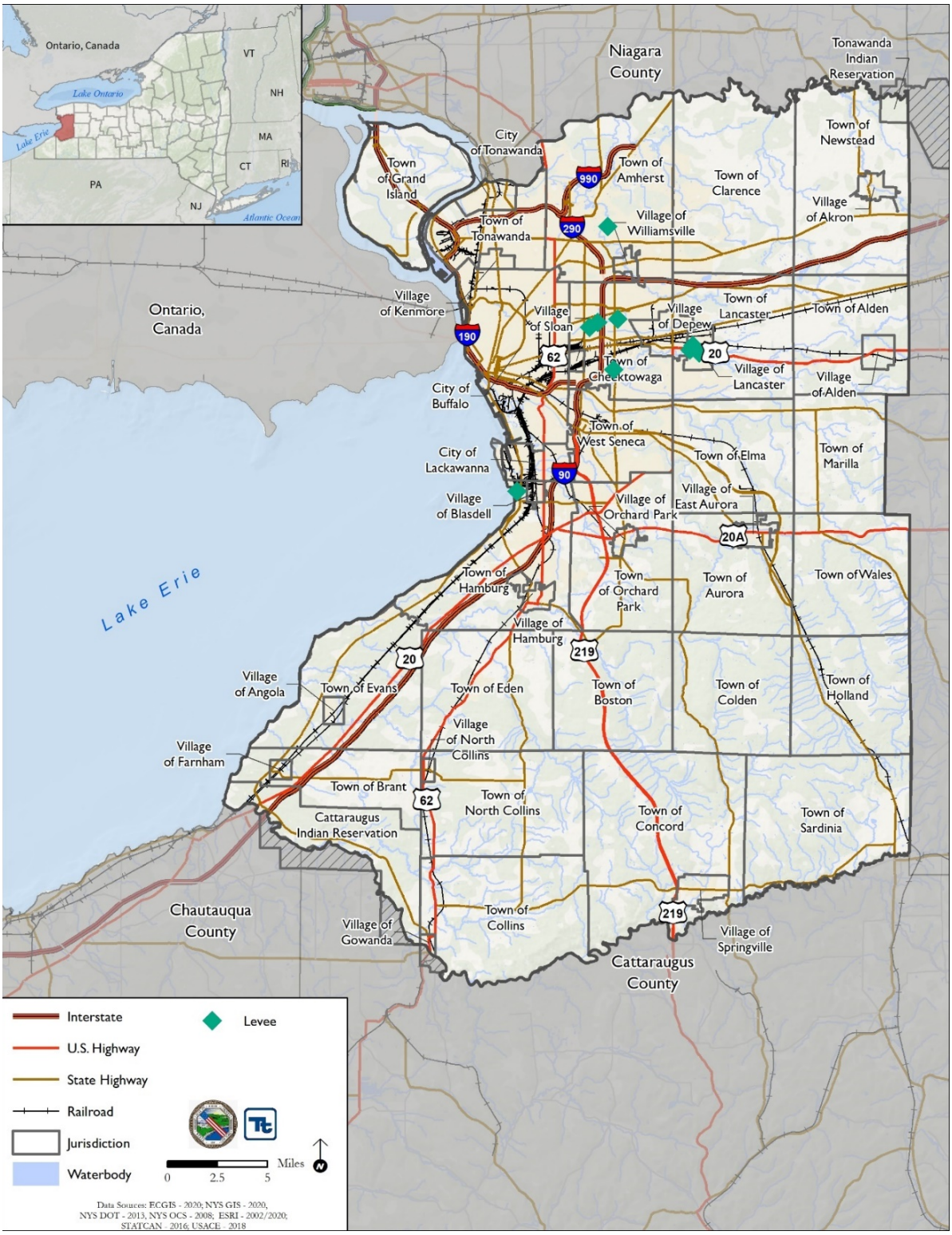
Nine accredited levee systems are present within Erie County. These were constructed by USACE and area operated and maintained by the New York State Department of Environmental Conservation. The locations of these levee systems are displayed in Figure 5.4.6-5.

- The Blasdell Creek Left Bank levee system protects a population of 192 people, 82 structures, and an estimated property value of $30,310,075.74.
- The Cayuga Creek-Cheektowaga levee system is located on the right bank of Cayuga Creek in the Town of Cheektowaga, NY. It extends from the Union Road Bridge to 1,600 feet upstream of the bridge. The total levee length is 0.28 miles, with an average height of 6 feet and a protected Leveed Area of 35.2 acres. The levee system, including channel, has prevented greater than an estimated $7,153,000 of flood damages since completion.
- The Cayuga Creek-Lancaster-Left Bank levee system is located on the left bank of Cayuga Creek in the Village of Lancaster, NY. It extends from Lake Ave. to Penora St. in the Village of Depew, NY. The levee system total length is 1 mile, average height is 8 feet, and the leveed area is 64 acres. A flood in the area behind the levee could impact approximately 447 people and 207 commercial and residential structures and could cause an estimated $ $75,987,510.00 in flood-related damage (USACE, 2020).
- Cayuga Creek - Lancaster - Right Bank - Legion Field. The levee system is located on the right bank (looking downstream) of Cayuga Creek in the Village of Lancaster, NY. It extends from Park Blvd. to the Broadway bridge in the Village of Lancaster. The levee system is 0.37 miles long, with an average height of 8 feet and a leveed area of 23.7 acres. A flood in the area behind the level could impact approximately 184 people, 88 commercial and residential structures, and could cause an estimated $ $25,310,670.00 in flood-related damage (USACE, 2020).
- Cayuga Creek - Lancaster - Right Bank - St. Mary's. The levee system is located on the right bank (looking downstream) of Cayuga Creek in the Village of Lancaster, NY. It extends from St. Mary's St. at the water tower to St. Mary's St. west of the cemetery. The levee system is 0.42 miles long, with an average height of 6 feet and a leveed area of 30 acres. A flood in the area behind the level could impact approximately 56 people, 24 commercial and residential structures, and could cause an estimated $6,689,480.00 in flood-related damage (USACE, 2020).
- Ellicott Creek-Amherst levee system. The levee system is located on the right bank (looking downstream) of Ellicott Creek in the Town of Amherst, NY. It extends from the Hidden Creek Ct. residential community to the Maple Rd. bridge. The levee system is 0.21 miles in length, with an average of 3 feet height and a leveed area of 11.5 acres. A flood in the area behind the level could impact approximately 55 people, 14 commercial and residential structures, and could cause an estimated $4,579,550.00 in flood-related damage (USACE, 2020).
- Scajaquada Creek - Cheektowaga - Main Stem. The levee system is located on the left bank of Scajaquada Creek in the Town of Cheektowaga, NY. It extends from downstream of Central Blvd. to upstream of Harlem Rd. The levee system is 0.44 miles long, with an average height of 3.5 feet and a leveed area of 70.4 acres. A flood in the area behind the level could impact approximately 427 people, 202 commercial and residential structures, and could cause an estimated $58,203,900.00 in flood-related damage (USACE, 2020).
- Scajaquada Creek - Cheektowaga - Tributary T-3. The levee system is located on the right bank (looking downstream) of Tributary T-3 in the Town of Cheektowaga, NY. It is extending from the downstream limit of Tributary T-2A to George Urban Blvd. The levee system total length is 0.36 miles, with an average height of 3.5 feet and a leveed area of 26.9 acres. A flood in the area behind the level could impact approximately 380 people, 132 commercial and residential structures, and could cause an estimated $12,940,760.00 in flood-related damage (USACE, 2020).
- Scajaquada Creek - Cheektowaga - Tributary T-3B. The levee system is located on the right bank of Tributary T-3B in the Town of Cheektowaga, NY. It extends between Dick Rd. and Union Rd. The levee system is 0.18 miles long, with an average height of 2.5 feet and a leveed area of 22.4 acres. A flood in the area behind the level could impact approximately 122 people, 52 commercial and

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

residential structures, and could cause an estimated $13,348,750.00 in flood-related damage (USACE, 2020).

Figure 5.4.6-5. Location of Levee Systems in Erie County



Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The United States Geological Survey (USGS) National Water Information System (NWIS) collects surface water data from more than 850,000 stations across the country. The time-series data describe stream levels, streamflow (discharge), reservoir and lake levels, surface water quality, and rainfall. The data are collected by automatic recorders and manual field measurements at the gage locations. USGS collects data in Erie County via 10 stream gages, as indicated in Table 5.4.6-4 and Figure 5.4.6-6.

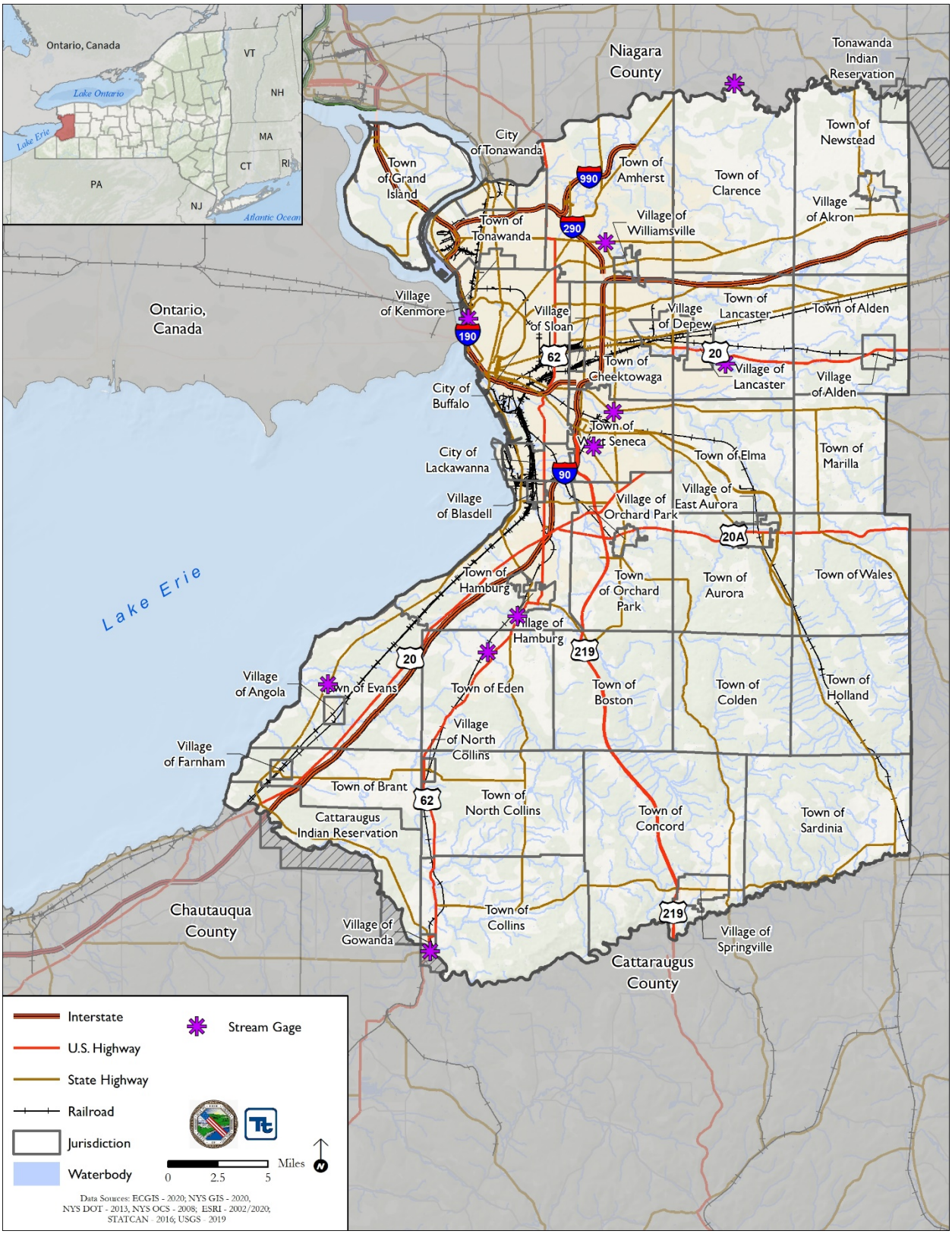
Table 5.4.6-4. USGS Gages Located in Erie County

Site Number	Site Name	Category	Agency	Longitude	Latitude
4213500	Cattaraugus Creek at Gowanda NY	ST	USGS	-78.9342	42.46333
4214060	Big Sister Creek at Evans Center NY	ST	USGS	-79.0356	42.65667
421422210	Eighteenmile Creek at Hamburg NY	ST	USGS	-78.8493	42.70656
4214231	S Br Eighteenmile Cr at Bley Rd At Eden Valley	ST	USGS	-78.8787	42.68028
4214500	Buffalo Creek at Gardenville NY	ST	USGS	-78.755	42.85472
4215000	Cayuga Creek Near Lancaster NY	ST	USGS	-78.645	42.89
4215500	Cazenovia Creek at Ebenezer NY	ST	USGS	-78.775	42.82972
4218000	Tonawanda Creek at Rapids NY	ST	USGS	-78.6361	43.09306
4218518	Ellicott Creek below Williamsville NY	ST	USGS	-78.7636	42.97778
425520078535601	Manhole, Delevan St, 110 Ft West of Niagara St	FA	USGS	-78.8988	42.92228

Source: USGS 2021

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.6-6. USGS Gage Locations in Erie County



Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Water Level Data

A hydrograph shows how a water level changes over time at a specific location to enable a review of historic water levels which are useful in floodplain management planning. In Erie County, of the ten deployed USGS stream gages, five are continuously monitored and have associated hydrographs. These forecast hydrographs are useful to reference when flooding is expected or to determine the observed water level for the past few days:

- Action Stage - the stage which, when reached by a rising stream, lake, or reservoir, represents the level where the NWS or a partner/user needs to take some type of mitigation action in preparation for possible significant hydrologic activity.
- Minor Flooding - minimal or no property damage, but possibly some public threat.
- Moderate Flooding - some inundation of structures and roads near stream. Some evacuations of people and/or transfer of property to higher elevations.
- Major Flooding - extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations.
- Record Flooding - flooding which equals or exceeds the highest stage or discharge at a given site during the period of record keeping.
- Stage - level of the water surface in a river measured with reference to some datum.
- Flow - volume of water passing a given point per unit of time.
- kcfs - measurement of water flow equivalent to 1000 cubic feet of water passing a given point for an entire second (NWS 2020) *(https://water.weather.gov/ahps2/pdf/hydrograph_terminology.pdf)*.

Previous Occurrences and Losses

Table 5.4.6-5 documents historical flood events from 1950 to August 2020 in Erie County based on data collected from NOAA's National Centers for Environmental Information (NCEI), National Performance of Dams Program (NPDP), and CRREL databases.

Table 5.4.6-5. Flood Events 1954-2020

Hazard Type	Number of Occurrences Between 1950 and 2020	Total Fatalities	Total Injuries	Total Property Damage ($)	Total Crop Damage ($)
Flash Flood	54	0	0	$21 M	$500,000
Flood	40	0	0	$3.2 M	$0
Total	**90**	**0**	**0**	**$24.2 M**	**$500,000**

Source: NOAA-NCEI 2021; CRREL 2018

FEMA Disaster Declarations

According to the New York State HMP, between 1954 and 2020, FEMA included New York State in 51 flood-related major disaster (DR) or emergency (EM) declarations (NYS DHSES 2020). Generally, these disasters cover a wide region of the state; therefore, they may have impacted many counties. Erie County was included in seven of these flood-related declarations (Table 5.4.6-6).

Table 5.4.6-6. FEMA DR and EM Declarations for Flood Events in Erie County, 1954 to 2020

FEMA Declaration Number	Date(s) Of Event	Event Type	Details
494	March 19, 1976	Severe Ice Storm	Ice Storm, Severe Storms & Flooding
1233	June 25, 1998 - July 10, 1998	Severe Storm(s)	Severe Storms and Flooding
1335	May 3, 2000 - August 12, 2000	Severe Storm(s)	Severe Storms and Flooding

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

FEMA Declaration Number	Date(s) Of Event	Event Type	Details
1534	May 13, 2004 - June 17, 2004	Severe Storm(s)	Severe Storms and Flooding
1665	October 12, 2006 - October 25, 2006	Severe Storm(s)	Severe Storms and Flooding
1857	August 8, 2009 - August 10, 2009	Severe Storm(s)	Severe Storms and Flooding
4472	October 31, 2019 - November 1, 2019	Severe Storm(s)	Severe Storms, Straight-Line Winds, and Flooding

Source: FEMA 2020

U.S. Department of Agriculture Agricultural Disaster Declarations

The Secretary of Agriculture from the U.S. Department of Agriculture (USDA) is authorized to designate counties as disaster areas to make emergency loans available to producers suffering losses in those counties and in counties that are contiguous to a designated county. Erie County has experienced the following 10 USDA-designated agricultural disasters since 2013 that included or may have included losses due to flooding:

- S3593 - 2013 Excessive Rain and Related Flooding, High Winds, and Hail
- S3747 - 2014 Excessive Rain, Flash Flooding, Flooding, High Winds, and Hail
- S3777 - 2014 Excessive Snow, Flooding, Freeze, and High Wind
- S3885 - 2015 Excessive Rain, High Winds, Hail, Lightning, and Tornado
- S4274 - 2017 Excessive Rain and Related Flooding
- S4265 - 2017 Excessive Rain and Related Flooding, High Winds, and Hail
- S4479 - 2018 Excessive Rain

The USDA crop loss data provide another indicator of the severity of previous events. Additionally, crop losses can have a significant impact on the economy by reducing produce sales and purchases. Such impacts may have long-term consequences, particularly if crop yields are low the following years as well. USDA records indicate that Erie County has experienced crop losses from flood events. Table 5.4.6-7 provides details regarding crop losses in Erie County according to USDA records.

Table 5.4.6-7. USDA Crop Losses from Excess Moisture/Precipitation/Rain and/or Flooding in Erie County (2014-2019)

Year	Crop Type	Cause of Loss	Losses
2014	Wheat, corn, oats, beans, soybeans, all cover crops	Excess Moisture/Precipitation/Rain	$2 million
2015	Wheat, corn, oats, beans, soybeans	Excess Moisture/Precipitation/Rain	$1.6 million
2016	Wheat, corn, oats, beans, soybeans, oats	Excess Moisture/Precipitation/Rain	$1.2 million
2017	Wheat, corn, oats, beans, soybeans, grapes	Excess Moisture/Precipitation/Rain	$1.6 million
2018	Wheat, corn, oats, beans, soybeans	Excess Moisture/Precipitation/Rain	$1.1 million
2019	Wheat, corn, oats, beans, soybeans, oats	Excess Moisture/Precipitation/Rain	$2.1 million

Source: USDA 2021

Previous Events

For this update, flood events were summarized from 2013 to 2020. Known flood events that have impacted Erie County between 2015 and 2020, including FEMA disaster declarations, are identified in Table 5.4.6-8. Section 9 includes detailed information regarding flood impacts to each municipality.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-8. Flood Events in Erie County, 2015 to 2020

Dates of Event	Event Type	FEMA Declaration Number (if applicable)	County Designated?	Event Details
3/14/2015 & 3/15/2015	Flash Flood	-	-	Near record winter snowpack and ice on area creeks underwent a slow melt during the first half of the month. A rapid warm-up followed and resulted in ice jams on Cazenovia and Buffalo Creeks. Damages estimated at $20,000.
8/11/2015	Flash Flood	-	-	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms mod across southern Erie county and rapidly intensified. Instantaneous rainfall rates of 4 to 6 inches per hour were observed on radar. Damages from the event are estimated at $100,000.
8/15/2015	Flash Flood	-	-	Thunderstorms developed and tracked along a stalled frontal boundary across Niagara and northern Erie counties. The slow-moving thunderstorms produced intense rainfall with reports of 5 to 8 inches in just a couple of hours. Damages from the event are estimated at $105,000.
4/20/2017	Flood	-	-	Several rounds of thunderstorms brought 1 to 3 inches of rain to the area in just a couple of hours. This resulted in ponding of water on area roadways. Several roads were closed by flood waters. Several basements were reported flooded in Alden. Damages from the event are estimated at $80,000.
4/21/2017	Flood	-	-	Several rounds of thunderstorms brought 1 to 3 inches of rain to the area in just a couple of hours. This resulted in ponding of water on area roadways. Several roads were closed by flood waters. Damages from the event are estimated at $10,000.
5/1/2017	Flood	-	-	A strong cold front moved across the region during the afternoon and evening hours. A line of thunderstorms just ahead of the front produced damaging winds that downed trees and wires across western New York through the Finger Lakes Region as well as areas east of Lake Ontario. A few falling trees caused minor structural damage. Damages from the event are estimated at $10,000.
7/13/2017	Flash Flood	-	-	A convective complex moved across Western New York late in the morning. This produced a quick 2 to 4 inches of rain which covered a significant portion of the region and resulted in flash flooding that impacted the Buffalo metro area, the Boston/Wyoming hills, and parts of the northern Finger Lakes Region. Flood Stage is 8 feet. It was the fifth highest crest on record and the highest warm season crest. Rises were quick on

Dates of Event	Event Type	FEMA Declaration Number (if applicable)	County Designated?	Event Details
				the creeks due to the brief period the rain fell. Damages from the event are estimated at $15,000.
11/5/2017	Flood	-	-	After a warm front brought soaking rains to the region, a cold front brought additional rain. The heavy precipitation fell on already saturated ground resulting in both area and river flooding. crested at 6.32 feet at 6:00 PM on the 7th (Flood Stage is 6 feet). Damages from the event are estimated at $30,000.
10/6/2018	Flash Flood	-	-	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario, then snaking south ahead of the higher terrain east of Syracuse. Damages from the event are estimated at $20,000.
2/4/2019	Flood	-	-	Rapid temperature warmups occurred across the area coming out of below zero cold that ended January. Record high temperatures occurred on February 4, resulting in almost total snow melt off and ice break up on local rivers. Ice jam flooding occurred on the Cazenovia Creek and Big Sister Creeks in Erie County. Damages from the event are estimated at $13,000.
2/24/2019	Flash Flood	-	-	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region. Damages from the event are estimated at $5,000.
8/21/2019	Flash Flood	-	-	Well ahead of an approaching cold front and more tied to convective enhanced shortwave, strong thunderstorms developed in clusters early morning. Warm rain processes dominated with precipitable water values closing in on 1.8 inches. Congealing storms dropped very heavy rain over north Buffalo to the Tonawandas. Damages from the event are estimated at $15,000.
10/31/2019	Lakeshore Flood/High Wind	EM 4472	-	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31. Heavy rain also brought flooding concerns. All three climate stations broke their daily October 31 records with 1 to 3 inches of rain falling. High winds and lakeshore flooding continued into November 1.
6/2/2020	Flash Flood	-	-	A low-level boundary pushed southeast ahead of a mesoscale convective system late in the afternoon. This boundary followed

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Dates of Event	Event Type	FEMA Declaration Number (if applicable)	County Designated?	Event Details
				the passage of a warm front with effective shear values jumping to 50-60 knots as the low-level boundary made its way across southern Ontario and into western New York. The evening Buffalo sounding strongly suggested that any convection would be elevated. There were no reported damages from this event.
7/11/2020	Flood	-	-	A sharp shortwave trough embedded within a broad upper level trough over the northeastern U.S. supported a wave of convection that moved across the entire area. There were no reported damages from this event. There were no reported damages from this event. There were no reported damages from this event.
7/16/2020	Flood	-	-	A mesoscale convective vortex pulled a pair of fronts across the area during the afternoon and evening near the time of peak heating. There were no reported damages from this event.
8/15/2020	Flash Flood	-	-	A diffuse and weak mid-level trough drifted across the eastern Great Lakes during the afternoon and evening, with a weak inverted trough at the surface extending from the Middle Atlantic states into western New York. Daytime heating resulted in moderate instability, although mid-level lapse rates were poor. Very weak flow through the low and mid-levels provided little to no shear. Damages from the event are estimated at $142,000.

Source: *FEMA 2021; NOAA-NCEI 2021; NYS HMP 2019*
Note: *Many sources were consulted to provide an update of previous occurrences and losses; event details and loss/impact information may vary and has been summarized in the above table.*
FEMA *Federal Emergency Management Agency*
N/A *Not Applicable*
K *Thousand*
M *Million*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Climate Change Projections

Climate change is beginning to affect both people and resources of Erie County, and the impacts of climate change will continue. Impacts related to increasing temperatures are already being felt in the county. ClimAID: the Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision-makers with information on the state's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge (New York Each region in New York State, as defined by ClimAID, contains attributes that will be affected by climate change. Erie County is part of Region 1, Western New York, Great Lakes Plain. In Region 1, it is estimated that temperatures will increase by 3.0 ºF to 5.5 ºF by the 2050s and 4.5 ºF to 8.5 ºF by the 2080s (baseline of 48.0 ºF, mid-range projection). Precipitation totals will increase between 0 and 10% by the 2050s and 0 to 15% by the 2080s (baseline of 37.0 inches, mid-range projection). Table 5.4.6-9 displays the projected seasonal precipitation change for ClimAID Region 1 (NYSERDA 2014).

Table 5.4.6-9. Projected Seasonal Precipitation Change in Region 1, 2050s (% change)

Winter	Spring	Summer	Fall
+5 to +15	0 to +10	-5 to +10	-5 to +10

Source: NYSERDA 2014

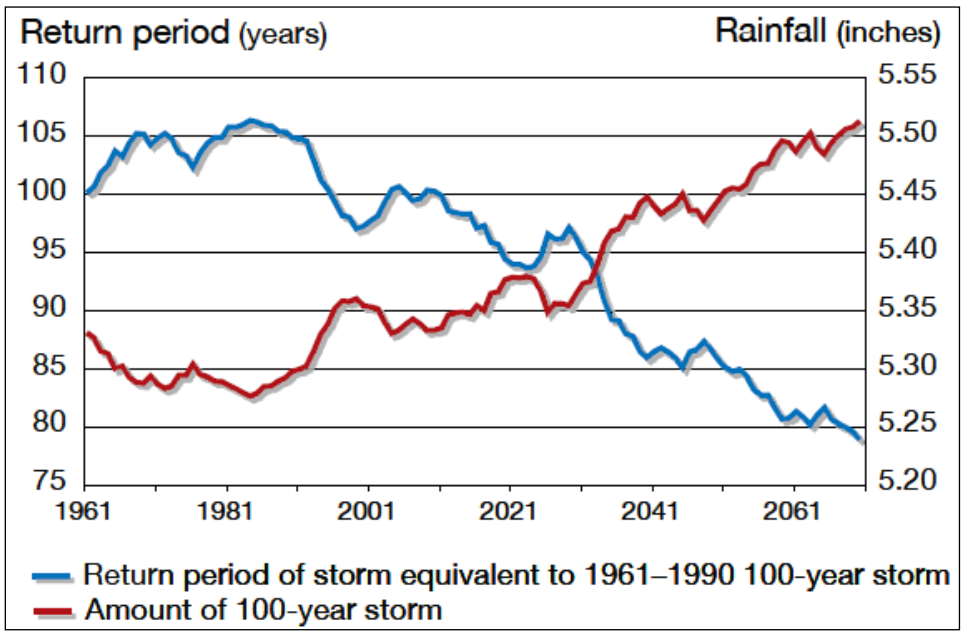
By the end of the century, the greatest increases in precipitation are projected to be in the northern parts of the state. Although seasonal projections are less certain than annual results, much of this additional precipitation is projected to occur during the winter months. During the late summer and early fall, in contrast, total precipitation is slightly reduced in many climate models. The projected increase in precipitation is expected to fall in heavy downpours and less in light rains. The increase in heavy downpours has the potential to affect drinking water; heighten the risk of riverine flooding; flood key rail lines, roadways, and transportation hubs; and increase delays and hazards related to extreme weather events (NYSERDA 2018).

Average annual temperatures are projected to increase across New York State by 2.0–3.4 ˚F by the 2020s, 4.1–6.8 ˚F by the 2050s, and 5.3–10.1 ˚F by the 2080s. By the end of the century, the greatest warming is projected to be in the northern parts of the state. The state's growing season could lengthen by about a month, with summers becoming more intense and winters milder (NYSERDA 2018).

Increasing air temperatures intensify the water cycle by increasing evaporation and precipitation. This can cause an increase in rain totals during events with longer dry periods in between those events. These changes can have a variety of effects on the state's water resources (NYSERDA 2011). Figure 5.4.6-7 displays the project rainfall and frequency of extreme storms in New York State. The amount of rainfall in a 100-year event is projected to increase, while the number of years between such storms (return period) is projected to decrease. Rainstorms will become more severe and more frequent (NYSERDA 2011).

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.6-7. Projected Rainfall and Frequency of Extreme Storms



Source: NYSERDA 2011

Dams are designed partly based on assumptions about a river's flow behavior, expressed as hydrographs. Changes in weather patterns can significantly affect the hydrograph used for the design of a dam. If the hygrograph changes, the dam conceivably could lose some or all of its designed margin of safety, also known as freeboard. Loss of designed margin of safety increases the possibility that floodwaters would overtop the dam or create unintended loads, which could lead to a dam failure.

Probability of Future Occurrences

Based on the historic and more recent flood events in Erie County, the county has a high probability of flooding for the future. The fact that the elements required for flooding exist and that major flooding has occurred throughout the county in the past suggests that many people and properties are at risk from the flood hazard in the future. It is estimated that Erie County will continue to experience direct and indirect impacts of flooding events annually that may induce secondary hazards such as infrastructure deterioration or failure, utility failures, power outages, water quality and supply concerns, and transportation delays, accidents, and inconveniences.

As defined by FEMA, geographic areas within the 1 percent annual chance flood area in Erie County are estimated to have a 1 percent chance of flooding in any given year. A structure located within a 1 percent annual chance flood area has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage. Geographic areas in Erie County located within the 0.2 percent annual chance flood area boundary are estimated to have a 0.2 percent chance of being flooded in any given year (FEMA 2007).

According to the NOAA-NCEI and the CRREL database, Erie County experienced 94 flood events between 1950 and 2020, including 40 floods and 54 flash floods. Table 5.4.6-10 shows these statistics, as well as the annual average number of events and the percent chance of these individual flood hazards occurring in Erie County in future years based on the historic record (NOAA-NCEI 2020).

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.6-10. Probability of Future Occurrence of Flooding Events

Hazard Type	Number of Occurrences Between 1950 and 2020	Percent (%) chance of occurrence in any given year
Flash Flood	54	76.06
Flood	40	56.34
Lakeshore Flood	10	14.08
Total	**104**	**100.0**

Source: NOAA-National Climatic Data Center (NCDC) 2021; CRREL 2018; NPDP 2018

Climate change is expected to increase the severity and frequency of heavy rain events in Erie County. This is likely to lead to an increase in flooding events and dam and levee failure events.

In Section 5.3, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Committee, the probability of occurrence for flood in the county is considered *occasional*, having between 10 and 100 percent annual probability of the hazard occurring, as presented in Table 5.3-1 in Section 5.3, Hazard Ranking.

5.4.6.2 Vulnerability Assessment

To assess Erie County's risk to the flood hazard, a spatial analysis was conducted using the FEMA Risk Map effective and preliminary products dated June 2019 and February 2019, respectively. The 1 and 0.2 percent annual chance flood events were examined to determine the assets located in the hazard areas and to estimate potential loss using the FEMA Hazus riverine flood model. These results are summarized below.

Impact on Life, Health, and Safety

The impact of flooding on life, health, and safety is dependent upon several factors, including the severity of the event and whether or not adequate warning time is provided to residents. Exposure represents the population living in or near floodplain areas that could be impacted should a flood event occur. Additionally, exposure should not be limited to only those who reside in a defined hazard zone, but everyone who may be affected by the effects of a hazard event (e.g., people are at risk while traveling in flooded areas, or their access to emergency services is compromised during an event). The degree of that impact will vary and is not strictly measurable.

To estimate population exposure to the 1 percent and 0.2 percent annual chance flood events, the DFIRM flood boundaries were used. Based on the spatial analysis, there are an estimated 9,633 residents living in the A Zones of the 1 percent annual chance floodplain or 1.1 percent of the County's total population. There are an estimated 14 residents living in the V Zones of the 1 percent annual chance floodplain, which is less than 0.1 percent of the County's total population. There are an estimated 48,397 residents living in the 0.2 percent annual chance floodplain, or 5.3 percent of the County's total population. The Town of Amherst has the greatest number of residents living in the floodplain, with approximately 2,818 residents living in the Special Flood Hazard Area (SFHA) and 24,611 people living in the 0.2 percent annual chance floodplain. Table 5.4.6-11. summarizes the population exposed to the flood hazard by jurisdiction.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.6-11. Estimated Population Exposed to the 1 Percent and 0.2 Percent Annual Chance Flood Event Hazard Area

Jurisdiction	American Community Survey (2014-2019) Population	Estimated Population Exposed to the Flood Hazard Areas					
		1 percent Annual Chance Flood (A Zones)	Percent of Total	1 percent Annual Chance Flood (V Zones)	Percent of Total	0.2 percent Annual Chance Flood	Percent of Total
Akron (V)	2,871	18	0.6%	0	0.0%	38	1.3%
Alden (T)	7,418	17	0.2%	0	0.0%	29	0.4%
Alden (V)	2,577	0	0.0%	0	0.0%	0	0.0%
Amherst (T)	120,276	2,818	2.3%	0	0.0%	24,611	20.5%
Angola (V)	2,373	3	0.1%	0	0.0%	3	0.1%
Aurora (T)	7,599	29	0.4%	0	0.0%	82	1.1%
Blasdell (V)	2,645	0	0.0%	0	0.0%	0	0.0%
Boston (T)	8,042	2	<0.1%	0	0.0%	4	0.1%
Brant (T)	1,541	0	0.0%	0	0.0%	0	0.0%
Buffalo (C)	256,480	828	0.3%	0	0.0%	3,956	1.5%
Cheektowaga (T)	73,129	110	0.2%	0	0.0%	5,033	6.9%
Clarence (T)	32,440	1,288	4.0%	0	0.0%	2,574	7.9%
Colden (T)	3,328	17	0.5%	0	0.0%	22	0.7%
Collins (T)	5,418	33	0.6%	0	0.0%	39	0.7%
Concord (T)	4,186	23	0.6%	0	0.0%	23	0.6%
Depew (V)	15,102	43	0.3%	0	0.0%	193	1.3%
East Aurora (V)	6,184	87	1.4%	0	0.0%	1,002	16.2%
Eden (T)	7,631	2	<0.1%	0	0.0%	2	0.0%
Elma (T)	11,732	46	0.4%	0	0.0%	114	1.0%
Evans (T)	13,782	509	3.7%	11	0.1%	616	4.5%
Farnham (V)	459	0	0.0%	0	0.0%	0	0.0%
Gowanda (V)	1,043	21	2.0%	0	0.0%	30	2.9%
Grand Island (T)	21,047	247	1.2%	0	0.0%	255	1.2%
Hamburg (T)	45,985	373	0.8%	3	<0.1%	495	1.1%
Hamburg (V)	9,636	0	0.0%	0	0.0%	0	0.0%
Holland (T)	3,355	25	0.7%	0	0.0%	29	0.9%
Kenmore (V)	15,132	0	0.0%	0	0.0%	0	0.0%
Lackawanna (C)	17,831	1,795	10.1%	0	0.0%	4,471	25.1%
Lancaster (T)	27,625	375	1.4%	0	0.0%	578	2.1%
Lancaster (V)	10,144	53	0.5%	0	0.0%	88	0.9%
Marilla (T)	5,378	134	2.5%	0	0.0%	158	2.9%
Newstead (T)	5,804	93	1.6%	0	0.0%	169	2.9%
North Collins (T)	2,130	0	0.0%	0	0.0%	0	0.0%
North Collins (V)	1,370	0	0.0%	0	0.0%	0	0.0%
Orchard Park (T)	26,361	32	0.1%	0	0.0%	84	0.3%
Orchard Park (V)	3,148	15	0.5%	0	0.0%	32	1.0%
Sardinia (T)	2,780	12	0.4%	0	0.0%	12	0.4%
Sloan (V)	3,562	0	0.0%	0	0.0%	0	0.0%
Springville (V)	4,298	11	0.3%	0	0.0%	21	0.5%
Tonawanda (C)	14,830	20	0.1%	0	0.0%	798	5.4%
Tonawanda (T)	57,027	28	<0.1%	0	0.0%	1,570	2.8%
Wales (T)	3,020	16	0.5%	0	0.0%	23	0.7%
West Seneca (T)	45,344	325	0.7%	0	0.0%	943	2.1%
Williamsville (V)	5,233	186	3.6%	0	0.0%	301	5.7%
Erie County Total	**917,296**	**9,633**	**1.1%**	**14**	**<0.1%**	**48,397**	**5.3%**

Source: FEMA 2019; American Community Survey 2019; Erie County GIS 2020
% = Percent; C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Research has shown that some populations, while they may not have more hazard exposure, may experience exacerbated impacts and prolonged recovery if/when impacted. This is due to many factors, including their physical and financial ability to react or respond during a hazard. Of the population exposed, the most vulnerable include the economically disadvantaged and the population over age 65. Economically disadvantaged populations may be more vulnerable because they are likely to evaluate their risk and make decisions to evacuate based on net economic impacts on their families. The population over age 65 is also more vulnerable because they are more likely to seek or need medical attention that may not be available due to isolation during a flood event, and they may have more difficulty evacuating. Within Erie County, there are approximately 161,744 people over the age of 65 and 126,806 people below the poverty level (American Community Survey 2019).

The Centers for Disease Control and Prevention (CDC) 2016 Social Vulnerability Index (SVI) ranks U.S. Census tracts on socioeconomic status, household composition and disability, minority status and language, and housing and transportation. Erie County's overall score is 0.3986, indicating that its communities have low to moderate social vulnerability (CDC 2016). This score indicates that some county residents may not have enough resources to respond to flood events.

Using 2010 U.S. Census data, Hazus estimates the potential sheltering needs as a result of a 1 percent annual chance flood event. For the 1 percent flood event, Hazus estimates 21,383 households will be displaced, and 985 people will seek short-term sheltering. These statistics, by jurisdiction and by flood zone, are presented in Table 5.4.6-12.

Table 5.4.6-12. Estimated Population Displaced or Seeking Short-Term Shelter from the 1 Percent Annual Chance Flood Event Hazard Area

Jurisdiction	American Community Survey (2015-2019) Population	1 Percent Annual Chance Flood Event (V Zones)		1 Percent Annual Chance Flood Event (A Zones)		1 percent Annual Chance Flood Event (All A and V Zones)	
		Displaced Population	Persons Seeking Short-Term Sheltering	Displaced Population	Persons Seeking Short-Term Sheltering	Displaced Population	Persons Seeking Short-Term Sheltering
Akron (V)	2,871	0	0	63	0	63	0
Alden (T)	7,418	0	0	353	9	353	9
Alden (V)	2,577	0	0	18	0	18	0
Amherst (T)	120,276	0	0	6,604	419	6,604	419
Angola (V)	2,373	0	0	11	0	11	0
Aurora (T)	7,599	0	0	110	2	110	2
Blasdell (V)	2,645	0	0	1	0	1	0
Boston (T)	8,042	0	0	104	1	104	1
Brant (T)	1,541	8	0	2	0	10	0
Buffalo (C)	256,480	18	1	1,151	90	1,169	91
Cheektowaga (T)	73,129	0	0	1,312	88	1,312	88
Clarence (T)	32,440	0	0	2,019	76	2,019	76
Colden (T)	3,328	0	0	74	1	74	1
Collins (T)	5,418	0	0	76	1	76	1
Concord (T)	4,186	0	0	36	0	36	0
Depew (V)	15,102	0	0	416	9	416	9
East Aurora (V)	6,184	0	0	325	10	325	10
Eden (T)	7,631	0	0	21	0	21	0
Elma (T)	11,732	0	0	323	3	323	3
Evans (T)	13,782	92	1	728	15	820	16
Farnham (V)	459	0	0	0	0	0	0
Gowanda (V)	1,043	0	0	51	0	51	0
Grand Island (T)	21,047	0	0	343	5	343	5
Hamburg (T)	45,985	64	0	905	21	969	21

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	American Community Survey (2015-2019) Population	1 Percent Annual Chance Flood Event (V Zones)		1 Percent Annual Chance Flood Event (A Zones)		1 percent Annual Chance Flood Event (All A and V Zones)	
		Displaced Population	Persons Seeking Short-Term Sheltering	Displaced Population	Persons Seeking Short-Term Sheltering	Displaced Population	Persons Seeking Short-Term Sheltering
Hamburg (V)	9,636	0	0	69	1	69	1
Holland (T)	3,355	0	0	81	0	81	0
Kenmore (V)	15,132	0	0	0	0	0	0
Lackawanna (C)	17,831	0	0	1,899	102	1,899	102
Lancaster (T)	27,625	0	0	981	25	981	25
Lancaster (V)	10,144	0	0	353	13	353	13
Marilla (T)	5,378	0	0	122	4	122	4
Newstead (T)	5,804	0	0	265	3	265	3
North Collins (T)	2,130	0	0	0	0	0	0
North Collins (V)	1,370	0	0	0	0	0	0
Orchard Park (T)	26,361	0	0	229	2	229	2
Orchard Park (V)	3,148	0	0	57	1	57	1
Sardinia (T)	2,780	0	0	44	0	44	0
Sloan (V)	3,562	0	0	0	0	0	0
Springville (V)	4,298	0	0	63	0	63	0
Tonawanda (C)	14,830	0	0	47	0	47	0
Tonawanda (T)	57,027	0	0	159	7	159	7
Wales (T)	3,020	0	0	120	1	120	1
West Seneca (T)	45,344	0	0	1,322	57	1,322	57
Williamsville (V)	5,233	0	0	334	17	334	17
Erie County Total	**917,296**	**182**	**2**	**21,191**	**983**	**21,373**	**985**

Source: Hazus v4.2; FEMA 2019
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

The total number of injuries and casualties resulting from flooding is generally limited based on advance weather forecasting, blockades, and warnings. More likely, persons could become displaced from their homes or may seek shelter due to the impacts of a flood event. Therefore, injuries and deaths generally are not anticipated if proper warning and precautions are in place. Ongoing mitigation efforts should help to avoid the most likely cause of injury, which results from persons trying to cross flooded roadways or channels during a flood. Dam failure can cause, in the most extreme case, loss of life and extensive property damage, or in the least extreme case, no loss of life or significant property damage. Dam failure can cause persons to become displaced if flooding of structures occurs. Dam failure may mimic flood events, depending on the size of the dam reservoir and breach. Dam failure inundation modeling estimates the potential impacts of a failure; however, this data is considered sensitive information and is not displayed or discussed further in the HMP.

Cascading impacts of flooding and dam failure inundation may also include exposure to pathogens such as mold. After flood events, excess moisture and standing water contribute to the growth of mold in buildings. Mold may present a health risk to building occupants, especially those with already compromised immune systems such as infants, children, the elderly, and pregnant women. The degree of impact will vary and is not strictly measurable. Mold spores can grow in as short a period as 24–48 hours in wet and damaged areas of buildings that have not been properly cleaned. Very small mold spores can easily be inhaled, creating the potential for allergic reactions,

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

asthma episodes, and other respiratory problems. Buildings should be properly cleaned and dried out to safely prevent mold growth (CDC 2020).

Molds and mildews are not the only public health risk associated with flooding. Floodwaters can be contaminated by pollutants such as sewage, human and animal feces, pesticides, fertilizers, oil, asbestos, and rusting building materials. Common public health risks associated with flood events also include:

- Unsafe food
- Contaminated drinking and washing water and poor sanitation
- Mosquitos and animals
- Carbon monoxide poisoning
- Secondary hazards associated with re-entering/cleaning flooded structures
- Mental stress and fatigue

Current loss estimation models such as Hazus are not equipped to measure public health impacts. The best level of mitigation for these impacts is to be aware that they can occur, educate the public on prevention, and be prepared to deal with these vulnerabilities in responding to flood events.

Impact on General Building Stock

Exposure to the flood hazard includes those buildings located in the flood zone or those that are built downstream in other flood inundation areas such as dam failure inundation areas. Potential damage is the modeled loss that could occur to the exposed inventory measured by the structural and content replacement cost value. There are an estimated 3,923 and 17,522 buildings located in the 1 percent and 0.2 percent annual chance flood event hazard area, respectively. This represents approximately 1.1 percent and 4.9 percent of the county's total general building stock inventory replacement cost value, respectively (approximately $222.5 billion). The Town of Amherst has the greatest number of its buildings located in the 1 percent annual chance floodplain (927 buildings or 2.4 percent of its total building stock). The Town of Amherst also has the greatest number of its buildings located in the 0.2 percent annual chance floodplain (7,800 buildings or 20.2 percent of its total building stock). Refer to Table 5.4.6-13. for the estimated exposure of 1 percent and 0.2 percent flood events by jurisdiction. Refer to Table 5.4.6-14 through Table 5.4.6-17. for the Hazus estimated losses by jurisdiction, for residential, commercial, and other occupancy structures, respectively.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-13. Estimated General Building Stock Exposure to the 1 percent and 0.2 percent Annual Chance Flood Event

Jurisdiction	No. of Bldgs.	Total RCV	Estimated Building Stock Exposed to 1 percent Annual Chance Flood: V Zones (VE Zones) No. of Bldgs.	V Zones (VE Zones) % of Bldgs.	V Zones (VE Zones) RCV	V Zones (VE Zones) % of RCV	A Zones (A, AE, AH, AO Zones) No. of Bldgs.	A Zones (A, AE, AH, AO Zones) % of Bldgs.	A Zones (A, AE, AH, AO Zones) RCV	A Zones (A, AE, AH, AO Zones) % of RCV	Total (All Flood Zones) No. of Bldgs.	Total (All Flood Zones) % of Bldgs.	Total (All Flood Zones) RCV	Total (All Flood Zones) % of RCV	Estimated Building Stock Exposed to 0.2 percent Annual Chance Flood Total (All Flood Zones) No. of Bldgs.	Total (All Flood Zones) % of Bldgs.	Total (All Flood Zones) RCV	Total (All Flood Zones) % of RCV
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%	11	0.9%	$4,505,225	0.5%	11	0.9%	$4,505,225	0.5%	20	1.6%	$8,825,784	1.0%
Alden (T)	3,400	$1,748,473,245	0	0.0%	$0	0.0%	8	0.2%	$2,787,385	0.2%	8	0.2%	$2,787,385	0.2%	13	0.4%	$4,767,461	0.3%
Alden (V)	1,102	$602,655,574	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Amherst (T)	38,528	$27,372,255,690	0	0.0%	$0	0.0%	927	2.4%	$605,412,946	2.2%	927	2.4%	$605,412,946	2.2%	7,800	20.2%	$5,153,025,365	18.8%
Angola (V)	874	$525,704,230	0	0.0%	$0	0.0%	1	0.1%	$312,694	0.1%	1	0.1%	$312,694	0.1%	1	0.1%	$312,694	0.1%
Aurora (T)	4,280	$2,496,885,036	0	0.0%	$0	0.0%	18	0.4%	$13,568,298	0.5%	18	0.4%	$13,568,298	0.5%	47	1.1%	$35,460,638	1.4%
Blasdell (V)	1,026	$638,571,953	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Boston (T)	4,040	$1,702,475,276	0	0.0%	$0	0.0%	1	<0.1%	$272,457	<0.1%	1	<0.1%	$272,457	<0.1%	2	<0.1%	$636,576	<0.1%
Brant (T)	1,325	$657,594,060	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Buffalo (C)	83,471	$58,603,851,634	0	0.0%	$0	0.0%	299	0.4%	$382,542,873	0.7%	299	0.4%	$382,542,873	0.7%	1,287	1.5%	$1,042,139,689	1.8%
Cheektowaga (T)	30,938	$17,530,893,277	0	0.0%	$0	0.0%	92	0.3%	$160,728,670	0.9%	92	0.3%	$160,728,670	0.9%	2,152	7.0%	$1,119,394,827	6.4%
Clarence (T)	13,660	$9,866,246,863	0	0.0%	$0	0.0%	568	4.2%	$292,942,837	3.0%	568	4.2%	$292,942,837	3.0%	1,092	8.0%	$587,033,738	5.9%
Colden (T)	2,110	$854,417,381	0	0.0%	$0	0.0%	10	0.5%	$2,867,971	0.3%	10	0.5%	$2,867,971	0.3%	13	0.6%	$3,488,550	0.4%
Collins (T)	2,521	$1,189,158,504	0	0.0%	$0	0.0%	15	0.6%	$6,141,846	0.5%	15	0.6%	$6,141,846	0.5%	17	0.7%	$6,368,497	0.5%
Concord (T)	3,245	$1,338,570,261	0	0.0%	$0	0.0%	17	0.5%	$4,658,097	0.3%	17	0.5%	$4,658,097	0.3%	18	0.6%	$5,351,555	0.4%
Depew (V)	6,532	$3,841,823,815	0	0.0%	$0	0.0%	26	0.4%	$28,327,637	0.7%	26	0.4%	$28,327,637	0.7%	93	1.4%	$62,816,464	1.6%
East Aurora (V)	2,441	$1,723,816,550	0	0.0%	$0	0.0%	41	1.7%	$26,584,702	1.5%	41	1.7%	$26,584,702	1.5%	419	17.2%	$421,069,283	24.4%
Eden (T)	4,290	$2,180,455,513	0	0.0%	$0	0.0%	2	<0.1%	$642,523	<0.1%	2	0.0%	$642,523	<0.1%	2	<0.1%	$642,523	<0.1%
Elma (T)	6,093	$3,775,039,302	0	0.0%	$0	0.0%	28	0.5%	$12,843,428	0.3%	28	0.5%	$12,843,428	0.3%	71	1.2%	$40,361,699	1.1%
Evans (T)	7,952	$3,335,060,692	7	0.1%	$1,771,642	0.1%	290	3.6%	$91,591,351	2.7%	297	3.7%	$93,362,993	2.8%	353	4.4%	$109,426,408	3.3%
Farnham (V)	189	$87,990,422	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Gowanda (V)	396	$249,516,940	0	0.0%	$0	0.0%	9	2.3%	$7,454,163	3.0%	9	2.3%	$7,454,163	3.0%	17	4.3%	$15,280,796	6.1%
Grand Island (T)	8,426	$4,674,517,058	0	0.0%	$0	0.0%	108	1.3%	$80,615,175	1.7%	108	1.3%	$80,615,175	1.7%	112	1.3%	$82,285,448	1.8%
Hamburg (T)	19,130	$11,911,210,828	1	<0.1%	$744,790	<0.1%	172	0.9%	$59,988,742	0.5%	173	0.9%	$60,733,532	0.5%	233	1.2%	$158,122,956	1.3%
Hamburg (V)	3,794	$2,005,172,252	0	0.0%	$0	0.0%	1	<0.1%	$940,589	<0.1%	1	<0.1%	$940,589	<0.1%	1	<0.1%	$940,589	<0.1%
Holland (T)	2,182	$1,151,194,342	0	0.0%	$0	0.0%	18	0.8%	$5,916,245	0.5%	18	0.8%	$5,916,245	0.5%	24	1.1%	$17,001,403	1.5%
Kenmore (V)	6,017	$2,305,529,001	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Lackawanna (C)	6,751	$4,030,622,400	0	0.0%	$0	0.0%	646	9.6%	$202,694,909	5.0%	646	9.6%	$202,694,909	5.0%	1,648	24.4%	$624,409,048	15.5%
Lancaster (T)	10,973	$6,845,493,469	0	0.0%	$0	0.0%	158	1.4%	$107,902,069	1.6%	158	1.4%	$107,902,069	1.6%	244	2.2%	$191,789,058	2.8%
Lancaster (V)	4,323	$2,217,331,122	0	0.0%	$0	0.0%	21	0.5%	$6,124,309	0.3%	21	0.5%	$6,124,309	0.3%	37	0.9%	$12,583,479	0.6%

Jurisdiction	No. of Bldgs.	Total RCV	Estimated Building Stock Exposed to 1 percent Annual Chance Flood: V Zones (VE Zones) No. of Bldgs.	V Zones (VE Zones) % of Bldgs.	V Zones (VE Zones) RCV	V Zones (VE Zones) % of RCV	A Zones (A, AE, AH, AO Zones) No. of Bldgs.	A Zones (A, AE, AH, AO Zones) % of Bldgs.	A Zones (A, AE, AH, AO Zones) RCV	A Zones (A, AE, AH, AO Zones) % of RCV	Total (All Flood Zones) No. of Bldgs.	Total (All Flood Zones) % of Bldgs.	Total (All Flood Zones) RCV	Total (All Flood Zones) % of RCV	Estimated Building Stock Exposed to 0.2 percent Annual Chance Flood Total (All Flood Zones) No. of Bldgs.	Total (All Flood Zones) % of Bldgs.	Total (All Flood Zones) RCV	Total (All Flood Zones) % of RCV
Marilla (T)	2,956	$1,099,846,031	0	0.0%	$0	0.0%	68	2.3%	$9,812,100	0.9%	68	2.3%	$9,812,100	0.9%	80	2.7%	$11,941,817	1.1%
Newstead (T)	4,202	$2,181,758,974	0	0.0%	$0	0.0%	59	1.4%	$20,825,212	1.0%	59	1.4%	$20,825,212	1.0%	113	2.7%	$43,034,770	2.0%
North Collins (T)	1,898	$889,517,676	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
North Collins (V)	551	$383,968,909	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Orchard Park (T)	10,748	$8,174,650,530	0	0.0%	$0	0.0%	13	0.1%	$5,557,556	0.1%	13	0.1%	$5,557,556	0.1%	34	0.3%	$16,241,968	0.2%
Orchard Park (V)	1,211	$867,347,745	0	0.0%	$0	0.0%	5	0.4%	$2,282,910	0.3%	5	0.4%	$2,282,910	0.3%	11	0.9%	$5,869,748	0.7%
Sardinia (T)	2,184	$1,068,523,829	0	0.0%	$0	0.0%	8	0.4%	$1,767,269	0.2%	8	0.4%	$1,767,269	0.2%	8	0.4%	$1,767,269	0.2%
Sloan (V)	1,674	$634,998,253	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Springville (V)	1,816	$1,354,905,864	0	0.0%	$0	0.0%	7	0.4%	$4,967,514	0.4%	7	0.4%	$4,967,514	0.4%	13	0.7%	$11,327,770	0.8%
Tonawanda (C)	6,452	$3,291,492,557	0	0.0%	$0	0.0%	8	0.1%	$1,348,225	<0.1%	8	0.1%	$1,348,225	<0.1%	349	5.4%	$277,911,127	8.4%
Tonawanda (T)	23,999	$14,694,684,404	0	0.0%	$0	0.0%	32	0.1%	$35,436,231	0.2%	32	0.1%	$35,436,231	0.2%	650	2.7%	$237,796,690	1.6%
Wales (T)	1,923	$833,853,270	0	0.0%	$0	0.0%	9	0.5%	$2,976,569	0.4%	9	0.5%	$2,976,569	0.4%	13	0.7%	$4,821,832	0.6%
West Seneca (T)	17,970	$9,583,482,689	0	0.0%	$0	0.0%	145	0.8%	$147,042,604	1.5%	145	0.8%	$147,042,604	1.5%	398	2.2%	$285,723,843	3.0%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%	74	3.6%	$72,522,993	6.4%	74	3.6%	$72,522,993	6.4%	137	6.7%	$119,587,703	10.6%
Erie County Total	**360,925**	**$222,515,035,436**	**8**	**<0.1%**	**$2,516,432**	**0.1%**	**3,915**	**1.1%**	**$2,412,906,323**	**1.1%**	**3,923**	**1.1%**	**$2,415,422,755**	**1.1%**	**17,522**	**4.9%**	**$10,719,559,063**	**4.8%**

Source: FEMA 2019; Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
No. = Number Bldgs. = Buildings RCV = Replacement Cost Value % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-14. Estimated General Building Stock Potential Loss to the 1 percent Annual Chance Flood Event

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (All Occupancies) Located Within the 1 Percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Akron (V)	$866,609,574	$0	0.0%	$377,446	<0.1%	$377,446	<0.1%
Alden (T)	$1,748,473,245	$0	0.0%	$37,107	<0.1%	$37,107	<0.1%
Alden (V)	$602,655,574	$0	0.0%	$0	0.0%	$0	0.0%
Amherst (T)	$27,372,255,690	$0	0.0%	$12,969,013	<0.1%	$12,969,013	<0.1%
Angola (V)	$525,704,230	$0	0.0%	$35,653	<0.1%	$35,653	<0.1%
Aurora (T)	$2,496,885,036	$0	0.0%	$2,057,320	0.1%	$2,057,320	0.1%
Blasdell (V)	$638,571,953	$0	0.0%	$0	0.0%	$0	0.0%
Boston (T)	$1,702,475,276	$0	0.0%	$35,689	<0.1%	$35,689	<0.1%
Brant (T)	$657,594,060	$0	0.0%	$0	0.0%	$0	0.0%
Buffalo (C)	$58,603,851,634	$0	0.0%	$33,701,397	0.1%	$33,701,397	0.1%
Cheektowaga (T)	$17,530,893,277	$0	0.0%	$11,124,892	0.1%	$11,124,892	0.1%
Clarence (T)	$9,866,246,863	$0	0.0%	$5,706,595	0.1%	$5,706,595	0.1%
Colden (T)	$854,417,381	$0	0.0%	$62,964	<0.1%	$62,964	<0.1%
Collins (T)	$1,189,158,504	$0	0.0%	$246,689	<0.1%	$246,689	<0.1%
Concord (T)	$1,338,570,261	$0	0.0%	$784,791	0.1%	$784,791	0.1%
Depew (V)	$3,841,823,815	$0	0.0%	$441,883	<0.1%	$441,883	<0.1%
East Aurora (V)	$1,723,816,550	$0	0.0%	$3,796,024	0.2%	$3,796,024	0.2%
Eden (T)	$2,180,455,513	$0	0.0%	$40,578	<0.1%	$40,578	<0.1%
Elma (T)	$3,775,039,302	$0	0.0%	$1,128,643	<0.1%	$1,128,643	<0.1%
Evans (T)	$3,335,060,692	$633,667	<0.1%	$7,786,947	0.2%	$8,420,614	0.3%
Farnham (V)	$87,990,422	$0	0.0%	$0	0.0%	$0	0.0%
Gowanda (V)	$249,516,940	$0	0.0%	$1,197,209	0.5%	$1,197,209	0.5%
Grand Island (T)	$4,674,517,058	$0	0.0%	$5,765,468	0.1%	$5,765,468	0.1%
Hamburg (T)	$11,911,210,828	$83,332	<0.1%	$5,759,825	<0.1%	$5,843,158	<0.1%
Hamburg (V)	$2,005,172,252	$0	0.0%	$3,243	<0.1%	$3,243	<0.1%
Holland (T)	$1,151,194,342	$0	0.0%	$452,073	<0.1%	$452,073	<0.1%
Kenmore (V)	$2,305,529,001	$0	0.0%	$0	0.0%	$0	0.0%
Lackawanna (C)	$4,030,622,400	$0	0.0%	$28,327,456	0.7%	$28,327,456	0.7%
Lancaster (T)	$6,845,493,469	$0	0.0%	$8,608,363	0.1%	$8,608,363	0.1%
Lancaster (V)	$2,217,331,122	$0	0.0%	$278,318	<0.1%	$278,318	<0.1%
Marilla (T)	$1,099,846,031	$0	0.0%	$2,466,111	0.2%	$2,466,111	0.2%
Newstead (T)	$2,181,758,974	$0	0.0%	$856,832	<0.1%	$856,832	<0.1%
North Collins (T)	$889,517,676	$0	0.0%	$0	0.0%	$0	0.0%
North Collins (V)	$383,968,909	$0	0.0%	$0	0.0%	$0	0.0%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (All Occupancies) Located Within the 1 Percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Orchard Park (T)	$8,174,650,530	$0	0.0%	$186,649	<0.1%	$186,649	<0.1%
Orchard Park (V)	$867,347,745	$0	0.0%	$98,818	<0.1%	$98,818	<0.1%
Sardinia (T)	$1,068,523,829	$0	0.0%	$245,523	<0.1%	$245,523	<0.1%
Sloan (V)	$634,998,253	$0	0.0%	$0	0.0%	$0	0.0%
Springville (V)	$1,354,905,864	$0	0.0%	$155,746	<0.1%	$155,746	<0.1%
Tonawanda (C)	$3,291,492,557	$0	0.0%	$447,134	<0.1%	$447,134	<0.1%
Tonawanda (T)	$14,694,684,404	$0	0.0%	$4,295,039	<0.1%	$4,295,039	<0.1%
Wales (T)	$833,853,270	$0	0.0%	$87,524	<0.1%	$87,524	<0.1%
West Seneca (T)	$9,583,482,689	$0	0.0%	$10,654,762	0.1%	$10,654,762	0.1%
Williamsville (V)	$1,126,868,443	$0	0.0%	$5,451,598	0.5%	$5,451,598	0.5%
Erie County Total	**$222,515,035,436**	**$716,999**	**<0.1%**	**$155,671,321**	0.1%	**$156,388,321**	**0.1%**

Source: Hazusv4.2, FEMA 2019; Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.6-15. Estimated Residential General Building Stock Potential Loss to the 1 percent Annual Chance Flood Event

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Residential Occupancy) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Akron (V)	$408,367,905	$0	0.0%	$33,743	<0.1%	$33,743	<0.1%
Alden (T)	$1,069,428,654	$0	0.0%	$35,401	<0.1%	$35,401	<0.1%
Alden (V)	$395,847,903	$0	0.0%	$0	0.0%	$0	0.0%
Amherst (T)	$16,727,353,474	$0	0.0%	$4,645,669	<0.1%	$4,645,669	<0.1%
Angola (V)	$267,129,260	$0	0.0%	$35,653	<0.1%	$35,653	<0.1%
Aurora (T)	$1,873,492,624	$0	0.0%	$519,865	<0.1%	$519,865	<0.1%
Blasdell (V)	$289,015,144	$0	0.0%	$0	0.0%	$0	0.0%
Boston (T)	$1,379,165,647	$0	0.0%	$35,689	<0.1%	$35,689	<0.1%
Brant (T)	$411,942,061	$0	0.0%	$0	0.0%	$0	0.0%
Buffalo (C)	$29,380,809,385	$0	0.0%	$4,716,078	<0.1%	$4,716,078	<0.1%
Cheektowaga (T)	$8,765,908,598	$0	0.0%	$777,561	<0.1%	$777,561	<0.1%
Clarence (T)	$7,127,011,673	$0	0.0%	$4,330,265	0.1%	$4,330,265	0.1%
Colden (T)	$706,333,156	$0	0.0%	$62,964	<0.1%	$62,964	<0.1%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Residential Occupancy) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Collins (T)	$785,134,852	$0	0.0%	$246,689	<0.1%	$246,689	<0.1%
Concord (T)	$953,242,955	$0	0.0%	$402,189	<0.1%	$402,189	<0.1%
Depew (V)	$1,777,424,829	$0	0.0%	$102,970	<0.1%	$102,970	<0.1%
East Aurora (V)	$921,213,925	$0	0.0%	$396,183	<0.1%	$396,183	<0.1%
Eden (T)	$1,381,283,349	$0	0.0%	$40,578	<0.1%	$40,578	<0.1%
Elma (T)	$2,508,868,803	$0	0.0%	$399,628	<0.1%	$399,628	<0.1%
Evans (T)	$2,324,723,996	$605,534	<0.1%	$6,008,422	0.3%	$6,613,955	0.3%
Farnham (V)	$58,371,286	$0	0.0%	$0	0.0%	$0	0.0%
Gowanda (V)	$128,781,498	$0	0.0%	$31,243	<0.1%	$31,243	<0.1%
Grand Island (T)	$3,259,141,639	$0	0.0%	$2,505,997	0.1%	$2,505,997	0.1%
Hamburg (T)	$6,868,261,787	$83,332	<0.1%	$4,533,114	0.1%	$4,616,446	0.1%
Hamburg (V)	$1,297,913,317	$0	0.0%	$0	0.0%	$0	0.0%
Holland (T)	$659,570,296	$0	0.0%	$442,744	0.1%	$442,744	0.1%
Kenmore (V)	$1,803,866,517	$0	0.0%	$0	0.0%	$0	0.0%
Lackawanna (C)	$2,080,257,793	$0	0.0%	$21,180,591	1.0%	$21,180,591	1.0%
Lancaster (T)	$4,259,431,610	$0	0.0%	$4,676,797	0.1%	$4,676,797	0.1%
Lancaster (V)	$1,254,181,390	$0	0.0%	$278,318	<0.1%	$278,318	0.0%
Marilla (T)	$915,745,109	$0	0.0%	$2,466,111	0.3%	$2,466,111	<0.1%
Newstead (T)	$1,151,078,041	$0	0.0%	$530,585	<0.1%	$530,585	<0.1%
North Collins (T)	$494,763,766	$0	0.0%	$0	0.0%	$0	0.0%
North Collins (V)	$166,981,586	$0	0.0%	$0	0.0%	$0	0.0%
Orchard Park (T)	$5,215,766,189	$0	0.0%	$174,544	<0.1%	$174,544	<0.1%
Orchard Park (V)	$503,877,556	$0	0.0%	$98,818	<0.1%	$98,818	<0.1%
Sardinia (T)	$640,451,468	$0	0.0%	$245,523	<0.1%	$245,523	<0.1%
Sloan (V)	$430,086,727	$0	0.0%	$0	0.0%	$0	0.0%
Springville (V)	$636,234,153	$0	0.0%	$13,451	<0.1%	$13,451	<0.1%
Tonawanda (C)	$1,742,973,931	$0	0.0%	$447,134	<0.1%	$447,134	<0.1%
Tonawanda (T)	$7,741,209,135	$0	0.0%	$5,096	<0.1%	$5,096	<0.1%
Wales (T)	$615,054,386	$0	0.0%	$87,524	<0.1%	$87,524	<0.1%
West Seneca (T)	$6,099,460,803	$0	0.0%	$2,702,786	<0.1%	$2,702,786	<0.1%
Williamsville (V)	$797,180,973	$0	0.0%	$411,466	0.1%	$411,466	0.1%
Erie County Total	**$128,274,339,150**	**$688,866**	**<0.1%**	**$63,621,389**	**<0.1%**	**$64,310,255**	**0.1%**

Source: Hazusv4.2, FEMA 2019; Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-16. Estimated Commercial General Building Stock Potential Loss to the 1 percent Annual Chance Flood Event

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Commercial Occupancy) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Akron (V)	$153,671,895	$0	0.0%	$343,704	0.2%	$343,704	0.2%
Alden (T)	$211,835,618	$0	0.0%	$0	0.0%	$0	0.0%
Alden (V)	$120,190,739	$0	0.0%	$0	0.0%	$0	0.0%
Amherst (T)	$6,767,561,778	$0	0.0%	$7,089,883	0.1%	$7,089,883	0.1%
Angola (V)	$117,664,285	$0	0.0%	$0	0.0%	$0	0.0%
Aurora (T)	$353,538,415	$0	0.0%	$644,730	0.2%	$644,730	0.2%
Blasdell (V)	$99,116,494	$0	0.0%	$0	0.0%	$0	0.0%
Boston (T)	$160,262,380	$0	0.0%	$0	0.0%	$0	0.0%
Brant (T)	$87,379,906	$0	0.0%	$0	0.0%	$0	0.0%
Buffalo (C)	$15,956,810,248	$0	0.0%	$15,799,013	0.1%	$15,799,013	0.1%
Cheektowaga (T)	$5,892,442,351	$0	0.0%	$10,268,859	0.2%	$10,268,859	0.2%
Clarence (T)	$1,767,854,669	$0	0.0%	$1,320,203	0.1%	$1,320,203	0.1%
Colden (T)	$69,053,024	$0	0.0%	$0	0.0%	$0	0.0%
Collins (T)	$134,699,721	$0	0.0%	$0	0.0%	$0	0.0%
Concord (T)	$155,449,324	$0	0.0%	$382,602	0.2%	$382,602	0.2%
Depew (V)	$1,080,665,332	$0	0.0%	$326,621	<0.1%	$326,621	<0.1%
East Aurora (V)	$408,769,691	$0	0.0%	$2,257,783	0.6%	$2,257,783	0.6%
Eden (T)	$197,862,200	$0	0.0%	$0	0.0%	$0	0.0%
Elma (T)	$659,385,803	$0	0.0%	$729,015	0.1%	$729,015	0.1%
Evans (T)	$569,442,151	$28,133	<0.1%	$1,778,525	0.3%	$1,806,658	0.3%
Farnham (V)	$12,214,610	$0	0.0%	$0	0.0%	$0	0.0%
Gowanda (V)	$55,622,139	$0	0.0%	$1,165,965	2.1%	$1,165,965	2.1%
Grand Island (T)	$644,364,874	$0	0.0%	$3,259,471	0.5%	$3,259,471	0.5%
Hamburg (T)	$2,405,982,895	$0	0.0%	$968,041	<0.1%	$968,041	<0.1%
Hamburg (V)	$357,867,160	$0	0.0%	$3,243	<0.1%	$3,243	<0.1%
Holland (T)	$154,858,888	$0	0.0%	$9,329	<0.1%	$9,329	<0.1%
Kenmore (V)	$353,514,895	$0	0.0%	$0	0.0%	$0	0.0%
Lackawanna (C)	$574,982,748	$0	0.0%	$1,831,614	0.3%	$1,831,614	0.3%
Lancaster (T)	$1,579,789,344	$0	0.0%	$1,447,456	0.1%	$1,447,456	0.1%
Lancaster (V)	$390,420,591	$0	0.0%	$0	0.0%	$0	0.0%
Marilla (T)	$53,112,315	$0	0.0%	$0	0.0%	$0	0.0%
Newstead (T)	$500,085,392	$0	0.0%	$0	0.0%	$0	0.0%
North Collins (T)	$79,531,595	$0	0.0%	$0	0.0%	$0	0.0%
North Collins (V)	$108,146,566	$0	0.0%	$0	0.0%	$0	0.0%
Orchard Park (T)	$1,912,950,232	$0	0.0%	$0	0.0%	$0	0.0%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Commercial Occupancy) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Orchard Park (V)	$186,187,663	$0	0.0%	$0	0.0%	$0	0.0%
Sardinia (T)	$209,206,001	$0	0.0%	$0	0.0%	$0	0.0%
Sloan (V)	$121,138,398	$0	0.0%	$0	0.0%	$0	0.0%
Springville (V)	$478,079,508	$0	0.0%	$142,295	<0.1%	$142,295	<0.1%
Tonawanda (C)	$935,960,265	$0	0.0%	$0	0.0%	$0	0.0%
Tonawanda (T)	$3,459,940,259	$0	0.0%	$4,155,986	0.1%	$4,155,986	0.1%
Wales (T)	$64,209,749	$0	0.0%	$0	0.0%	$0	0.0%
West Seneca (T)	$2,199,302,929	$0	0.0%	$7,503,994	0.3%	$7,503,994	0.3%
Williamsville (V)	$266,225,547	$0	0.0%	$5,040,132	1.9%	$5,040,132	1.9%
Erie County Total	**$52,067,350,588**	**$28,133**	**<0.1%**	**$66,468,464**	**0.1%**	**$66,496,597**	**0.1%**

Source: Hazusv4.2, FEMA 2019; Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.6-17. Estimated Other General Building Stock Potential Loss to the 1 percent Annual Chance Flood Event

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Agricultural, Industrial, Religious, Education and Government Occupancies) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Akron (V)	$304,569,773	$0	0.0%	$0	0.0%	$0	0.0%
Alden (T)	$467,208,972	$0	0.0%	$1,705	<0.1%	$1,705	<0.1%
Alden (V)	$86,616,933	$0	0.0%	$0	0.0%	$0	0.0%
Amherst (T)	$3,877,340,438	$0	0.0%	$1,233,461	<0.1%	$1,233,461	<0.1%
Angola (V)	$140,910,684	$0	0.0%	$0	0.0%	$0	0.0%
Aurora (T)	$269,853,997	$0	0.0%	$892,725	0.3%	$892,725	0.3%
Blasdell (V)	$250,440,314	$0	0.0%	$0	0.0%	$0	0.0%
Boston (T)	$163,047,249	$0	0.0%	$0	0.0%	$0	0.0%
Brant (T)	$158,272,093	$0	0.0%	$0	0.0%	$0	0.0%
Buffalo (C)	$13,266,232,001	$0	0.0%	$13,186,306	0.1%	$13,186,306	0.1%
Cheektowaga (T)	$2,872,542,328	$0	0.0%	$78,472	<0.1%	$78,472	<0.1%
Clarence (T)	$971,380,522	$0	0.0%	$56,127	<0.1%	$56,127	<0.1%
Colden (T)	$79,031,202	$0	0.0%	$0	0.0%	$0	0.0%
Collins (T)	$269,323,931	$0	0.0%	$0	0.0%	$0	0.0%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total Replacement Cost Value	Estimated Loss to the General Building Stock (Agricultural, Industrial, Religious, Education and Government Occupancies) Located within the 1 percent Annual Chance Event Flood Hazard Area					
		V Zones (VE Zones)		A Zones (A, AE, AH, AO Zones)		Total (All Flood Zones)	
		Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value	Estimated Loss	Percent of Total Replacement Cost Value
Concord (T)	$229,877,982	$0	0.0%	$0	0.0%	$0	0.0%
Depew (V)	$983,733,654	$0	0.0%	$12,291	<0.1%	$12,291	<0.1%
East Aurora (V)	$393,832,933	$0	0.0%	$1,142,059	0.3%	$1,142,059	0.3%
Eden (T)	$601,309,964	$0	0.0%	$0	0.0%	$0	0.0%
Elma (T)	$606,784,697	$0	0.0%	$0	0.0%	$0	0.0%
Evans (T)	$440,894,545	$0	0.0%	$0	0.0%	$0	0.0%
Farnham (V)	$17,404,525	$0	0.0%	$0	0.0%	$0	0.0%
Gowanda (V)	$65,113,302	$0	0.0%	$0	0.0%	$0	0.0%
Grand Island (T)	$771,010,545	$0	0.0%	$0	0.0%	$0	0.0%
Hamburg (T)	$2,636,966,146	$0	0.0%	$258,670	<0.1%	$258,670	<0.1%
Hamburg (V)	$349,391,775	$0	0.0%	$0	0.0%	$0	0.0%
Holland (T)	$336,765,159	$0	0.0%	$0	0.0%	$0	0.0%
Kenmore (V)	$148,147,588	$0	0.0%	$0	0.0%	$0	0.0%
Lackawanna (C)	$1,375,381,858	$0	0.0%	$5,315,252	0.4%	$5,315,252	0.4%
Lancaster (T)	$1,006,272,515	$0	0.0%	$2,484,109	0.2%	$2,484,109	0.2%
Lancaster (V)	$572,729,141	$0	0.0%	$0	0.0%	$0	0.0%
Marilla (T)	$130,988,607	$0	0.0%	$0	0.0%	$0	0.0%
Newstead (T)	$530,595,541	$0	0.0%	$326,247	0.1%	$326,247	0.1%
North Collins (T)	$315,222,315	$0	0.0%	$0	0.0%	$0	0.0%
North Collins (V)	$108,840,757	$0	0.0%	$0	0.0%	$0	0.0%
Orchard Park (T)	$1,045,934,109	$0	0.0%	$12,105	<0.1%	$12,105	<0.1%
Orchard Park (V)	$177,282,527	$0	0.0%	$0	0.0%	$0	0.0%
Sardinia (T)	$218,866,360	$0	0.0%	$0	0.0%	$0	0.0%
Sloan (V)	$83,773,128	$0	0.0%	$0	0.0%	$0	0.0%
Springville (V)	$240,592,203	$0	0.0%	$0	0.0%	$0	0.0%
Tonawanda (C)	$612,558,361	$0	0.0%	$0	0.0%	$0	0.0%
Tonawanda (T)	$3,493,535,010	$0	0.0%	$133,958	<0.1%	$133,958	<0.1%
Wales (T)	$154,589,135	$0	0.0%	$0	0.0%	$0	0.0%
West Seneca (T)	$1,284,718,958	$0	0.0%	$447,982	<0.1%	$447,982	<0.1%
Williamsville (V)	$63,461,923	$0	0.0%	$0	0.0%	$0	0.0%
Erie County Total	**$42,173,345,698**	**$0**	**0.0%**	**$25,581,469**	**0.1%**	$25,581,469	0.1%

Source: Hazusv4.2, FEMA 2019; Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

NFIP Statistics

FEMA Region 2 provided a list of NFIP policies, past claims, and repetitive loss properties (RL) in Erie County. According to FEMA, a RL property is a NFIP-insured structure that has had at least two paid flood losses of more than $1,000 in any 10-year period since 1978. A SRL property is a NFIP-insured structure that has had four or more separate claim payments made under a standard flood insurance policy, with the amount of each claim exceeding $5,000 and with the cumulative amount of such claims payments exceeding $20,000 or at least two separate claims payments made under a standard flood insurance policy with the cumulative amount of such claim payments exceed the fair market value of the insured building on the day before each loss (FEMA 2018).

Table 5.4.6-18. summarizes the NFIP policies, claims, and repetitive loss statistics for Erie County. Note that specific locations of repetitive loss properties were not made available for this plan.

Table 5.4.6-18. Repetitive Loss Properties and NFIP Data for Erie County

Jurisdiction	Number of Repetitive Loss Properties	Number of Policies	Number of Claims	Total Losses Claimed
Akron (V)	Data Not Provided by FEMA	1	4	$8,104
Alden (T)	Data Not Provided by FEMA	9	19	$187,358
Alden (V)	Data Not Provided by FEMA	0	5	$4,711
Amherst (T)	Data Not Provided by FEMA	846	448	$1,417,565
Angola (V)	Data Not Provided by FEMA	1	18	$83,162
Aurora (T)	Data Not Provided by FEMA	12	12	$96,661
Blasdell (V)	Data Not Provided by FEMA	1	25	$150,556
Boston (T)	Data Not Provided by FEMA	11	19	$180,739
Brant (T)	Data Not Provided by FEMA	1	99	$287,387
Buffalo (C)	Data Not Provided by FEMA	94	403	$927,901
Cheektowaga (T)	Data Not Provided by FEMA	76	211	$1,197,869
Clarence (T)	Data Not Provided by FEMA	108	41	$77,190
Colden (T)	Data Not Provided by FEMA	5	8	$6,758
Collins (T)	Data Not Provided by FEMA	3	6	$74,714
Concord (T)	Data Not Provided by FEMA	4	8	$58,398
Depew (V)	Data Not Provided by FEMA	14	33	$23,675
East Aurora (V)	Data Not Provided by FEMA	27	37	$184,988
Eden (T)	Data Not Provided by FEMA	4	6	$35,311
Elma (T)	Data Not Provided by FEMA	16	21	$52,116
Evans (T)	Data Not Provided by FEMA	106	100	$450,489
Farnham (V)	Data Not Provided by FEMA	1	5	$20,817
Gowanda (V)	Data Not Provided by FEMA	80	135	$2,332,781
Grand Island (T)	Data Not Provided by FEMA	46	30	$62,488
Hamburg (T)	Data Not Provided by FEMA	90	202	$1,854,818
Hamburg (V)	Data Not Provided by FEMA	5	26	$214,636
Holland (T)	Data Not Provided by FEMA	3	2	$2,738
Kenmore (V)	Data Not Provided by FEMA	1	8	$3,379
Lackawanna (C)	Data Not Provided by FEMA	184	94	$110,735
Lancaster (T)	Data Not Provided by FEMA	74	52	$366,231
Lancaster (V)	Data Not Provided by FEMA	16	5	$4,698
Marilla (T)	Data Not Provided by FEMA	2	1	$15,190
Newstead (T)	Data Not Provided by FEMA	11	8	$26,190
North Collins (T)	Data Not Provided by FEMA	0	0	$0
North Collins (V)	Data Not Provided by FEMA	0	0	$0
Orchard Park (T)	Data Not Provided by FEMA	20	14	$8,609
Orchard Park (V)	Data Not Provided by FEMA	7	7	$59,650
Sardinia (T)	Data Not Provided by FEMA	4	6	$114,205
Sloan (V)	Data Not Provided by FEMA	0	1	$ 0
Springville (V)	Data Not Provided by FEMA	5	18	$320,646
Tonawanda (C)	Data Not Provided by FEMA	4	9	$26,665
Tonawanda (T)	Data Not Provided by FEMA	32	56	$73,198

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Repetitive Loss Properties	Number of Policies	Number of Claims	Total Losses Claimed
Wales (T)	Data Not Provided by FEMA	1	4	$2,133
West Seneca (T)	Data Not Provided by FEMA	123	186	$786,473
Williamsville (V)	Data Not Provided by FEMA	26	134	$518,994
Erie County Total	**Data Not Provided by FEMA**	**2,074**	**2,526**	**$12,430,926**

Source: FEMA Region 2, 2020

Note: NFIP = National Flood Insurance Program, V = Village, T = Town, C = City
The Village of Gowanda is partially in both Erie and Cattaraugus Counties. Totals may be inflated as they are for the entire Village, not just Erie County.

Impact on Land Uses

An exposure analysis was completed to determine the acres of developed residential land and developed non-residential land use types located in the 1 percent and 0.2 percent flood hazard areas. To estimate exposure for developed residential and nonresidential land use types to the 1 percent flood hazard area, the floodplain boundary was overlaid upon land use data. Across Erie County, natural land has the highest percentage in flood areas. Approximately 7.9 percent and 9.8 percent of natural land use area is in the 1 percent (A and V Zones combined) and 0.2% annual chance flood zone, respectively. Non-residential land the greatest area in flood areas. Approximately 34,426 acres of non-residential land area are in the 1 percent annual chance flood zone, and 44,479 acres of non-residential land area are in the 0.2 percent annual chance flood zone. Refer to Table 5.4.6-19 for a complete summary of this analysis.

Table 5.4.6-19. Developed Residential and Non-Residential Land Use Exposed to 1 Percent and 0.2 Percent Annual Chance Flood Event Hazard Areas

Land Use Type	Total Acres for County	1 percent Annual Chance Flood Event - A Zones		1 percent Annual Chance Flood Event - V Zones		0.2 percent Annual Chance Flood Event	
		Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Residential Land	103,575	2,825	2.7%	73	0.1%	7,419	7.2%
Non-Residential Land	544,586	34,318	6.3%	107	<0.1%	44,479	8.2%
Natural Land	304,039	24,098	7.9%	19	<0.1%	29,826	9.8%
Erie County Total	**652,056**	**38,814**	**6.0%**	**383**	**0.1%**	**53,849**	**8.3%**

Source: FEMA 2021; Erie County GIS 2021; USGS 2016
C = City; T = Town; V = Village

Notes: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.
The area presented includes the area of inland waterways.

Impact on Critical Facilities

It is important to determine the critical facilities and infrastructure within the county that may be at risk to flooding (riverine, dam failure, flash/stormwater flooding) and who may be impacted should damage occur. Critical services during and after a flood event may not be available if critical facilities are directly damaged or transportation routes to access these critical facilities are impacted. Roads that are blocked or damaged can isolate residents and can prevent access throughout the planning area to many service providers needing to get to vulnerable populations or to make repairs. Utilities such as overhead power, cable, and phone lines could also be vulnerable due to utility poles damaged by standing water or the surge of water from a dam failure event. Loss of these utilities could create additional isolation issues for the inundation zones.

Major roadways that may be impacted by the 1 percent annual chance flood event include Interstates I-90, I-990, I-190, State Roads NY-266, NY-277, NY-270, NY-324, NY-33, NY-354, NY-384, NY-39, NY-391, NY-425, NY-5, NY-75, NY-78, NY-93, and NY-93, US Routes 20, 20A, 219, and 62 and various county roads.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Approximately 2.7 percent (both A and V Zones) and 6.3 percent of all roadways are located in the 1 percent and 0.2 percent annual chance flood event, respectively. Table 5.4.6-20 summarizes the total number of miles of exposed roadways. There are several issues associated with transportation routes flooding, including isolation caused by bridges being washed out or blocked by floods or debris, health problems caused by water and sewer systems that are flooded or backed up, drinking water contamination caused by floodwaters carrying pollutants in water supplies, and localized urban flooding caused by culverts blocked with debris.

Table 5.4.6-20. Road Miles Located in the 1 percent Annual Chance Flood Hazard Area

Road Type	Total Miles for County	1 Percent Annual Chance Flood Event - A Zones		1 Percent Annual Chance Flood Event - V Zones		0.2 Percent Annual Chance Flood Event	
		Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total
Local and Private Roads	3,693	95.3	2.6%	0.2	<0.1%	251.4	6.8%
County Roads	1,221	38.1	3.1%	0.0	0.0%	69.2	5.7%
State Routes	542	18.4	3.4%	0.0	0.0%	34.9	6.4%
US Highways	195	1.6	0.8%	0.0	0.0%	3.1	1.6%
Interstate	168	2.0	1.2%	0.0	0.0%	5.5	3.3%
Erie County Total	**5,818**	**155.4**	**2.7%**	**0.2**	**<0.1%**	**364.1**	**6.3%**

Source: FEMA 2019; NYS DOT 2013

Critical facility exposure to the 1 percent and 0.2 percent annual chance flood hazard event boundary was examined. In addition, Hazus was used to estimate the flood loss potential to critical facilities located in the FEMA mapped floodplains. Table 5.4.6-21. separated by A and V Zones and Table 5.4.6-22. summarize the number of critical facilities exposed to the 1 percent and 0.2 percent flood inundation areas by jurisdiction. Of the 496 critical facilities located in the 1 percent annual chance flood event boundary, 468 are considered lifelines for the county out of the 585 critical facilities located in the 0.2 percent annual chance flood event boundary, 554 are considered lifelines for the county. Table 5.4.6-23.and Table 5.4.6-24. the distribution of critical facilities in the 1 percent and 0.2 percent annual chance flood event boundary. Refer to Section 4 (County Profile) for more information about the critical facilities and lifelines in Erie County.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-21. Number of Critical Facilities Located in the 1 Percent Annual Chance Flood Hazard Area

Jurisdiction	Total CFs Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (A Zones)				Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (V Zones)				Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (All A and V Zones)			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines	Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines	Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	8	26.7%	8	30.8%	0	0.0%	0	0.0%	8	26.7%	8	30.8%
Alden (T)	76	68	15	19.7%	14	20.6%	0	0.0%	0	0.0%	15	19.7%	14	20.6%
Alden (V)	19	17	1	5.3%	1	5.9%	0	0.0%	0	0.0%	1	5.3%	1	5.9%
Amherst (T)	391	387	44	11.3%	43	11.1%	0	0.0%	0	0.0%	44	11.3%	43	11.1%
Angola (V)	20	18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Aurora (T)	95	81	17	17.9%	17	21.0%	0	0.0%	0	0.0%	17	17.9%	17	21.0%
Blasdell (V)	22	22	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Boston (T)	81	75	9	11.1%	9	12.0%	0	0.0%	0	0.0%	9	11.1%	9	12.0%
Brant (T)	39	39	3	7.7%	3	7.7%	0	0.0%	0	0.0%	3	7.7%	3	7.7%
Buffalo ©	751	748	41	5.5%	39	5.2%	0	0.0%	0	0.0%	41	5.5%	39	5.2%
Cheektowaga (T)	224	221	14	6.3%	14	6.3%	0	0.0%	0	0.0%	14	6.3%	14	6.3%
Clarence (T)	121	115	31	25.6%	31	27.0%	0	0.0%	0	0.0%	31	25.6%	31	27.0%
Colden (T)	67	56	10	14.9%	9	16.1%	0	0.0%	0	0.0%	10	14.9%	9	16.1%
Collins (T)	71	55	11	15.5%	10	18.2%	0	0.0%	0	0.0%	11	15.5%	10	18.2%
Concord (T)	84	68	6	7.1%	5	7.4%	0	0.0%	0	0.0%	6	7.1%	5	7.4%
Depew (V)	63	63	5	7.9%	5	7.9%	0	0.0%	0	0.0%	5	7.9%	5	7.9%
East Aurora (V)	42	41	6	14.3%	6	14.6%	0	0.0%	0	0.0%	6	14.3%	6	14.6%
Eden (T)	78	72	6	7.7%	4	5.6%	0	0.0%	0	0.0%	6	7.7%	4	5.6%
Elma (T)	83	75	13	15.7%	13	17.3%	0	0.0%	0	0.0%	13	15.7%	13	17.3%
Evans (T)	112	109	23	20.5%	23	21.1%	1	0.9%	1	0.9%	24	21.4%	24	22.0%
Farnham (V)	10	10	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Gowanda (V)	7	7	1	14.3%	1	14.3%	0	0.0%	0	0.0%	1	14.3%	1	14.3%
Grand Island (T)	69	66	12	17.4%	11	16.7%	0	0.0%	0	0.0%	12	17.4%	11	16.7%
Hamburg (T)	189	181	30	15.9%	30	16.6%	1	0.5%	0	0.0%	31	16.4%	30	16.6%
Hamburg (V)	27	23	2	7.4%	1	4.3%	0	0.0%	0	0.0%	2	7.4%	1	4.3%
Holland (T)	90	70	12	13.3%	12	17.1%	0	0.0%	0	0.0%	12	13.3%	12	17.1%
Kenmore (V)	14	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lackawanna ©	94	93	18	19.1%	18	19.4%	0	0.0%	0	0.0%	18	19.1%	18	19.4%
Lancaster (T)	109	103	25	22.9%	24	23.3%	0	0.0%	0	0.0%	25	22.9%	24	23.3%
Lancaster (V)	58	53	10	17.2%	7	13.2%	0	0.0%	0	0.0%	10	17.2%	7	13.2%

Jurisdiction	Total CFs Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (A Zones)				Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (V Zones)				Number of Critical Facilities and Lifeline Facilities Exposed to 1 percent Annual Chance Flood Event (All A and V Zones)			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines	Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines	Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Marilla (T)	48	37	6	12.5%	6	16.2%	0	0.0%	0	0.0%	6	12.5%	6	16.2%
Newstead (T)	64	61	10	15.6%	10	16.4%	0	0.0%	0	0.0%	10	15.6%	10	16.4%
North Collins (T)	69	56	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
North Collins (V)	14	13	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Orchard Park (T)	141	129	22	15.6%	21	16.3%	0	0.0%	0	0.0%	22	15.6%	21	16.3%
Orchard Park (V)	21	18	5	23.8%	3	16.7%	0	0.0%	0	0.0%	5	23.8%	3	16.7%
Sardinia (T)	78	57	6	7.7%	3	5.3%	0	0.0%	0	0.0%	6	7.7%	3	5.3%
Sloan (V)	8	8	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Springville (V)	35	32	1	2.9%	0	0.0%	0	0.0%	0	0.0%	1	2.9%	0	0.0%
Tonawanda ©	61	60	13	21.3%	13	21.7%	0	0.0%	0	0.0%	13	21.3%	13	21.7%
Tonawanda (T)	266	265	8	3.0%	8	3.0%	0	0.0%	0	0.0%	8	3.0%	8	3.0%
Wales (T)	82	68	13	15.9%	12	17.6%	0	0.0%	0	0.0%	13	15.9%	12	17.6%
West Seneca (T)	145	140	30	20.7%	28	20.0%	0	0.0%	0	0.0%	30	20.7%	28	20.0%
Williamsville (V)	16	14	7	43.8%	5	35.7%	0	0.0%	0	0.0%	7	43.8%	5	35.7%
Erie County Total	**4,184**	**3,933**	**494**	**11.8%**	**467**	**11.9%**	**2**	**<0.1%**	**1**	**<0.1%**	**496**	**11.9%**	**468**	**11.9%**

Source: FEMA 2019; Erie County GIS 2020
C = City; T = Town; V = Village % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.6-22. Distribution of Critical Facilities in the 1 percent Annual Chance Flood Event Floodplain by Type and Jurisdiction

Jurisdiction	Total CFs Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to 0.2 percent Annual Chance Flood Event			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	8	26.7%	8	30.8%
Alden (T)	76	68	15	19.7%	14	20.6%
Alden (V)	19	17	1	5.3%	1	5.9%
Amherst (T)	391	387	74	18.9%	72	18.6%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	17	17.9%	17	21.0%
Blasdell (V)	22	22	0	0.0%	0	0.0%
Boston (T)	81	75	9	11.1%	9	12.0%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total CFs Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to 0.2 percent Annual Chance Flood Event			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Brant (T)	39	39	3	7.7%	3	7.7%
Buffalo (C)	751	748	44	5.9%	42	5.6%
Cheektowaga (T)	224	221	30	13.4%	30	13.6%
Clarence (T)	121	115	33	27.3%	33	28.7%
Colden (T)	67	56	10	14.9%	9	16.1%
Collins (T)	71	55	11	15.5%	10	18.2%
Concord (T)	84	68	6	7.1%	5	7.4%
Depew (V)	63	63	8	12.7%	8	12.7%
East Aurora (V)	42	41	10	23.8%	10	24.4%
Eden (T)	78	72	6	7.7%	4	5.6%
Elma (T)	83	75	14	16.9%	14	18.7%
Evans (T)	112	109	24	21.4%	24	22.0%
Farnham (V)	10	10	0	0.0%	0	0.0%
Gowanda (V)	7	7	3	42.9%	3	42.9%
Grand Island (T)	69	66	12	17.4%	11	16.7%
Hamburg (T)	189	181	33	17.5%	32	17.7%
Hamburg (V)	27	23	2	7.4%	1	4.3%
Holland (T)	90	70	12	13.3%	12	17.1%
Kenmore (V)	14	13	0	0.0%	0	0.0%
Lackawanna (C)	94	93	26	27.7%	26	28.0%
Lancaster (T)	109	103	30	27.5%	29	28.2%
Lancaster (V)	58	53	11	19.0%	7	13.2%
Marilla (T)	48	37	6	12.5%	6	16.2%
Newstead (T)	64	61	11	17.2%	10	16.4%
North Collins (T)	69	56	0	0.0%	0	0.0%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	22	15.6%	21	16.3%
Orchard Park (V)	21	18	5	23.8%	3	16.7%
Sardinia (T)	78	57	6	7.7%	3	5.3%
Sloan (V)	8	8	0	0.0%	0	0.0%
Springville (V)	35	32	1	2.9%	0	0.0%
Tonawanda (C)	61	60	15	24.6%	15	25.0%

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Total CFs Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to 0.2 percent Annual Chance Flood Event			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Tonawanda (T)	266	265	13	4.9%	13	4.9%
Wales (T)	82	68	13	15.9%	12	17.6%
West Seneca (T)	145	140	33	22.8%	31	22.1%
Williamsville (V)	16	14	8	50.0%	6	42.9%
Erie County Total	**4,184**	**3,933**	**585**	**14.0%**	**554**	**14.1%**

Source: FEMA 2021; Erie County GIS 2021
C = City; T = Town; V = Village % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.6-23. Lifelines Exposed to the 1 Percent Annual Chance Flood Event Boundary

FEMA Lifeline Category	Number of Lifelines	Number of Lifelines Exposed to 1 percent Annual Chance Flood Event
Communications	59	0
Energy	176	5
Food, Water, and Shelter	951	31
Hazardous Materials	398	5
Health and Medical	144	0
Safety and Security	1,047	13
Transportation	1,158	414
Erie County Total	**3,933**	**468**

Source: FEMA 2019; Erie County GIS 2020; FEMA 2020

Table 5.4.6-24. Lifelines Exposed to the 0.2 Percent Annual Chance Flood Event Boundary

FEMA Lifeline Category	Number of Lifelines	Number of Lifelines Exposed to 0.2 percent Annual Chance Flood Event
Communications	59	1
Energy	176	10
Food, Water, and Shelter	951	51
Hazardous Materials	398	19
Health and Medical	144	2
Safety and Security	1,047	30
Transportation	1,158	441
Erie County Total	**3,933**	**554**

Source: FEMA 2019; Erie County GIS 2020

In cases where short-term functionality is impacted by a hazard, other facilities of neighboring municipalities may need to increase support response functions during a disaster event. Mitigation planning should consider means to reduce impact to critical facilities and ensure enough emergency and school services remain when a significant event occurs. Actions addressing shared services agreements are included in Section 9, Mitigation Strategies, of this plan.

Impact on the Economy

Flood events can significantly impact the local and regional economy. This includes but is not limited to general building stock damages and associated tax loss, impacts to utilities and infrastructure, business interruption, and impacts on tourism. In areas that are directly flooded, renovations of commercial and industrial buildings may be necessary, disrupting associated services. Subsection of Section 5.4.6.2, Impact on General Building Stock, discusses direct impacts to buildings in Erie County.

Debris management may also be a large expense after a flood event. HAZUS estimates the amount of structural debris generated during a flood event. The model breaks down debris into three categories: (1) finishes (dry wall, insulation, etc.); (2) structural (wood, brick, etc.); and (3) foundations (concrete slab and block, rebar, etc.). These distinctions are necessary because of the different types of equipment needed to handle debris. Table 5.4.6-25. summarizes the Hazus v4.2 countywide debris estimates for the 1 percent annual chance flood event. This table only estimates structural debris generated by flooding and does not include non-structural debris or additional potential damage and debris possibly generated by wind that may be associated with a flood event or storm that causes flooding. Overall, Hazus estimates that there will be 40,750 tons of debris generated during the 1 percent annual chance flood event in Erie County.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.6-25. Estimated Debris Generated from the 1 percent Annual Chance Flood Event

Jurisdiction	1 percent Coastal Annual Chance Flood Event				1 percent Riverine Annual Chance Flood Event				1 percent All Annual Chance Flood Event			
	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)
Akron (V)	0	0	0	0	63	63	0	0	63	63	0	0
Alden (T)	0	0	0	0	300	242	36	23	300	242	36	23
Alden (V)	0	0	0	0	10	9	0	0	10	9	0	0
Amherst (T)	0	0	0	0	6,439	4,710	1,025	704	6,439	4,710	1,025	704
Angola (V)	0	0	0	0	54	32	14	9	54	32	14	9
Aurora (T)	0	0	0	0	296	191	54	50	296	191	54	50
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0
Boston (T)	0	0	0	0	170	124	23	23	170	124	23	23
Brant (T)	273	74	80	119	6	6	0	0	279	79	81	119
Buffalo (C)	923	241	287	395	2,859	1,374	798	687	3,782	1,615	1,085	1,082
Cheektowaga (T)	0	0	0	0	3,806	1,623	1,145	1,039	3,806	1,623	1,145	1,039
Clarence (T)	0	0	0	0	1,565	1,113	256	197	1,565	1,113	256	197
Colden (T)	0	0	0	0	148	124	10	14	148	124	10	14
Collins (T)	0	0	0	0	162	58	59	45	162	58	59	45
Concord (T)	0	0	0	0	111	47	35	30	111	47	35	30
Depew (V)	0	0	0	0	2,357	1,062	705	590	2,357	1,062	705	590
East Aurora (V)	0	0	0	0	352	287	38	27	352	287	38	27
Eden (T)	0	0	0	0	145	76	39	31	145	76	39	31
Elma (T)	0	0	0	0	811	528	172	111	811	528	172	111
Evans (T)	3,045	871	993	1,181	1,316	1,069	149	99	4,361	1,940	1,141	1,280
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	171	60	61	50	171	60	61	50
Grand Island (T)	0	0	0	0	993	961	19	12	993	961	19	12
Hamburg (T)	2,062	477	621	964	2,802	1,800	558	443	4,864	2,278	1,180	1,407
Hamburg (V)	0	0	0	0	85	56	17	11	85	56	17	11
Holland (T)	0	0	0	0	101	91	6	4	101	91	6	4
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	0	0	3,892	2,269	843	780	3,892	2,269	843	780
Lancaster (T)	0	0	0	0	1,274	1,016	155	102	1,274	1,016	155	102
Lancaster (V)	0	0	0	0	3,814	1,009	1,549	1,257	3,814	1,009	1,549	1,257
Marilla (T)	0	0	0	0	225	76	53	96	225	76	53	96
Newstead (T)	0	0	0	0	138	138	0	0	138	138	0	0
North Collins (T)	0	0	0	0	0	0	0	0	0	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	0	0	275	263	8	5	275	263	8	5
Orchard Park (V)	0	0	0	0	70	44	15	11	70	44	15	11

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	1 percent Coastal Annual Chance Flood Event				1 percent Riverine Annual Chance Flood Event				1 percent All Annual Chance Flood Event			
	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)	Total (tons)	Finish (tons)	Structure (tons)	Foundation (tons)
Sardinia (T)	0	0	0	0	60	47	8	6	60	47	8	6
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	28	24	3	2	28	24	3	2
Tonawanda (C)	0	0	0	0	113	105	5	3	113	105	5	3
Tonawanda (T)	0	0	0	0	185	185	0	0	185	185	0	0
Wales (T)	0	0	0	0	517	224	165	128	517	224	165	128
West Seneca (T)	0	0	0	0	4,402	2,097	1,331	974	4,402	2,097	1,331	974
Williamsville (V)	0	0	0	0	633	587	28	18	633	587	28	18
Erie County Total	**0**	**0**	**0**	**0**	**40,750**	**23,788**	**9,381**	**7,582**	**40,750**	**23,788**	**9,381**	**7,582**

Source: HAZUS V4.2
Notes: V = Village, T = Town, C = City

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Impact on the Environment

As Erie County and its jurisdictions evolve with changes in population and density, flood events may increase in frequency and/or severity as land use changes, more structures are built, and impervious surfaces expand. Furthermore, flood extents for the 1 percent annual chance flood event will continue to evolve alongside natural occurrences such as climate change and/or severe weather events. These flood events will inevitably impact Erie County's natural and local environment.

Furthermore, the environmental impacts of a dam failure can include significant water quality and debris-disposal issues. Flood waters can back up sanitary sewer systems and inundate wastewater treatment plants, causing raw sewage to contaminate residential and commercial buildings and the flooded waterway. The contents of unsecured containers of oil, fertilizers, pesticides, and other chemicals get added to flood waters. Hazardous materials may be released and distributed widely across the floodplain. Water supply and wastewater treatment facilities could be offline for weeks. After the flood waters subside, contaminated and flood-damaged building materials and contents must be properly disposed of. Contaminated sediment must be removed from buildings, yards, and properties. In addition, severe erosion is likely; such erosion can negatively impact local ecosystems.

The acreage of natural land makes up 46.6 percent of the county's total land area (NLCD 2016). Natural land areas from the 2016 land use type dataset includes areas of forested land and wetlands. Severe flooding will not only influence the habitat of these natural land areas, it can be disruptive to species that reside in these natural habitats. Overall, 7.9 percent and 9.8 percent of the natural land area in the county is exposed to the 1 percent and 0.2 percent annual chance flood events, respectively.

Cascading Impacts on Other Hazards

Flood events can exacerbate the impacts of land sliding and utility failure. The New York City (NYC) 2019 Hazard Mitigation Plan suggests that flooding may cause a loss of stabilizing plant material caused by inundation and erosion (NYC 2019). Flooding of contaminated waters and flood water containing debris may also cause failure of utilities, particularly if the utilities are disrupted by debris clogging treatment systems or flood waters inundating power sources. More information about these hazards of concern can be found in Sections 5.4.8 and 5.4.12.

Future Changes That May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The county considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across the county. Any areas of growth located in the flood inundation areas could be potentially impacted by flooding. It is recommended that the county and municipal partners implement design strategies that mitigate against the risk of flooding. The maps in the jurisdictional annexes in Section 9 illustrate the new development locations throughout the county and their proximity to the 1 percent annual chance flood hazard event boundary.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has increased by a negligible amount between 2010 and 2019 (American Community Survey 2019). Estimated population projections provided by the Cornell Program on Applied Demographics indicate that the county's population will increase into 2040, bringing total population to approximately 945,891 persons (Cornell Program on Applied Demographics 2018). As population increases, new residents may move into locations that are more susceptible than others to flooding. This includes areas that are directly impacted by flood events and those that are indirectly impacted (i.e., isolated neighborhoods, flood-prone roadways, etc.). Section 4, County Profile, includes additional discussion on population trends.

Climate Change

As discussed earlier, annual precipitation amounts in the region are projected to increase, primarily in the form of heavy rainfalls, which have the potential to increase the risk to flash flooding and riverine flooding, and flood critical transportation corridors and infrastructure (NYSERDA 2014). Increases in precipitation may alter and expand the floodplain boundaries and runoff patterns, resulting in the exposure of populations, buildings, and critical facilities and infrastructure that were previously outside the floodplain. This increase in exposure would result in an increased risk to life and health, an increase in structural losses, a diversion of additional resources to response and recovery efforts, and an increase in business closures affected by future flooding events due to loss of service or access.

Existing dams may not be able to retain and manage increases in water flow from more frequent, heavy rainfall events. Heavy rainfalls may result in more frequent overtopping of these dams and flooding of the county's assets in adjacent inundation areas. However, the probable maximum flood used to design each dam may be able to accommodate changes in climate.

Change of Vulnerability Since 2015 HMP

Since the 2015 HMP analysis, population statistics have been updated using the 5-Year 2015–2019 American Community Survey Population Estimates (American Community Survey 2019). The general building stock was also established using RS Means 2020 building valuations that estimated replacement cost value for each building in the inventory. Additionally, a critical facility dataset was provided from the county. A Hazus riverine flood analysis of Erie County was based on the most current and best available data, including building and critical facility inventories and 2012 FEMA effective DFIRM.

Overall, this vulnerability assessment uses a more accurate and updated building inventory than that used in the 2015 HMP. This information provides more accurate exposure and potential loss estimates for Erie County.

Attachment: 16-Section-5.4.6-Flood-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.7 Hazardous Materials

This section provides a hazard profile and vulnerability assessment of the hazardous materials (hazmat) hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.7.1 Hazard Profile

This section provides information regarding the description, location, extent, previous occurrences and losses, probability of future occurrences, and climate change projections for the hazardous materials hazard.

Hazard Description

Hazardous substances include materials and wastes that are considered severely harmful to human health and the environment, as defined by the U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (also known as Superfund). Many hazardous materials are commonly-used substances, which are harmless in their normal uses, but are quite dangerous if released. EPA designates more than 800 substances as hazardous and identifies many more as potentially hazardous due to their characteristics and the circumstances of their release (EPA 2020).

Superfund's definition of a hazardous substance includes the following:

- Any element, compound, mixture, solution, or substance designated as hazardous under Section 102 of CERCLA.
- Any hazardous substance designated under Section 311(b)(2)(a) of the Clean Water Act (CWA), or any toxic pollutant listed under Section 307(a) of the CWA. More than 400 substances are designated as either hazardous or toxic under the CWA.
- Any hazardous waste having the characteristics identified or listed under section 3001 of the Resource Conservation and Recovery Act (RCRA).
- Any hazardous air pollutant listed under Section 112 of the Clean Air Act (CAA), as amended. More than 200 substances are listed as hazardous air pollutants under the CAA.
- Any imminently hazardous chemical substance or mixture that the EPA Administrator has "taken action" under Section 7 of the Toxic Substances Control Act (TSCA) (EPA 2020).

If released or misused, hazardous substances can cause death, serious injury, long-lasting health effects, and damage to structures and other properties, as well as the environment. Many products containing hazardous substances are used and stored in homes and these products are shipped daily on highways, railroads, waterways, and pipelines. For the purpose of this HMP update, hazardous substance incidents occurring at fixed sites and those that occur during transport will be discussed in this profile.

Hazardous Materials at Fixed Sites

A fixed-site hazardous substance (materials and waste) incident is the uncontrolled release of materials from a fixed site, capable of posing a risk to health, safety, and property as determined by RCRA. It is possible to identify and prepare for a fixed-site incident because federal and state laws require those facilities to notify state and local authorities about the materials being used or produced at the site. Hazardous materials at fixed sites are regulated by EPA.

EPA chooses to specifically list substances as hazardous and extremely hazardous, rather than providing objective definitions. Hazardous substances (as listed) are generally materials that, if released into the

environment, tend to persist for long periods and pose long-term health hazards for living organisms. Extremely hazardous substances, while also generally toxic materials, represent acute health hazards that, when released, are immediately dangerous to the lives of humans and animals and cause serious damage to the environment. When facilities contain these materials in quantities at or above the threshold planning quantity (TPQ), they must submit "Tier II" information to appropriate state and/or local agencies to facilitate emergency planning.

Nuclear power-generating stations, research reactors, or other stationary sources of radioactivity present the threat of release of radiological material. This type of event could threaten a large, multi-jurisdictional area, and result in property damage, contamination of farm and water supplies, and economic damage. This could be a concern to Erie County because Erie County is within 50 miles of the AES Somerset LLC Nuclear Power Plant. Erie County is well outside the emergency planning zones of the rest of the New York nuclear power-generating stations (U.S. Nuclear Regulatory Commission [NRC] 2020).

Hazardous Materials in Transit

As defined in regulations by the U.S. Department of Transportation (DOT) Materials Transport, a hazardous materials transportation incident is any event resulting in an uncontrolled release of materials during transport that can pose a risk to health, safety, and property. Transportation incidents are difficult to prepare for because there is little, if any, notice about the types of materials involved should an accident happen.

Hazardous materials transportation incidents can occur anywhere within the United States. Transportation of hazardous materials on highways involves tanker trucks or trailers, and these are responsible for the greatest number of hazardous substance release incidents. Potential also exists for hazardous substance releases to occur along rail lines, as collisions and derailments of train cars can result in large spills. Hazardous materials in transit are regulated by DOT.

DOT regulations define hazardous materials as a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has been designated as hazardous under Section 5103 of Federal Hazardous Materials Transportation Law (49 U.S.C. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (Title 49 of the *Code of Federal Regulations* [CFR] 172.101), and materials that meet the defining criteria for hazard classes and divisions. When a substance meets DOT's definition of a hazardous material, it must be transported in accordance with safety regulations, which provide guidelines for appropriate packaging, communication of hazards, and proper shipping controls.

Approximately 5,818 miles of roads are present through Erie County (New York State Department of Transportation [NYSDOT] 2020). These roads cross rivers and streams; hazardous substance spills on roads could pollute watersheds that serve as domestic water supplies for areas within Erie County and other parts of the state. Hazardous substance releases also could occur along rail lines, as collisions and derailments of train cars can result in large spills.

Location

Hazardous materials are widely stored and transported throughout Erie County. An event involving hazardous materials can occur anywhere; however, they usually occur at facilities that store and/or use hazardous materials (fixed site) or along major highways and railways (in transit).

Hazardous Materials at Fixed Sites

Erie County has 399 fixed facilities that store or use hazardous materials and that fall under Superfund Amendments and Reauthorization Act (SARA) Title III Tier II reporting requirements. For security purposes,

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

fixed facilities are not mapped in this profile. However, SARA site potential release vulnerability areas are presented in Figure 5.4.7-1.

EPA also requires these facilities to be registered with their Facility Registry Service (FRS). FRS is a national database organized by facility industrial classification and geographic location. Erie County reports 142 facilities to the FRS (EPA 2020).

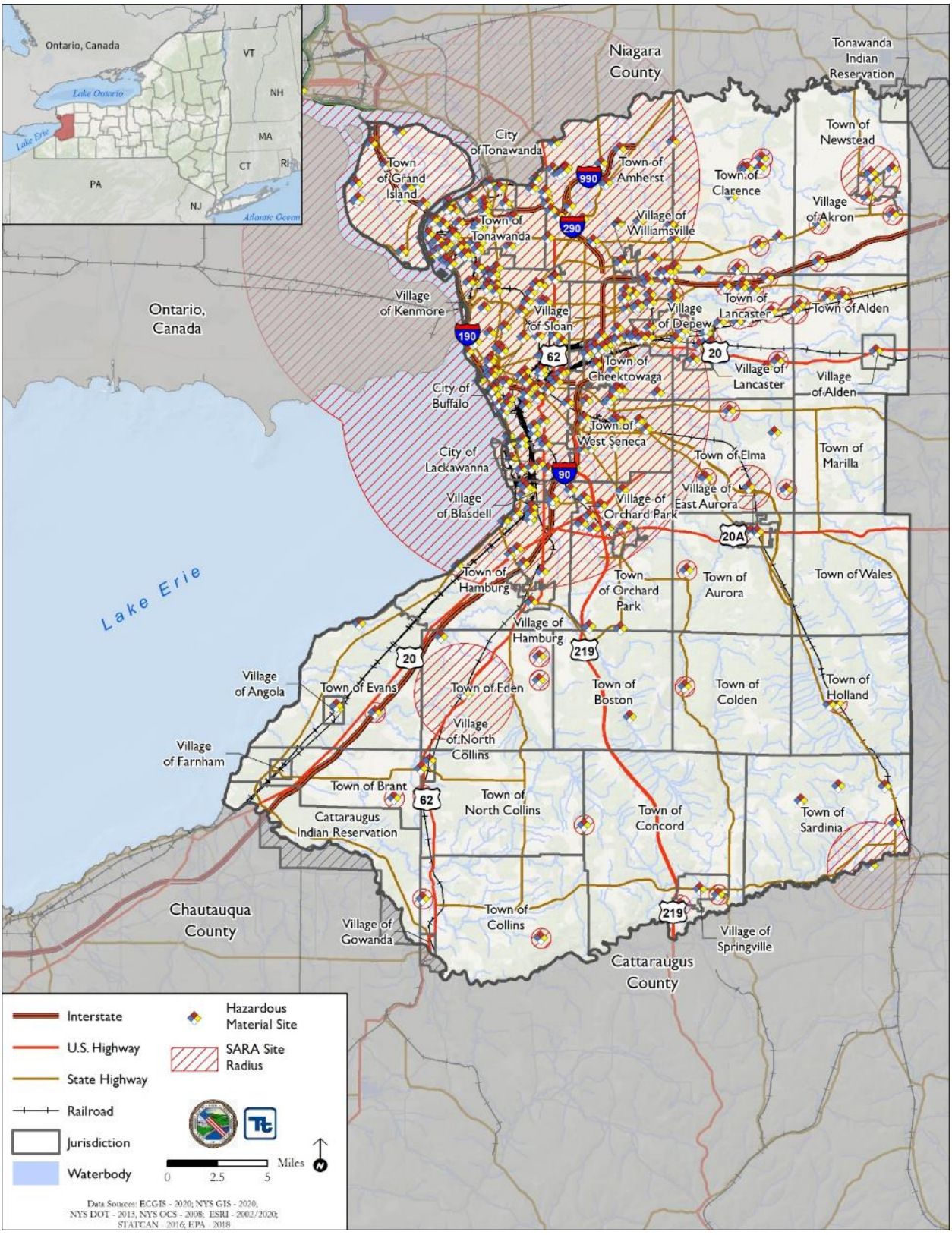
Additionally, EPA identifies 60 Erie County facilities under the Toxic Release Inventory (TRI). These facilities are required to annually report how much of each chemical is recycled, combusted for energy recovery, treated for destruction, and disposed of or otherwise released on and off site. In 2019 (most recent data available), the TRI facilities in Erie County reported a total of 1,094,432 pounds (lbs.) of hazardous waste designated for on-site and off-site disposal or other releases, with the following breakdown:

- Total On-Site: 653,100 lbs.
    - Air: 643,831 lbs.
    - Water: 2,839 lbs.
    - Land: 6,430 lbs.
- Total Off-Site: 441,332 lbs.

The majority of chemicals released into the air in Erie County (as recorded in 2019) includes carbon disulfide (29.2 percent), zinc and zinc compounds (19.8 percent), and nitrate compounds (16.9 percent) (EPA 2019).

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.7-1. SARA Site Potential Release Areas in Erie County



Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazardous Materials In Transit

Incidents involving hazardous materials in transit can occur anywhere in Erie County. Transportation corridors within Erie County that carry hazardous materials include highways, railroads, air/flight paths, pipelines, and navigable waterways. Major highways are more likely to be settings for this type of hazard because of interstate and local commercial transport of hazardous materials. Transport vehicles do not typically travel through residential areas unless they are en route to gasoline service stations or storage facilities.

Hazardous substance releases in navigable waterways are not a significant concern for Erie County; per U.S. Coast Guard (USCG) determinations, there are no navigable waterways within the county (USCG 2017).

Major transportation routes through Erie County include a framework of Interstate (I) and US highways including I-990, 290, 190, and 90, and US Highways 20, 20A, 62, and 219. The potential for a spill also exists on routes used for industrial and business purposes. Section 4 of this HMP discusses roadways in the county. Figure 5.4.7-2 shows the major transportation routes and railways in Erie County.

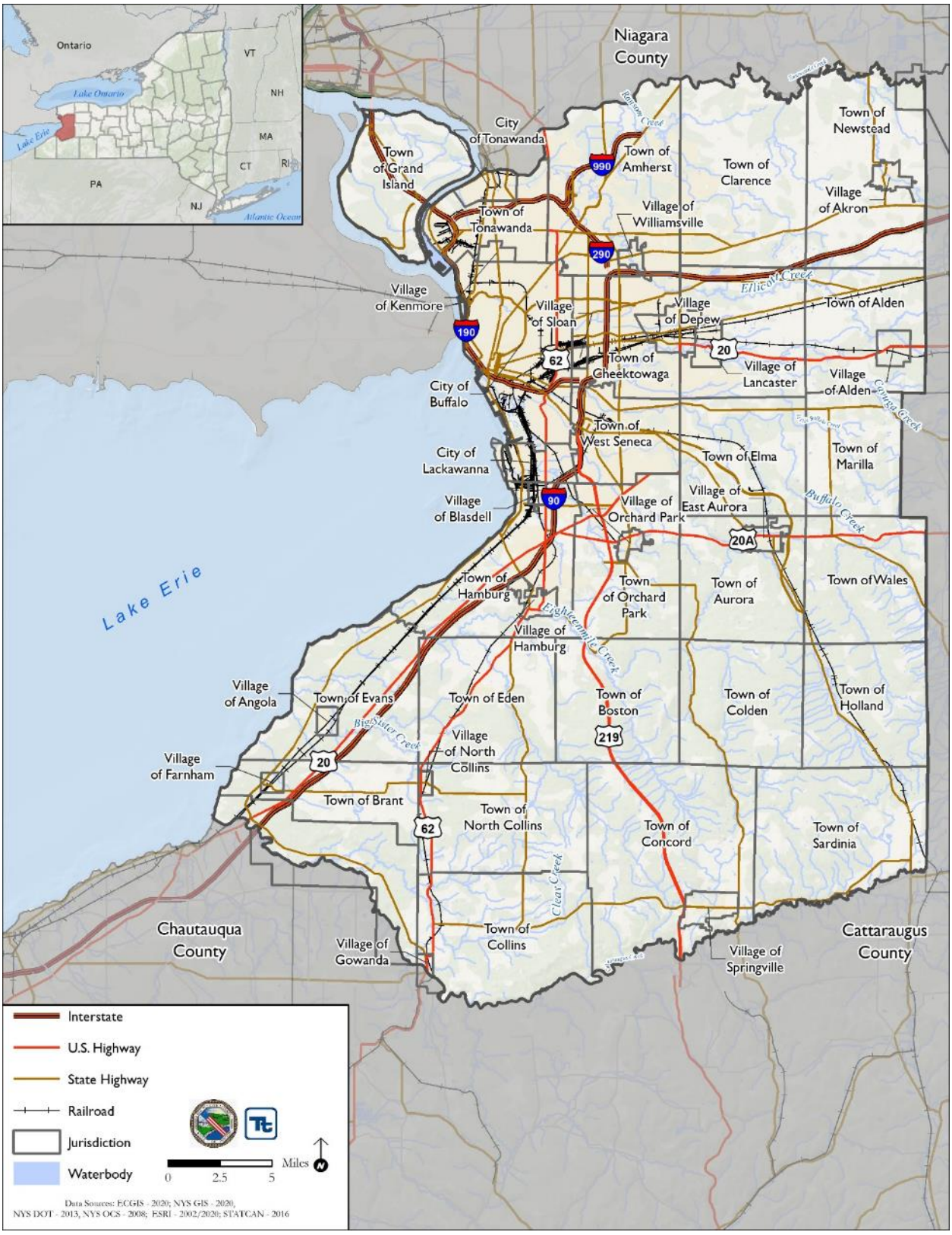
Hazardous material incidents may also occur along railways in Erie County. Rail lines that may carry hazardous materials include the CSX Corporation, Norfolk Southern, and two short lines: New York & Lake Erie Railroad and Buffalo Southern Railroad Inc.

NYSDOT has a vital interest in preserving and improving the rail freight part of its transportation network. Rail shipments allow cost-effective movement of goods and thus decrease stress on the state's highway system. Major commodities shipped by rail include petrochemicals (including plastic pellets), construction materials, food products, raw materials, and finished goods for manufacturers. An accident involving a rail car carrying hazardous materials could pose a public safety hazard to the community. Figure 5.4.7-2 shows railways that run throughout Erie County. Figure 5.4.7-3 illustrates the transportation routes and railways with a 0.5-mile buffer.

Hazardous materials can also be transported via underground petroleum and gas (natural and propane) pipelines across the state. New York State has an extensive network of natural gas and petroleum pipelines, some of which pass through Erie County. Figure 5.4.7-4 shows the extent and location of gas and hazardous liquid pipelines in the county (National Pipeline Mapping System [NPMS] 2020). Figure 5.4.7-5 illustrates the pipelines with a 0.5-mile buffer zone.

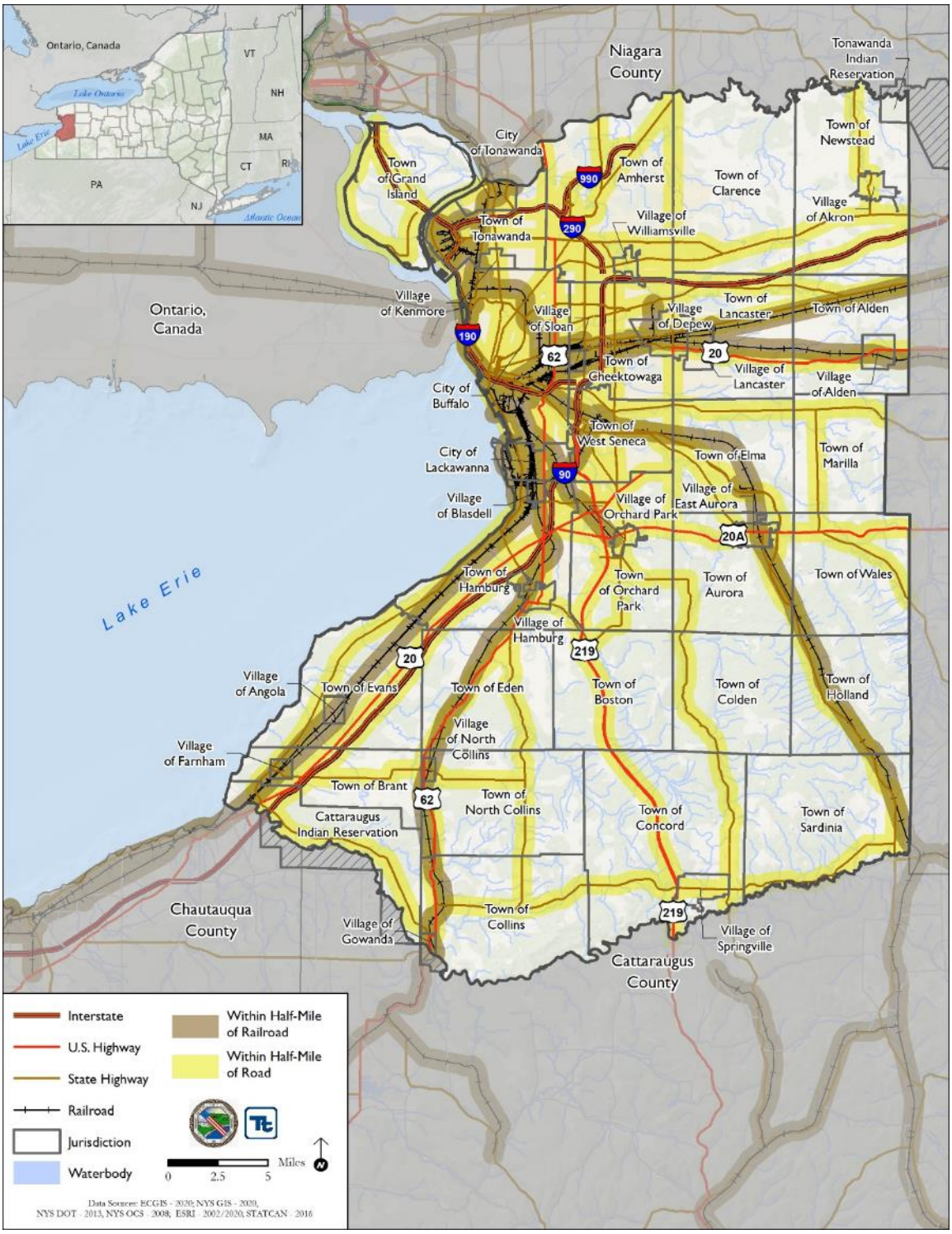
Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.7-2. Major Transportation Routes and Railways in Erie County



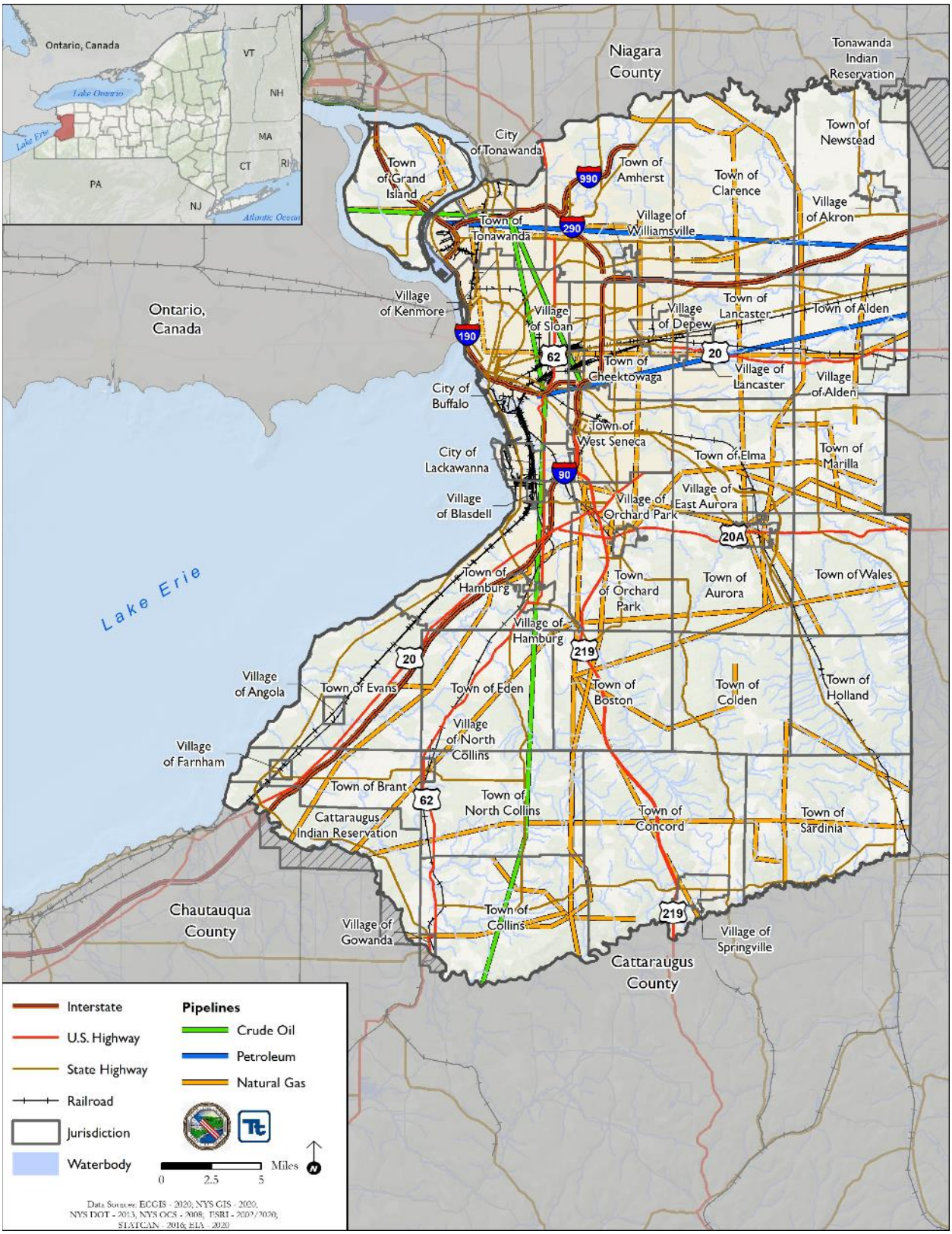
Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.7-3. Surrounding 0.5 Mile of Roadways and Railways in Erie County



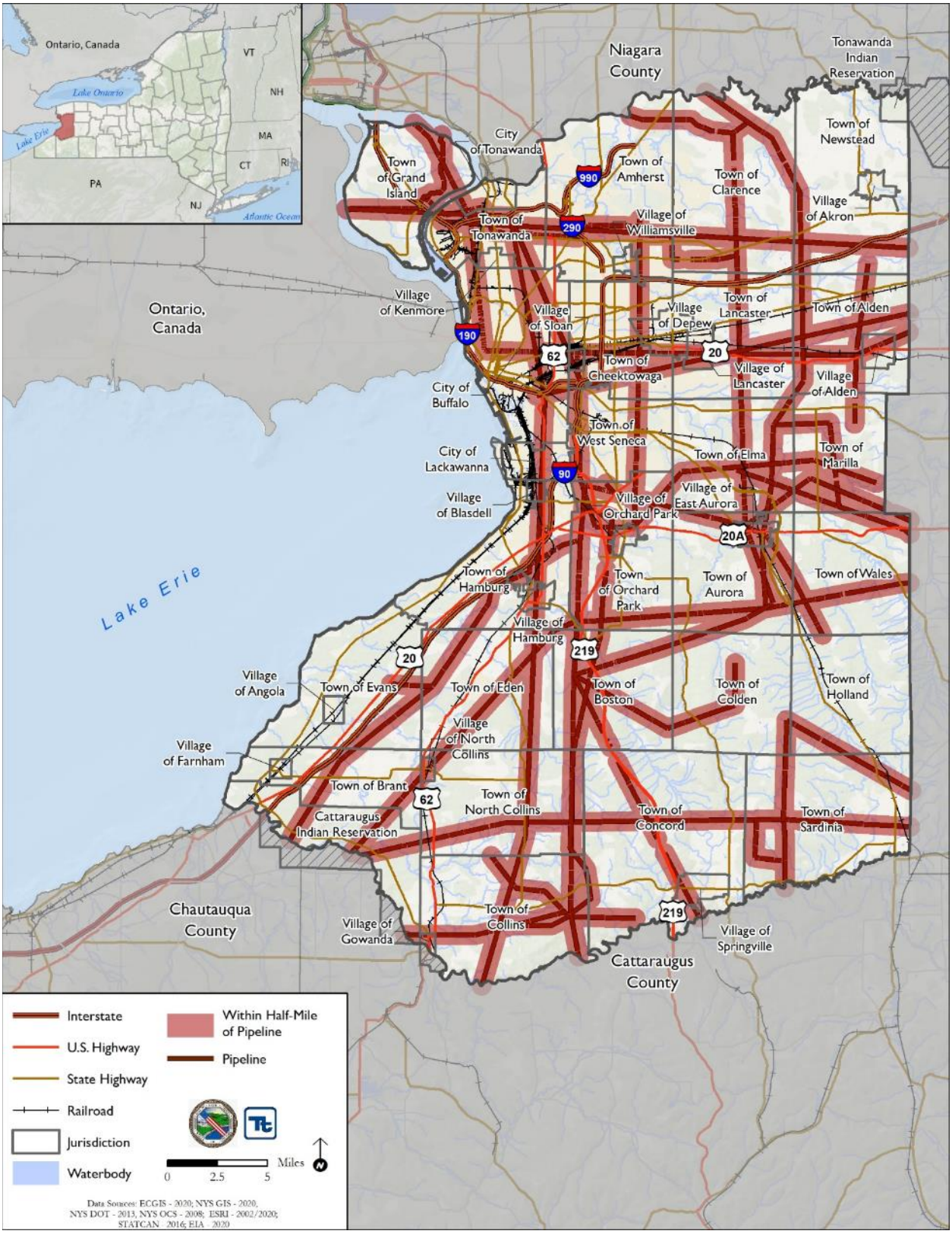
Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.7-4. Gas Transmission and Hazardous Liquid Pipelines in Erie County



Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.7-5. Surrounding 0.5 Mile of Petroleum, Natural Gas, and Crude Oil Pipelines in Erie County



Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Extent

The extent of a hazardous substance release depends on (1) whether the substance is released from a fixed or mobile source, (2) the size of the impacted area, (3) the toxicity and properties of the substance, (4) the duration of the release, and (5) environmental conditions (for example, wind and precipitation, terrain, etc.).

Hazardous substance releases can contaminate air, water, and soils, possibly resulting in death or injuries. Dispersion can occur rapidly when the hazardous substance is transported by water and wind. While often accidental, releases can occur as a result of human carelessness, intentional acts, or natural hazards. Hazardous releases caused by natural hazards are known as secondary events. Hazardous materials can include toxic chemicals, radioactive substances, infectious substances, and hazardous wastes. Such releases can affect nearby populations and contaminate critical or sensitive environmental areas.

The severity or impact of a hazardous substance release, whether accidental or intentional, depends on several potentially mitigating or exacerbating circumstances. Mitigation involves precautionary measures taken in advance to reduce the impact of a release on the surrounding environment. For example, primary and secondary containment, or shielding by sheltering in place, protects people and property from the harmful effects of a hazardous substance release. Exacerbating conditions—characteristics that can enhance or magnify the effects of a hazardous substance release—include the following:

- Weather conditions, which affect the ways in which the hazard occurs and develops
- Micro-meteorological effects of buildings and terrain, which alter dispersion of hazardous materials
- Maintenance failures (such as fire protection and containment features), which can substantially increase damage to a facility and to surrounding buildings

The severity of an incident depends not only on the circumstances described above, but also on the type of substance released and the distance from the incident and related response time of emergency response teams. Areas closest to a release are generally at greatest risk; however, depending on the substance, a release can travel great distances or remain present in the environment for a long period of time (for example, centuries to millennia).

The occurrence of a hazardous materials incident can be sudden and without any warning, such an explosion, or may slowly develop, as in the case of a leaking container for example. Facilities that store extremely hazardous substances are required to notify local officials when an incident occurs. Local emergency responders and emergency management officials would determine whether they need to evacuate the public or to advise to shelter in place. Similar to on-site hazardous substances incidents, the amount of warning time for incidents associated with hazardous substances in transit varies based on the nature and scope of the incident. If an explosion did not occur immediately following an accident, officials may have time to warn adjacent neighborhoods and facilitate appropriate protective actions.

Previous Occurrences and Losses

Hazardous materials incidents, both on site or in transit, occur frequently across the state and in Erie County. These incidents are typically small, localized events. FEMA disaster declarations and other previous events in the county are discussed in the sections below.

FEMA Disaster Declarations

Between 1954 and 2019, New York State was included in two FEMA emergency declarations (EM) related to a hazardous substance incident. On August 7, 1978, and May 21, 1980, emergency declarations (EM-3066 and

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

EM-3080) for New York State were issued related to the Love Canal incident. Erie County was not included in this declaration (FEMA 2020).

Previous Events

The Erie County Local Emergency Planning Committee (LEPC) provided an incident report database with information on hazmat incidents throughout the county. According to this database, 228 incidents occurred in Erie County between 2010 and 2020 (Erie County 2021). For this 2022 HMP update, known hazardous substances incidents that have impacted Erie County between 2010 and 2020 are identified in Table 5.4.7-1. It should be noted that not all events that have occurred in Erie County are included in Table 5.4.7-1 because of the extent of documentation, and the fact that not all sources may have been identified or researched.

Table 5.4.7-1. Hazardous Materials Incidents in Erie County, 2010 to 2020

Municipality	Year											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Akron (V)	0	0	0	0	0	4	0	0	0	0	0	4
Alden (T)	0	0	0	0	0	0	0	0	0	0	1	1
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	0	0	2	0	0	0	0	0	0	2
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	0	0	0	0	1	0	0	0	1
Blasdell (V)	0	0	0	0	1	0	0	0	0	0	0	1
Boston (T)	0	0	0	0	0	0	0	0	0	0	1	1
Brant (T)	0	0	0	0	0	0	0	0	0	0	0	0
Buffalo (C)	0	0	1	1	2	1	9	8	19	5	6	52
Cheektowaga (T)	0	1	3	5	5	7	7	7	8	7	6	56
Clarence (T)	0	1	1	0	0	0	0	1	0	0	1	4
Colden (T)	0	1	0	1	1	0	1	1	0	0	0	5
Collins (T)	0	0	0	0	0	1	2	0	0	0	0	3
Concord (T)	0	0	0	0	1	0	0	0	0	0	0	1
Depew (V)	0	0	0	0	0	2	1	1	0	0	0	4
East Aurora (V)	0	0	0	0	0	0	0	0	0	1	1	2
Eden (T)	0	0	0	0	0	0	0	0	0	0	1	1
Elma (T)	0	0	0	0	0	0	0	0	1	1	0	2
Evans (T)	0	0	3	0	0	2	1	0	1	0	0	7
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	0	0	1	1	0	1	1	0	0	0	4
Hamburg (T)	0	0	3	2	1	0	0	0	0	1	0	7
Hamburg (V)	0	0	0	0	0	1	0	0	0	0	0	1
Holland (T)	1	0	1	0	0	0	0	0	1	1	0	4
Kenmore (V)	0	0	0	0	0	0	1	1	0	0	0	2
Lackawanna (C)	0	0	0	2	0	0	2	0	0	0	0	4
Lancaster (T)	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (V)	0	0	0	0	1	0	0	0	0	0	0	1
Marilla (T)	0	0	0	0	1	0	0	0	0	0	0	1
Newstead (T)	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Municipality	Year											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
North Collins (T)	0	0	0	0	1	1	0	0	0	0	1	3
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	1
Orchard Park (T)	0	0	2	0	6	0	3	1	3	4	3	22
Orchard Park (V)	0	0	1	0	0	0	0	0	0	0	0	1
Sardinia (T)	0	0	0	0	0	0	1	0	1	0	0	2
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	0	1	0	0	0	1	0	2
Tonawanda (C)	0	0	0	0	1	3	0	1	1	0	0	6
Tonawanda (T)	0	0	0	0	4	0	0	0	0	0	0	4
Wales (T)	0	0	0	0	0	0	0	0	0	0	0	0
West Seneca (T)	0	0	2	2	3	2	1	1	2	4	1	18
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**3**	**17**	**14**	**32***	**25**	**30**	**24**	**37**	**25**	**22**	**230**

Sources: Erie County 2021

** One incident occurred on the Cattaraugus Reservation, and is not counted in the municipal totals.*

Erie County categorizes the hazardous materials incidents reflected in Table 5.4.7-1 by the following "call type":

- Overdose/ Ingestion/ Poison – overdoses on medication or narcotics, and/or ingestion of poisons
- Traffic Accidents – Emergency Support Unit (ESU) personnel assisted at the scene of a motor vehicle accident
- EMS Special Operations – hazmat support of EMS units
- CPC Response – Chemical Protective Clothing (CPC) for a City of Buffalo Fire/Hazmat response
- Erie County HMRT – Requests for the Erie County Hazardous Materials Response Team and leaders
- Level I Hazmat – City of Buffalo Fire/Hazmat response
- Spill Response Hazmat – City of Buffalo Fire/Hazmat response to a chemical spill
- Asset Request – any other request of hazmat assets
- Other

Incidents are broken down by response category (call type) in Table 5.4.7-2.

Table 5.4.7-2. Hazardous Materials Incidents by Call Type in Erie County, 2010 to 2020

Call Type	Year											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Overdose/ Ingestion/ Poison	0	0	0	0	0	0	0	0	0	0	1	**1**
Traffic Accidents	0	0	0	0	0	0	1	0	0	0	0	**1**
Asset Request	0	0	0	0	0	0	2	0	0	0	0	**2**
EMS Special Operations	0	0	0	0	0	0	0	1	0	1	0	**2**
CPC Response	0	0	0	0	1	0	0	0	0	0	0	**1**
Erie County HMRT	0	0	1	3	0	3	6	5	5	19	20	**62**
Level I Hazmat	1	0	6	3	7	8	10	7	1	0	1	**44**
Spill Response Hazmat	0	0	3	2	5	2	3	2	5	0	0	**22**
Other	0	3	7	6	19	12	8	9	26	5	0	**95**
Total	**1**	**3**	**17**	**14**	**32**	**25**	**30**	**24**	**37**	**25**	**22**	**230**

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Probability of Future Occurrences

Predicting future hazardous substance incidents in Erie County is difficult. Hazmat incidents can occur at any time and any location in the county. Incidents can occur suddenly without any warning, or develop slowly. Small spills at both fixed sites and in transit occur throughout the year, and the probability of occurrences of these events is high. Risk of a major incident within a given year is small. The county is expected to continue to undergo direct and indirect impacts of hazardous substance incidents annually that may induce secondary hazards such as infrastructure deterioration or failure; potential decreases in water quality and supply; and transportation delays, accidents, and inconveniences.

For the 2022 HMP update, the most up-to-date data were collected to calculate the probability of future occurrence of both in-transit and fixed-site hazardous material incidents for Erie County. Information from the New York State Department of Environmental Conservation (NYS DEC), Pipeline and Hazardous Materials Safety Administration (PHMSA), FEMA and the Federal Railroad Administration (FRA) was used to identify the number of events that occurred between 1975 and 2020. Table 5.4.7-3 below provides statistics based on specific county records. Based on these statistics, Erie County has a 100-percent chance of a hazardous material incident occurring in any given year.

Table 5.4.7-3. Probability of Future Occurrence of Hazardous Material Incidents in Erie County

Hazard Type	Number of Occurrences Between 2010 and 2020	Percent chance of occurrence in any given year
Hazardous Materials Incident	230	100%

Sources: NYS DEC 2020; PHMSA 2018; FRA 2020; FEMA 2020; Erie County 2020

The identified hazards of concern within Erie County were ranked in Section 5.3 of this HMP. The probability of occurrence, or likelihood of an event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Partnership, the probability of occurrence of hazardous materials spills within the county is considered *frequent* (100-percent annual probability, occurring multiple times a year), as presented in Table 5.3-1.

Climate Change Impacts

Non-natural incidents such as hazardous substance incidents are not typically considered vulnerable to climate change; however, climate change may have some impact. Climate change and its impact on hazardous materials sites, particularly waste sites, is a growing concern. According to the National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI) State Climate Summaries for New York State, the mean annual temperature has increased approximately 2 ºF. This temperature change is likely to indirectly affect the county's vulnerability to hazmat incidents.

ClimAID: the Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision-makers with information on the state's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge (New York State Energy Research and Development Authority [NYSERDA] 2011). Each region in New York State, as defined by ClimAID, has attributes that will be affected by climate change. Erie County is part of Region 1, Western New York and the Great Lakes Plain. In Region 1, temperatures are estimated to increase by 4.3 to 6.3 ºF by the 2050s, and 5.7 to 9.6 ºF by the 2080s (baseline of 47.7 ºF, middle range projection). Precipitation totals will increase between 4 and 10 percent by the 2050s and 6 to 13 percent by the 2080s (baseline of 34.0 inches, middle-range projection).

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

As temperatures change, excessive heat on aging structures and/or infrastructure may be adversely affected. Excessive heat on structures or containers containing hazardous materials may alter the material properties.

In addition, hazardous substances stored at fixed locations in the floodplain may experience an increase in flood events due to the projected changes in increased precipitation events, specifically related to magnitude and frequency. Hazardous waste sites near rivers are tentatively at highest risk because extreme storms and higher water levels could release pollution into the environment. Many of these sites were built in locations believed to be removed from potential contamination or exposure-increasing factors. However, development, floodplain boundary change, and an increase in extreme events from climate change are increasing the possibility that water may reach hazardous material and waste sites.

5.4.7.2 Vulnerability Assessment

To understand risk, a community must evaluate the assets that are exposed or vulnerable within the identified hazard area. For the purposes of the assessment, an asset (population, structures, critical facilities, and lifelines) is considered exposed and potentially vulnerable to the hazardous materials hazard if it is located within the hazmat buffer areas. The analysis looked at four different hazardous material buffer areas:

1. 0.5 mile from a major highway
2. 0.5 mile from a rail line
3. 0.5 mile from a pipeline
4. Unique radius for each SARA Title III facility

This section discusses the potential impact of the hazardous materials hazard on the county. Specifically, this section addresses:

- Impacts on (1) life, health, and safety of residents; (2) general building stock; (3) critical facilities; (4) economy; and (5) the environment
- Future changes that may impact vulnerability
- Change in vulnerability as compared to information presented in the 2015 Erie County HMP

Impact on Life, Health, and Safety

Depending on the type and quantity of chemicals released and the weather conditions, an incident can affect larger areas that cross jurisdictional boundaries. When hazardous substances are released in the air, water, or on land, they may contaminate the environment and pose greater danger to human health. Exposure may be either acute or chronic, depending on the nature of the substance and extent of release and contamination.

Potential losses from hazardous substances incidences include human health and life and property resources. These types of incidents can lead to injury, illnesses, and/or death from both the involved persons and those living in the impacted areas. Human safety and welfare can become compromised from negative health effects of poisoning or exposure to toxic substances, fires, or explosions.

An exposure analysis of Erie County estimates that 674,447 persons, 268,216 persons, and 753,056 persons reside within 0.5 mile of roads, 0.5 mile of railways, and within unique buffer areas of SARA sites, respectively (Table 5.4.7-4). Additionally, 166,772 persons, 78,711 persons, 274,963 persons reside within 0.5 mile of crude oil, petroleum, and natural gas pipelines, respectively (Table 5.4.7-5).

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.7-4. Estimated Number of Persons Living Near Hazardous Materials Hazard Areas

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population within 0.5 Mile of Major Roadways		Estimated Population within 0.5 Mile of Major Railways		Estimated Population within SARA Site Hazard Areas	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Akron (V)	2,871	2,187	76.2%	0	0.0%	2,818	98.2%
Alden (T)	7,418	3,619	48.8%	2,055	27.7%	569	7.7%
Alden (V)	2,577	2,219	86.1%	1,999	77.6%	132	5.1%
Amherst (T)	120,276	82,023	68.2%	0	0.0%	120,276	100.0%
Angola (V)	2,373	411	17.3%	2,024	85.3%	161	6.8%
Aurora (T)	7,599	3,613	47.5%	1,041	13.7%	202	2.7%
Blasdell (V)	2,645	2,645	100.0%	2,645	100.0%	2,645	100.0%
Boston (T)	8,042	2,435	30.3%	0	0.0%	49	0.6%
Brant (T)	1,541	824	53.5%	187	12.1%	64	4.1%
Buffalo (C)	256,480	221,701	86.4%	120,939	47.2%	256,457	100.0%
Cheektowaga (T)	73,129	56,677	77.5%	14,392	19.7%	73,152	100.0%
Clarence (T)	32,440	13,252	40.8%	0	0.0%	10,190	31.4%
Colden (T)	3,328	1,045	31.4%	0	0.0%	133	4.0%
Collins (T)	5,418	2,946	54.4%	1,541	28.4%	450	8.3%
Concord (T)	4,186	1,570	37.5%	0	0.0%	45	1.1%
Depew (V)	15,102	12,195	80.8%	9,800	64.9%	14,673	97.2%
East Aurora (V)	6,184	5,867	94.9%	3,589	58.0%	1,756	28.4%
Eden (T)	7,631	3,324	43.6%	2,171	28.4%	5,107	66.9%
Elma (T)	11,732	5,618	47.9%	2,557	21.8%	4,509	38.4%
Evans (T)	13,782	6,522	47.3%	1,350	9.8%	131	1.0%
Farnham (V)	459	459	100.0%	432	94.1%	0	0.0%
Gowanda (V)	1,043	1,043	100.0%	1,040	99.7%	0	0.0%
Grand Island (T)	21,047	9,609	45.7%	0	0.0%	21,047	100.0%
Hamburg (T)	45,985	35,048	76.2%	25,626	55.7%	33,148	72.1%
Hamburg (V)	9,636	9,105	94.5%	3,748	38.9%	2,855	29.6%
Holland (T)	3,355	1,349	40.2%	1,105	32.9%	396	11.8%
Kenmore (V)	15,132	12,791	84.5%	3,763	24.9%	15,135	100.0%
Lackawanna (C)	17,831	14,174	79.5%	16,599	93.1%	17,831	100.0%
Lancaster (T)	27,625	11,820	42.8%	4,579	16.6%	10,075	36.5%
Lancaster (V)	10,144	6,566	64.7%	4,811	47.4%	8,615	84.9%
Marilla (T)	5,378	2,465	45.8%	0	0.0%	45	0.8%
Newstead (T)	5,804	2,703	46.6%	0	0.0%	1,572	27.1%
North Collins (T)	2,130	865	40.6%	312	14.6%	65	3.0%
North Collins (V)	1,370	1,370	100.0%	1,370	100.0%	113	8.2%
Orchard Park (T)	26,361	17,046	64.7%	2,920	11.1%	17,984	68.2%
Orchard Park (V)	3,148	2,970	94.4%	614	19.5%	3,148	100.0%
Sardinia (T)	2,780	1,101	39.6%	365	13.1%	737	26.5%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population within 0.5 Mile of Major Roadways		Estimated Population within 0.5 Mile of Major Railways		Estimated Population within SARA Site Hazard Areas	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Sloan (V)	3,562	3,351	94.1%	3,562	100.0%	3,562	100.0%
Springville (V)	4,298	3,857	89.8%	0	0.0%	776	18.1%
Tonawanda (C)	14,830	13,572	91.5%	9,384	63.3%	14,830	100.0%
Tonawanda (T)	57,027	44,495	78.0%	8,113	14.2%	57,024	100.0%
Wales (T)	3,020	1,369	45.3%	357	11.8%	0	0.0%
West Seneca (T)	45,344	41,469	91.5%	13,229	29.2%	45,344	100.0%
Williamsville (V)	5,233	5,159	98.6%	0	0.0%	5,233	100.0%
Erie County Total	**917,296**	**674,447**	**73.5%**	**268,216**	**29.2%**	**753,056**	**82.1%**

Source: Erie County Geographic Information System (GIS) 2020; RSMeans 2020; New York State Geographic Information System (NYSGIS) 2020; NYSDOT 2013
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-5 Estimated Number of Persons Living Near Pipeline Hazard Areas

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population within 0.5 Mile of Pipelines					
		Crude Oil Pipelines		Petroleum Pipelines		Natural Gas Pipelines	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Akron (V)	2,871	0	0.0%	0	0.0%	0	0.0%
Alden (T)	7,418	0	0.0%	1,233	16.6%	3,548	47.8%
Alden (V)	2,577	0	0.0%	0	0.0%	2,037	79.0%
Amherst (T)	120,276	0	0.0%	21,747	18.1%	30,306	25.2%
Angola (V)	2,373	0	0.0%	0	0.0%	0	0.0%
Aurora (T)	7,599	0	0.0%	0	0.0%	3,820	50.3%
Blasdell (V)	2,645	2,642	99.9%	0	0.0%	0	0.0%
Boston (T)	8,042	0	0.0%	0	0.0%	5,430	67.5%
Brant (T)	1,541	0	0.0%	0	0.0%	400	26.0%
Buffalo (C)	256,480	102,718	40.0%	9,848	3.8%	63,075	24.6%
Cheektowaga (T)	73,129	4,360	6.0%	10,058	13.8%	19,367	26.5%
Clarence (T)	32,440	0	0.0%	6,595	20.3%	11,124	34.3%
Colden (T)	3,328	0	0.0%	0	0.0%	817	24.5%
Collins (T)	5,418	615	11.3%	0	0.0%	1,312	24.2%
Concord (T)	4,186	0	0.0%	0	0.0%	1,147	27.4%
Depew (V)	15,102	0	0.0%	118	0.8%	4,889	32.4%
East Aurora (V)	6,184	0	0.0%	0	0.0%	5,830	94.3%
Eden (T)	7,631	1,292	16.9%	0	0.0%	1,755	23.0%
Elma (T)	11,732	0	0.0%	0	0.0%	6,530	55.7%
Evans (T)	13,782	0	0.0%	0	0.0%	358	2.6%
Farnham (V)	459	0	0.0%	0	0.0%	0	0.0%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	American Community Survey (2014-2018) Population	Estimated Population within 0.5 Mile of Pipelines					
		Crude Oil Pipelines		Petroleum Pipelines		Natural Gas Pipelines	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Gowanda (V)	1,043	0	0.0%	0	0.0%	709	68.0%
Grand Island (T)	21,047	2,962	14.1%	0	0.0%	6,413	30.5%
Hamburg (T)	45,985	8,996	19.6%	0	0.0%	6,841	14.9%
Hamburg (V)	9,636	4,339	45.0%	0	0.0%	2,262	23.5%
Holland (T)	3,355	0	0.0%	0	0.0%	218	6.5%
Kenmore (V)	15,132	2,134	14.1%	0	0.0%	2,185	14.4%
Lackawanna (C)	17,831	8,179	45.9%	0	0.0%	605	3.4%
Lancaster (T)	27,625	0	0.0%	4,175	15.1%	6,120	22.2%
Lancaster (V)	10,144	0	0.0%	6,235	61.5%	5,651	55.7%
Marilla (T)	5,378	0	0.0%	0	0.0%	3,617	67.3%
Newstead (T)	5,804	0	0.0%	643	11.1%	542	9.3%
North Collins (T)	2,130	346	16.3%	0	0.0%	631	29.6%
North Collins (V)	1,370	0	0.0%	0	0.0%	1,339	97.7%
Orchard Park (T)	26,361	0	0.0%	0	0.0%	17,600	66.8%
Orchard Park (V)	3,148	0	0.0%	0	0.0%	2,155	68.5%
Sardinia (T)	2,780	0	0.0%	0	0.0%	924	33.2%
Sloan (V)	3,562	2,679	75.2%	0	0.0%	3,562	100.0%
Springville (V)	4,298	0	0.0%	0	0.0%	991	23.1%
Tonawanda (C)	14,830	2,734	18.4%	2	0.0%	4,397	29.7%
Tonawanda (T)	57,027	22,774	39.9%	16,934	29.7%	22,481	39.4%
Wales (T)	3,020	0	0.0%	0	0.0%	790	26.2%
West Seneca (T)	45,344	3	0.0%	1,123	2.5%	20,819	45.9%
Williamsville (V)	5,233	0	0.0%	0	0.0%	2,366	45.2%
Erie County Total	**917,296**	**166,772**	**18.2%**	**78,711**	**8.6%**	**274,963**	**30.0%**

Source: Erie County GIS 2020; American Community Survey 2018; U.S. Energy Information Administration (EIA) 2020
% = Percent; C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Impact on General Building Stock

Potential losses to the general building stock caused by a hazardous substance releases, whether in transit or at fixed sites, is difficult to quantify. The degree of damage depends on the scale of the incident. Potential losses may include inaccessibility, loss of service, contamination, and/or potential structural and content losses if an explosion occurs. The closure of waterways, railroads, airports, and highways as a result of a hazardous substance incident has the potential to impact the ability to deliver goods and services efficiently. Potential impacts may be local, regional, or statewide depending on the magnitude of the event and level of service disruptions.

An exposure analysis estimates the county contains 104,423 buildings (worth approximately $79.6 billion), 260,912 buildings (worth approximately $171.1 billion), and 280,200 buildings (worth approximately $181.1 billion) within 0.5 mile of railways, 0.5 mile of major roadways, and within unique buffer areas of SARA sites, respectively (Table 5.4.7-6 through Table 5.4.7-11).

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

To estimate the buildings exposed to a pipeline event, the 0.5-mile buffer areas were overlaid upon the building level. The replacement cost value of the structures with centers in the buffer areas were totaled (Table 5.4.7-9 through Table 5.4.7-11). The City of Buffalo has the greatest number of buildings and the greatest replacement cost values that would be impacted by a pipeline event. However, if a pipeline release were to occur, the incident would not be located along all pipelines in the county, but instead only a section of the total pipeline exposure area. Therefore, the total exposure does not represent a complete vulnerability, should a hazard event occur.

Table 5.4.7-6. Estimated Number of Buildings and Replacement Cost Value Within 0.5 Mile of Rail Lines

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Railways			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%
Alden (T)	3,400	$1,748,473,245	1,050	30.9%	$758,187,448	43.4%
Alden (V)	1,102	$602,655,574	869	78.9%	$507,215,085	84.2%
Amherst (T)	38,528	$27,372,255,690	0	0.0%	$0	0.0%
Angola (V)	874	$525,704,230	754	86.3%	$487,067,288	92.7%
Aurora (T)	4,280	$2,496,885,036	600	14.0%	$341,669,281	13.7%
Blasdell (V)	1,026	$638,571,953	1,026	100.0%	$638,571,953	100.0%
Boston (T)	4,040	$1,702,475,276	0	0.0%	$0	0.0%
Brant (T)	1,325	$657,594,060	147	11.1%	$50,151,407	7.6%
Buffalo (C)	83,471	$58,603,851,634	40,162	48.1%	$33,038,200,026	56.4%
Cheektowaga (T)	30,938	$17,530,893,277	6,402	20.7%	$5,736,803,076	32.7%
Clarence (T)	13,660	$9,866,246,863	0	0.0%	$0	0.0%
Colden (T)	2,110	$854,417,381	0	0.0%	$0	0.0%
Collins (T)	2,521	$1,189,158,504	693	27.5%	$376,441,572	31.7%
Concord (T)	3,245	$1,338,570,261	0	0.0%	$0	0.0%
Depew (V)	6,532	$3,841,823,815	4,324	66.2%	$2,867,777,990	74.6%
East Aurora (V)	2,441	$1,723,816,550	1,426	58.4%	$1,085,829,661	63.0%
Eden (T)	4,290	$2,180,455,513	1,289	30.0%	$767,271,240	35.2%
Elma (T)	6,093	$3,775,039,302	1,341	22.0%	$937,250,294	24.8%
Evans (T)	7,952	$3,335,060,692	754	9.5%	$378,356,112	11.3%
Farnham (V)	189	$87,990,422	177	93.7%	$84,420,637	95.9%
Gowanda (V)	396	$249,516,940	394	99.5%	$237,733,984	95.3%
Grand Island (T)	8,426	$4,674,517,058	0	0.0%	$0	0.0%
Hamburg (T)	19,130	$11,911,210,828	10,670	55.8%	$6,638,526,441	55.7%
Hamburg (V)	3,794	$2,005,172,252	1,515	39.9%	$997,717,311	49.8%
Holland (T)	2,182	$1,151,194,342	852	39.0%	$604,727,763	52.5%
Kenmore (V)	6,017	$2,305,529,001	1,514	25.2%	$528,112,903	22.9%
Lackawanna (C)	6,751	$4,030,622,400	6,257	92.7%	$3,762,669,594	93.4%
Lancaster (T)	10,973	$6,845,493,469	1,908	17.4%	$1,713,243,273	25.0%
Lancaster (V)	4,323	$2,217,331,122	2,159	49.9%	$1,530,468,284	69.0%
Marilla (T)	2,956	$1,099,846,031	0	0.0%	$0	0.0%
Newstead (T)	4,202	$2,181,758,974	0	0.0%	$0	0.0%
North Collins (T)	1,898	$889,517,676	287	15.1%	$189,580,653	21.3%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Railways			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
North Collins (V)	551	$383,968,909	551	100.0%	$383,968,909	100.0%
Orchard Park (T)	10,748	$8,174,650,530	1,318	12.3%	$1,402,261,339	17.2%
Orchard Park (V)	1,211	$867,347,745	253	20.9%	$269,282,093	31.0%
Sardinia (T)	2,184	$1,068,523,829	344	15.8%	$228,594,964	21.4%
Sloan (V)	1,674	$634,998,253	1,674	100.0%	$634,998,253	100.0%
Springville (V)	1,816	$1,354,905,864	0	0.0%	$0	0.0%
Tonawanda (C)	6,452	$3,291,492,557	4,141	64.2%	$2,338,086,236	71.0%
Tonawanda (T)	23,999	$14,694,684,404	3,938	16.4%	$6,540,994,786	44.5%
Wales (T)	1,923	$833,853,270	220	11.4%	$81,565,915	9.8%
West Seneca (T)	17,970	$9,583,482,689	5,414	30.1%	$3,511,923,984	36.6%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%
Erie County Total	**360,925**	**$222,515,035,436**	**104,423**	**28.9%**	**$79,649,669,753**	**35.8%**

Source: Erie County GIS 2020; RSMeans 2020; NYSDOT 2013
% = Percent; C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-7. Estimated Number of Buildings and Replacement Cost Value Within 0.5 Mile of a Major Roadway

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Major Roadways			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	981	76.9%	$631,814,360	72.9%
Alden (T)	3,400	$1,748,473,245	1,721	50.6%	$1,103,436,931	63.1%
Alden (V)	1,102	$602,655,574	957	86.8%	$551,576,076	91.5%
Amherst (T)	38,528	$27,372,255,690	26,616	69.1%	$19,464,550,092	71.1%
Angola (V)	874	$525,704,230	141	16.1%	$44,568,741	8.5%
Aurora (T)	4,280	$2,496,885,036	2,126	49.7%	$1,342,361,485	53.8%
Blasdell (V)	1,026	$638,571,953	1,024	99.8%	$635,374,909	99.5%
Boston (T)	4,040	$1,702,475,276	1,218	30.1%	$504,790,125	29.7%
Brant (T)	1,325	$657,594,060	713	53.8%	$380,834,864	57.9%
Buffalo (C)	83,471	$58,603,851,634	72,479	86.8%	$52,068,584,784	88.8%
Cheektowaga (T)	30,938	$17,530,893,277	24,177	78.1%	$14,925,442,819	85.1%
Clarence (T)	13,660	$9,866,246,863	5,847	42.8%	$4,480,836,220	45.4%
Colden (T)	2,110	$854,417,381	666	31.6%	$290,066,664	33.9%
Collins (T)	2,521	$1,189,158,504	1,344	53.3%	$638,415,886	53.7%
Concord (T)	3,245	$1,338,570,261	1,256	38.7%	$580,549,495	43.4%
Depew (V)	6,532	$3,841,823,815	5,312	81.3%	$3,323,311,360	86.5%
East Aurora (V)	2,441	$1,723,816,550	2,318	95.0%	$1,665,512,707	96.6%
Eden (T)	4,290	$2,180,455,513	1,932	45.0%	$1,065,245,376	48.9%
Elma (T)	6,093	$3,775,039,302	3,030	49.7%	$2,243,069,526	59.4%
Evans (T)	7,952	$3,335,060,692	3,751	47.2%	$1,656,844,660	49.7%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Major Roadways			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Farnham (V)	189	$87,990,422	189	100.0%	$87,990,422	100.0%
Gowanda (V)	396	$249,516,940	396	100.0%	$249,516,940	100.0%
Grand Island (T)	8,426	$4,674,517,058	3,962	47.0%	$2,383,829,685	51.0%
Hamburg (T)	19,130	$11,911,210,828	14,696	76.8%	$9,583,144,122	80.5%
Hamburg (V)	3,794	$2,005,172,252	3,596	94.8%	$1,937,424,766	96.6%
Holland (T)	2,182	$1,151,194,342	996	45.6%	$675,122,345	58.6%
Kenmore (V)	6,017	$2,305,529,001	5,106	84.9%	$1,981,833,276	86.0%
Lackawanna (C)	6,751	$4,030,622,400	5,343	79.1%	$3,400,764,042	84.4%
Lancaster (T)	10,973	$6,845,493,469	4,932	44.9%	$4,140,423,585	60.5%
Lancaster (V)	4,323	$2,217,331,122	2,847	65.9%	$1,701,504,152	76.7%
Marilla (T)	2,956	$1,099,846,031	1,362	46.1%	$542,156,034	49.3%
Newstead (T)	4,202	$2,181,758,974	1,904	45.3%	$1,015,027,186	46.5%
North Collins (T)	1,898	$889,517,676	806	42.5%	$438,200,361	49.3%
North Collins (V)	551	$383,968,909	551	100.0%	$383,968,909	100.0%
Orchard Park (T)	10,748	$8,174,650,530	7,145	66.5%	$6,100,683,897	74.6%
Orchard Park (V)	1,211	$867,347,745	1,150	95.0%	$827,985,955	95.5%
Sardinia (T)	2,184	$1,068,523,829	936	42.9%	$543,904,709	50.9%
Sloan (V)	1,674	$634,998,253	1,561	93.2%	$549,853,309	86.6%
Springville (V)	1,816	$1,354,905,864	1,645	90.6%	$1,212,199,021	89.5%
Tonawanda (C)	6,452	$3,291,492,557	5,940	92.1%	$3,150,107,337	95.7%
Tonawanda (T)	23,999	$14,694,684,404	18,844	78.5%	$12,327,012,971	83.9%
Wales (T)	1,923	$833,853,270	921	47.9%	$453,474,385	54.4%
West Seneca (T)	17,970	$9,583,482,689	16,445	91.5%	$8,656,494,214	90.3%
Williamsville (V)	2,057	$1,126,868,443	2,030	98.7%	$1,119,391,017	99.3%
Erie County Total	**360,925**	**$222,515,035,436**	**260,912**	**72.3%**	**$171,059,199,718**	**76.9%**

Source: Erie County GIS 2020; RSMeans 2020; NYSGIS 2020
% = Percent; C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-8. Estimated Number of Buildings and Replacement Cost Value Within Unique Buffer Areas of Hazardous Materials Facilities

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within Sara Site Hazard Areas			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	1,254	98.4%	$856,110,300	98.8%
Alden (T)	3,400	$1,748,473,245	311	9.1%	$322,146,358	18.4%
Alden (V)	1,102	$602,655,574	62	5.6%	$31,084,596	5.2%
Amherst (T)	38,528	$27,372,255,690	38,528	100.0%	$27,372,255,690	100.0%
Angola (V)	874	$525,704,230	73	8.4%	$50,466,949	9.6%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within Sara Site Hazard Areas			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Aurora (T)	4,280	$2,496,885,036	122	2.9%	$53,349,984	2.1%
Blasdell (V)	1,026	$638,571,953	1,026	100.0%	$638,571,953	100.0%
Boston (T)	4,040	$1,702,475,276	32	0.8%	$27,386,670	1.6%
Brant (T)	1,325	$657,594,060	52	3.9%	$24,929,586	3.8%
Buffalo (C)	83,471	$58,603,851,634	83,464	100.0%	$58,601,845,652	100.0%
Cheektowaga (T)	30,938	$17,530,893,277	30,945	100.0%	$17,532,899,259	100.0%
Clarence (T)	13,660	$9,866,246,863	4,397	32.2%	$3,611,520,735	36.6%
Colden (T)	2,110	$854,417,381	80	3.8%	$36,163,543	4.2%
Collins (T)	2,521	$1,189,158,504	202	8.0%	$100,884,120	8.5%
Concord (T)	3,245	$1,338,570,261	56	1.7%	$56,332,089	4.2%
Depew (V)	6,532	$3,841,823,815	6,361	97.4%	$3,783,955,539	98.5%
East Aurora (V)	2,441	$1,723,816,550	741	30.4%	$537,678,534	31.2%
Eden (T)	4,290	$2,180,455,513	2,833	66.0%	$1,493,885,599	68.5%
Elma (T)	6,093	$3,775,039,302	2,448	40.2%	$1,897,152,089	50.3%
Evans (T)	7,952	$3,335,060,692	72	0.9%	$27,350,442	0.8%
Farnham (V)	189	$87,990,422	0	0.0%	$0	0.0%
Gowanda (V)	396	$249,516,940	0	0.0%	$0	0.0%
Grand Island (T)	8,426	$4,674,517,058	8,426	100.0%	$4,674,517,058	100.0%
Hamburg (T)	19,130	$11,911,210,828	13,903	72.7%	$9,400,754,558	78.9%
Hamburg (V)	3,794	$2,005,172,252	1,095	28.9%	$647,579,398	32.3%
Holland (T)	2,182	$1,151,194,342	275	12.6%	$304,070,648	26.4%
Kenmore (V)	6,017	$2,305,529,001	6,018	100.0%	$2,305,727,486	100.0%
Lackawanna (C)	6,751	$4,030,622,400	6,751	100.0%	$4,030,622,400	100.0%
Lancaster (T)	10,973	$6,845,493,469	4,075	37.1%	$3,120,141,431	45.6%
Lancaster (V)	4,323	$2,217,331,122	3,654	84.5%	$1,889,015,874	85.2%
Marilla (T)	2,956	$1,099,846,031	23	0.8%	$2,851,173	0.3%
Newstead (T)	4,202	$2,181,758,974	1,006	23.9%	$609,405,005	27.9%
North Collins (T)	1,898	$889,517,676	87	4.6%	$63,522,898	7.1%
North Collins (V)	551	$383,968,909	44	8.0%	$56,847,949	14.8%
Orchard Park (T)	10,748	$8,174,650,530	7,424	69.1%	$5,987,804,626	73.2%
Orchard Park (V)	1,211	$867,347,745	1,211	100.0%	$867,347,746	100.0%
Sardinia (T)	2,184	$1,068,523,829	637	29.2%	$436,540,153	40.9%
Sloan (V)	1,674	$634,998,253	1,674	100.0%	$634,998,253	100.0%
Springville (V)	1,816	$1,354,905,864	361	19.9%	$340,742,637	25.1%
Tonawanda (C)	6,452	$3,291,492,557	6,452	100.0%	$3,291,492,557	100.0%
Tonawanda (T)	23,999	$14,694,684,404	23,998	100.0%	$14,694,485,918	100.0%
Wales (T)	1,923	$833,853,270	0	0.0%	$0	0.0%
West Seneca (T)	17,970	$9,583,482,689	17,970	100.0%	$9,583,482,689	100.0%
Williamsville (V)	2,057	$1,126,868,443	2,057	100.0%	$1,126,868,443	100.0%
Erie County Total	**360,925**	**$222,515,035,436**	**280,200**	**77.6%**	**$181,124,788,589**	**81.4%**

Source: Erie County GIS 2020; RSMeans 2020
% = Percent; C = City; T = Town; V = Village

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-9 Estimated Number of Buildings and Replacement Cost Value Within 0.5 Mile of Crude Oil Pipelines

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Crude Oil Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%
Alden (T)	3,400	$1,748,473,245	0	0.0%	$0	0.0%
Alden (V)	1,102	$602,655,574	0	0.0%	$0	0.0%
Amherst (T)	38,528	$27,372,255,690	0	0.0%	$0	0.0%
Angola (V)	874	$525,704,230	0	0.0%	$0	0.0%
Aurora (T)	4,280	$2,496,885,036	0	0.0%	$0	0.0%
Blasdell (V)	1,026	$638,571,953	1,010	98.4%	$515,295,324	80.7%
Boston (T)	4,040	$1,702,475,276	0	0.0%	$0	0.0%
Brant (T)	1,325	$657,594,060	0	0.0%	$0	0.0%
Buffalo (C)	83,471	$58,603,851,634	32,965	39.5%	$19,743,832,915	33.7%
Cheektowaga (T)	30,938	$17,530,893,277	1,876	6.1%	$730,595,365	4.2%
Clarence (T)	13,660	$9,866,246,863	0	0.0%	$0	0.0%
Colden (T)	2,110	$854,417,381	0	0.0%	$0	0.0%
Collins (T)	2,521	$1,189,158,504	281	11.1%	$116,513,765	9.8%
Concord (T)	3,245	$1,338,570,261	0	0.0%	$0	0.0%
Depew (V)	6,532	$3,841,823,815	0	0.0%	$0	0.0%
East Aurora (V)	2,441	$1,723,816,550	0	0.0%	$0	0.0%
Eden (T)	4,290	$2,180,455,513	716	16.7%	$312,319,015	14.3%
Elma (T)	6,093	$3,775,039,302	0	0.0%	$0	0.0%
Evans (T)	7,952	$3,335,060,692	0	0.0%	$0	0.0%
Farnham (V)	189	$87,990,422	0	0.0%	$0	0.0%
Gowanda (V)	396	$249,516,940	0	0.0%	$0	0.0%
Grand Island (T)	8,426	$4,674,517,058	1,150	13.6%	$579,348,646	12.4%
Hamburg (T)	19,130	$11,911,210,828	3,786	19.8%	$2,363,355,745	19.8%
Hamburg (V)	3,794	$2,005,172,252	1,761	46.4%	$1,066,837,375	53.2%
Holland (T)	2,182	$1,151,194,342	0	0.0%	$0	0.0%
Kenmore (V)	6,017	$2,305,529,001	830	13.8%	$294,610,199	12.8%
Lackawanna (C)	6,751	$4,030,622,400	3,057	45.3%	$1,353,101,411	33.6%
Lancaster (T)	10,973	$6,845,493,469	0	0.0%	$0	0.0%
Lancaster (V)	4,323	$2,217,331,122	0	0.0%	$0	0.0%
Marilla (T)	2,956	$1,099,846,031	0	0.0%	$0	0.0%
Newstead (T)	4,202	$2,181,758,974	0	0.0%	$0	0.0%
North Collins (T)	1,898	$889,517,676	324	17.1%	$172,400,358	19.4%
North Collins (V)	551	$383,968,909	0	0.0%	$0	0.0%
Orchard Park (T)	10,748	$8,174,650,530	0	0.0%	$0	0.0%
Orchard Park (V)	1,211	$867,347,745	0	0.0%	$0	0.0%
Sardinia (T)	2,184	$1,068,523,829	0	0.0%	$0	0.0%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Crude Oil Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Sloan (V)	1,674	$634,998,253	1,272	76.0%	$498,627,197	78.5%
Springville (V)	1,816	$1,354,905,864	0	0.0%	$0	0.0%
Tonawanda (C)	6,452	$3,291,492,557	1,146	17.8%	$481,296,070	14.6%
Tonawanda (T)	23,999	$14,694,684,404	9,480	39.5%	$4,569,031,716	31.1%
Wales (T)	1,923	$833,853,270	0	0.0%	$0	0.0%
West Seneca (T)	17,970	$9,583,482,689	11	0.1%	$7,382,156	0.1%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%
Erie County Total	**360,925**	**$222,515,035,436**	**59,665**	**16.5%**	**$32,804,547,257**	**14.7%**

Source: Erie County GIS 2020; RSMeans 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-10 Estimated Number of Buildings and Replacement Cost Value Within 0.5 Mile of Petroleum Pipelines

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Petroleum Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%
Alden (T)	3,400	$1,748,473,245	541	15.9%	$214,210,171	12.3%
Alden (V)	1,102	$602,655,574	0	0.0%	$0	0.0%
Amherst (T)	38,528	$27,372,255,690	6,911	17.9%	$4,245,009,050	15.5%
Angola (V)	874	$525,704,230	0	0.0%	$0	0.0%
Aurora (T)	4,280	$2,496,885,036	0	0.0%	$0	0.0%
Blasdell (V)	1,026	$638,571,953	0	0.0%	$0	0.0%
Boston (T)	4,040	$1,702,475,276	0	0.0%	$0	0.0%
Brant (T)	1,325	$657,594,060	0	0.0%	$0	0.0%
Buffalo (C)	83,471	$58,603,851,634	3,270	3.9%	$2,512,654,192	4.3%
Cheektowaga (T)	30,938	$17,530,893,277	4,230	13.7%	$2,028,027,148	11.6%
Clarence (T)	13,660	$9,866,246,863	2,846	20.8%	$2,203,577,975	22.3%
Colden (T)	2,110	$854,417,381	0	0.0%	$0	0.0%
Collins (T)	2,521	$1,189,158,504	0	0.0%	$0	0.0%
Concord (T)	3,245	$1,338,570,261	0	0.0%	$0	0.0%
Depew (V)	6,532	$3,841,823,815	53	0.8%	$96,369,116	2.5%
East Aurora (V)	2,441	$1,723,816,550	0	0.0%	$0	0.0%
Eden (T)	4,290	$2,180,455,513	0	0.0%	$0	0.0%
Elma (T)	6,093	$3,775,039,302	0	0.0%	$0	0.0%
Evans (T)	7,952	$3,335,060,692	0	0.0%	$0	0.0%
Farnham (V)	189	$87,990,422	0	0.0%	$0	0.0%
Gowanda (V)	396	$249,516,940	0	0.0%	$0	0.0%
Grand Island (T)	8,426	$4,674,517,058	0	0.0%	$0	0.0%
Hamburg (T)	19,130	$11,911,210,828	0	0.0%	$0	0.0%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Petroleum Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Hamburg (V)	3,794	$2,005,172,252	0	0.0%	$0	0.0%
Holland (T)	2,182	$1,151,194,342	0	0.0%	$0	0.0%
Kenmore (V)	6,017	$2,305,529,001	0	0.0%	$0	0.0%
Lackawanna (C)	6,751	$4,030,622,400	0	0.0%	$0	0.0%
Lancaster (T)	10,973	$6,845,493,469	1,659	15.1%	$869,577,152	12.7%
Lancaster (V)	4,323	$2,217,331,122	2,541	58.8%	$882,055,193	39.8%
Marilla (T)	2,956	$1,099,846,031	0	0.0%	$0	0.0%
Newstead (T)	4,202	$2,181,758,974	406	9.7%	$235,487,860	10.8%
North Collins (T)	1,898	$889,517,676	0	0.0%	$0	0.0%
North Collins (V)	551	$383,968,909	0	0.0%	$0	0.0%
Orchard Park (T)	10,748	$8,174,650,530	0	0.0%	$0	0.0%
Orchard Park (V)	1,211	$867,347,745	0	0.0%	$0	0.0%
Sardinia (T)	2,184	$1,068,523,829	0	0.0%	$0	0.0%
Sloan (V)	1,674	$634,998,253	0	0.0%	$0	0.0%
Springville (V)	1,816	$1,354,905,864	0	0.0%	$0	0.0%
Tonawanda (C)	6,452	$3,291,492,557	1	0.0%	$239,253	0.0%
Tonawanda (T)	23,999	$14,694,684,404	7,093	29.6%	$3,909,137,213	26.6%
Wales (T)	1,923	$833,853,270	0	0.0%	$0	0.0%
West Seneca (T)	17,970	$9,583,482,689	497	2.8%	$286,986,258	3.0%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%
Erie County Total	**360,925**	**$222,515,035,436**	**30,048**	**8.3%**	**$17,483,330,582**	**7.9%**

Source: Erie County GIS 2020; RSMeans 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-11 Estimated Number of Buildings and Replacement Cost Value Within 0.5 Mile of Natural Gas Pipelines

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Natural Gas Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%
Alden (T)	3,400	$1,748,473,245	1,628	47.9%	$800,591,522	45.8%
Alden (V)	1,102	$602,655,574	881	79.9%	$483,752,721	80.3%
Amherst (T)	38,528	$27,372,255,690	9,769	25.4%	$6,866,752,175	25.1%
Angola (V)	874	$525,704,230	0	0.0%	$0	0.0%
Aurora (T)	4,280	$2,496,885,036	2,169	50.7%	$1,284,869,860	51.5%
Blasdell (V)	1,026	$638,571,953	0	0.0%	$0	0.0%
Boston (T)	4,040	$1,702,475,276	2,722	67.4%	$1,136,966,332	66.8%
Brant (T)	1,325	$657,594,060	331	25.0%	$138,725,461	21.1%
Buffalo (C)	83,471	$58,603,851,634	20,795	24.9%	$15,812,465,859	27.0%
Cheektowaga (T)	30,938	$17,530,893,277	8,293	26.8%	$5,346,226,742	30.5%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock within 0.5 Mile of Natural Gas Pipelines			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Clarence (T)	13,660	$9,866,246,863	4,818	35.3%	$3,861,773,244	39.1%
Colden (T)	2,110	$854,417,381	535	25.4%	$217,819,652	25.5%
Collins (T)	2,521	$1,189,158,504	671	26.6%	$279,944,898	23.5%
Concord (T)	3,245	$1,338,570,261	885	27.3%	$380,959,007	28.5%
Depew (V)	6,532	$3,841,823,815	2,206	33.8%	$1,383,823,468	36.0%
East Aurora (V)	2,441	$1,723,816,550	2,293	93.9%	$1,526,119,791	88.5%
Eden (T)	4,290	$2,180,455,513	966	22.5%	$394,686,055	18.1%
Elma (T)	6,093	$3,775,039,302	3,338	54.8%	$1,977,130,117	52.4%
Evans (T)	7,952	$3,335,060,692	240	3.0%	$122,938,304	3.7%
Farnham (V)	189	$87,990,422	0	0.0%	$0	0.0%
Gowanda (V)	396	$249,516,940	261	65.9%	$164,040,677	65.7%
Grand Island (T)	8,426	$4,674,517,058	2,496	29.6%	$1,381,374,491	29.6%
Hamburg (T)	19,130	$11,911,210,828	2,808	14.7%	$1,556,901,425	13.1%
Hamburg (V)	3,794	$2,005,172,252	855	22.5%	$421,897,711	21.0%
Holland (T)	2,182	$1,151,194,342	144	6.6%	$70,220,518	6.1%
Kenmore (V)	6,017	$2,305,529,001	879	14.6%	$270,970,029	11.8%
Lackawanna (C)	6,751	$4,030,622,400	215	3.2%	$86,506,255	2.1%
Lancaster (T)	10,973	$6,845,493,469	2,490	22.7%	$1,866,540,491	27.3%
Lancaster (V)	4,323	$2,217,331,122	2,355	54.5%	$999,328,957	45.1%
Marilla (T)	2,956	$1,099,846,031	1,974	66.8%	$713,317,624	64.9%
Newstead (T)	4,202	$2,181,758,974	356	8.5%	$349,736,483	16.0%
North Collins (T)	1,898	$889,517,676	595	31.3%	$315,743,815	35.5%
North Collins (V)	551	$383,968,909	540	98.0%	$381,123,274	99.3%
Orchard Park (T)	10,748	$8,174,650,530	7,230	67.3%	$5,474,309,601	67.0%
Orchard Park (V)	1,211	$867,347,745	846	69.9%	$622,395,676	71.8%
Sardinia (T)	2,184	$1,068,523,829	756	34.6%	$327,080,473	30.6%
Sloan (V)	1,674	$634,998,253	1,674	100.0%	$634,998,253	100.0%
Springville (V)	1,816	$1,354,905,864	469	25.8%	$371,951,088	27.5%
Tonawanda (C)	6,452	$3,291,492,557	1,855	28.8%	$827,067,361	25.1%
Tonawanda (T)	23,999	$14,694,684,404	9,539	39.7%	$5,925,479,795	40.3%
Wales (T)	1,923	$833,853,270	501	26.1%	$208,863,758	25.0%
West Seneca (T)	17,970	$9,583,482,689	8,064	44.9%	$3,980,782,469	41.5%
Williamsville (V)	2,057	$1,126,868,443	899	43.7%	$436,985,915	38.8%
Erie County Total	**360,925**	**$222,515,035,436**	**110,341**	**30.6%**	**$69,403,161,346**	**31.2%**

Source: Erie County GIS 2020; RSMeans 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Impact on Critical Facilities

Potential losses to critical facilities caused by a hazardous substances incident is difficult to quantify. Potential losses may include inaccessibility, loss of service, contamination and/or potential structural and content losses if an explosion occurs.

An exposure analysis estimates that 1,553 critical facilities or 1,510 lifelines, 3,149 critical facilities or 3,030 lifelines, and 2,591 critical facilities or 2,547 lifelines are built within 0.5 mile of railways, 0.5 mile of major roadways, and with unique buffer areas of SARA sites, respectively. Table 5.4.7-12 through Table 5.4.7-14 summarizes the number of critical facilities and lifelines built within the hazardous materials hazard areas by jurisdiction.

Furthermore, an exposure analysis was conducted on critical facilities vulnerable to a pipeline release event. Table 5.4.7-15 through Table 5.4.7-17 summarize critical facilities and lifelines located within 0.5 mile of crude oil, petroleum, and natural gas pipelines. The exposure analysis estimates that 507 critical facilities or 493 lifelines, 292 critical facilities or 282 lifelines, and 1,297 critical facilities or 1,195 lifelines are located within 0.5 mile of crude oil, petroleum, and natural gas pipelines, respectively.

Table 5.4.7-18 through Table 5.4.7-23 summarize the distribution of critical facilities by critical facility type exposed to the hazardous material hazard by jurisdiction. The majority of critical facilities exposed to the hazardous materials hazard are bridges, shelters, and schools. Furthermore, critical facilities that provide transportation lifeline services are the most exposed in the hazardous materials hazard areas (Table 5.4.7-24 and Table 5.4.7-25).

Table 5.4.7-12. Estimated Number of Critical Facilities and Lifelines Built Within 0.5 Mile of Rail Lines

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Major Railways			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	0	0.0%	0	0.0%
Alden (T)	76	68	30	39.5%	29	42.6%
Alden (V)	19	17	17	89.5%	15	88.2%
Amherst (T)	391	387	0	0.0%	0	0.0%
Angola (V)	20	18	20	100.0%	18	100.0%
Aurora (T)	95	81	18	18.9%	18	22.2%
Blasdell (V)	22	22	22	100.0%	22	100.0%
Boston (T)	81	75	0	0.0%	0	0.0%
Brant (T)	39	39	7	17.9%	7	17.9%
Buffalo (C)	751	748	459	61.1%	457	61.1%
Cheektowaga (T)	224	221	74	33.0%	74	33.5%
Clarence (T)	121	115	0	0.0%	0	0.0%
Colden (T)	67	56	0	0.0%	0	0.0%
Collins (T)	71	55	16	22.5%	15	27.3%
Concord (T)	84	68	0	0.0%	0	0.0%
Depew (V)	63	63	52	82.5%	52	82.5%
East Aurora (V)	42	41	26	61.9%	25	61.0%
Eden (T)	78	72	20	25.6%	19	26.4%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Major Railways			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Elma (T)	83	75	22	26.5%	21	28.0%
Evans (T)	112	109	13	11.6%	13	11.9%
Farnham (V)	10	10	10	100.0%	10	100.0%
Gowanda (V)	7	7	7	100.0%	7	100.0%
Grand Island (T)	69	66	0	0.0%	0	0.0%
Hamburg (T)	189	181	127	67.2%	122	67.4%
Hamburg (V)	27	23	12	44.4%	12	52.2%
Holland (T)	90	70	49	54.4%	39	55.7%
Kenmore (V)	14	13	5	35.7%	5	38.5%
Lackawanna (C)	94	93	91	96.8%	90	96.8%
Lancaster (T)	109	103	29	26.6%	26	25.2%
Lancaster (V)	58	53	45	77.6%	41	77.4%
Marilla (T)	48	37	0	0.0%	0	0.0%
Newstead (T)	64	61	0	0.0%	0	0.0%
North Collins (T)	69	56	19	27.5%	18	32.1%
North Collins (V)	14	13	14	100.0%	13	100.0%
Orchard Park (T)	141	129	29	20.6%	29	22.5%
Orchard Park (V)	21	18	6	28.6%	5	27.8%
Sardinia (T)	78	57	11	14.1%	8	14.0%
Sloan (V)	8	8	8	100.0%	8	100.0%
Springville (V)	35	32	0	0.0%	0	0.0%
Tonawanda (C)	61	60	43	70.5%	42	70.0%
Tonawanda (T)	266	265	168	63.2%	167	63.0%
Wales (T)	82	68	8	9.8%	8	11.8%
West Seneca (T)	145	140	76	52.4%	75	53.6%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**1,553**	**37.1%**	**1,510**	**38.4%**

Source: Erie County GIS 2020; NYSDOT 2013
% = Percent; C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-13. Estimated Number of Critical Facilities and Lifelines Built Within 0.5 Mile of Major Roadways

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Major Roadways			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	22	73.3%	19	73.1%
Alden (T)	76	68	41	53.9%	38	55.9%
Alden (V)	19	17	17	89.5%	16	94.1%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Major Roadways			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Amherst (T)	391	387	335	85.7%	332	85.8%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	50	52.6%	45	55.6%
Blasdell (V)	22	22	19	86.4%	19	86.4%
Boston (T)	81	75	22	27.2%	20	26.7%
Brant (T)	39	39	22	56.4%	22	56.4%
Buffalo (C)	751	748	700	93.2%	697	93.2%
Cheektowaga (T)	224	221	200	89.3%	200	90.5%
Clarence (T)	121	115	48	39.7%	46	40.0%
Colden (T)	67	56	33	49.3%	29	51.8%
Collins (T)	71	55	31	43.7%	29	52.7%
Concord (T)	84	68	37	44.0%	29	42.6%
Depew (V)	63	63	56	88.9%	56	88.9%
East Aurora (V)	42	41	38	90.5%	37	90.2%
Eden (T)	78	72	38	48.7%	34	47.2%
Elma (T)	83	75	48	57.8%	45	60.0%
Evans (T)	112	109	51	45.5%	50	45.9%
Farnham (V)	10	10	10	100.0%	10	100.0%
Gowanda (V)	7	7	7	100.0%	7	100.0%
Grand Island (T)	69	66	45	65.2%	44	66.7%
Hamburg (T)	189	181	165	87.3%	158	87.3%
Hamburg (V)	27	23	27	100.0%	23	100.0%
Holland (T)	90	70	52	57.8%	42	60.0%
Kenmore (V)	14	13	13	92.9%	12	92.3%
Lackawanna (C)	94	93	82	87.2%	81	87.1%
Lancaster (T)	109	103	85	78.0%	80	77.7%
Lancaster (V)	58	53	52	89.7%	47	88.7%
Marilla (T)	48	37	22	45.8%	17	45.9%
Newstead (T)	64	61	23	35.9%	23	37.7%
North Collins (T)	69	56	32	46.4%	25	44.6%
North Collins (V)	14	13	14	100.0%	13	100.0%
Orchard Park (T)	141	129	113	80.1%	107	82.9%
Orchard Park (V)	21	18	21	100.0%	18	100.0%
Sardinia (T)	78	57	34	43.6%	29	50.9%
Sloan (V)	8	8	8	100.0%	8	100.0%
Springville (V)	35	32	31	88.6%	28	87.5%
Tonawanda (C)	61	60	61	100.0%	60	100.0%
Tonawanda (T)	266	265	244	91.7%	243	91.7%
Wales (T)	82	68	41	50.0%	40	58.8%
West Seneca (T)	145	140	143	98.6%	138	98.6%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Major Roadways			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Williamsville (V)	16	14	16	100.0%	14	100.0%
Erie County Total	**4,184**	**3,933**	**3,149**	**75.3%**	**3,030**	**77.0%**

Source: Erie County GIS 2020; NYSDOT 2013
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-14. Estimated Number of Critical Facilities and Lifelines Built Within Unique Buffer Areas of Hazardous Materials Facilities

Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to Sara Site Hazard Areas			
		Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	26	28	93.3%	24	92.3%
Alden (T)	68	13	17.1%	13	19.1%
Alden (V)	17	2	10.5%	2	11.8%
Amherst (T)	387	359	91.8%	355	91.7%
Angola (V)	18	5	25.0%	5	27.8%
Aurora (T)	81	3	3.2%	2	2.5%
Blasdell (V)	22	22	100.0%	22	100.0%
Boston (T)	75	3	3.7%	3	4.0%
Brant (T)	39	4	10.3%	4	10.3%
Buffalo (C)	748	751	100.0%	748	100.0%
Cheektowaga (T)	221	215	96.0%	212	95.9%
Clarence (T)	115	20	16.5%	20	17.4%
Colden (T)	56	6	9.0%	6	10.7%
Collins (T)	55	2	2.8%	2	3.6%
Concord (T)	68	2	2.4%	2	2.9%
Depew (V)	63	30	47.6%	30	47.6%
East Aurora (V)	41	19	45.2%	18	43.9%
Eden (T)	72	39	50.0%	37	51.4%
Elma (T)	75	25	30.1%	25	33.3%
Evans (T)	109	9	8.0%	9	8.3%
Farnham (V)	10	0	0.0%	0	0.0%
Gowanda (V)	7	0	0.0%	0	0.0%
Grand Island (T)	66	69	100.0%	66	100.0%
Hamburg (T)	181	148	78.3%	143	79.0%
Hamburg (V)	23	6	22.2%	6	26.1%
Holland (T)	70	15	16.7%	15	21.4%
Kenmore (V)	13	14	100.0%	13	100.0%
Lackawanna (C)	93	94	100.0%	93	100.0%
Lancaster (T)	103	39	35.8%	37	35.9%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Exposed to Sara Site Hazard Areas			
		Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Lancaster (V)	53	30	51.7%	28	52.8%
Marilla (T)	37	0	0.0%	0	0.0%
Newstead (T)	61	17	26.6%	17	27.9%
North Collins (T)	56	7	10.1%	7	12.5%
North Collins (V)	13	3	21.4%	3	23.1%
Orchard Park (T)	129	79	56.0%	77	59.7%
Orchard Park (V)	18	3	14.3%	3	16.7%
Sardinia (T)	57	22	28.2%	21	36.8%
Sloan (V)	8	8	100.0%	8	100.0%
Springville (V)	32	6	17.1%	6	18.8%
Tonawanda (C)	60	61	100.0%	60	100.0%
Tonawanda (T)	265	266	100.0%	265	100.0%
Wales (T)	68	0	0.0%	0	0.0%
West Seneca (T)	140	132	91.0%	127	90.7%
Williamsville (V)	14	15	93.8%	13	92.9%
Erie County Total	**3,933**	**2,591**	**61.9%**	**2,547**	**64.8%**

Source: Erie County GIS 2020
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-15 Estimated Number of Critical Facilities and Lifelines Built Within 0.5 Mile of Crude Oil Pipelines

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Crude Oil Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	0	0.0%	0	0.0%
Alden (T)	76	68	0	0.0%	0	0.0%
Alden (V)	19	17	0	0.0%	0	0.0%
Amherst (T)	391	387	0	0.0%	0	0.0%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	0	0.0%	0	0.0%
Blasdell (V)	22	22	17	77.3%	17	77.3%
Boston (T)	81	75	0	0.0%	0	0.0%
Brant (T)	39	39	0	0.0%	0	0.0%
Buffalo (C)	751	748	197	26.2%	197	26.3%
Cheektowaga (T)	224	221	17	7.6%	17	7.7%
Clarence (T)	121	115	0	0.0%	0	0.0%
Colden (T)	67	56	0	0.0%	0	0.0%
Collins (T)	71	55	7	9.9%	5	9.1%
Concord (T)	84	68	0	0.0%	0	0.0%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Crude Oil Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Depew (V)	63	63	0	0.0%	0	0.0%
East Aurora (V)	42	41	0	0.0%	0	0.0%
Eden (T)	78	72	13	16.7%	13	18.1%
Elma (T)	83	75	0	0.0%	0	0.0%
Evans (T)	112	109	0	0.0%	0	0.0%
Farnham (V)	10	10	0	0.0%	0	0.0%
Gowanda (V)	7	7	0	0.0%	0	0.0%
Grand Island (T)	69	66	5	7.2%	5	7.6%
Hamburg (T)	189	181	53	28.0%	52	28.7%
Hamburg (V)	27	23	22	81.5%	18	78.3%
Holland (T)	90	70	0	0.0%	0	0.0%
Kenmore (V)	14	13	1	7.1%	1	7.7%
Lackawanna (C)	94	93	40	42.6%	39	41.9%
Lancaster (T)	109	103	0	0.0%	0	0.0%
Lancaster (V)	58	53	0	0.0%	0	0.0%
Marilla (T)	48	37	0	0.0%	0	0.0%
Newstead (T)	64	61	0	0.0%	0	0.0%
North Collins (T)	69	56	10	14.5%	4	7.1%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	0	0.0%	0	0.0%
Orchard Park (V)	21	18	0	0.0%	0	0.0%
Sardinia (T)	78	57	0	0.0%	0	0.0%
Sloan (V)	8	8	7	87.5%	7	87.5%
Springville (V)	35	32	0	0.0%	0	0.0%
Tonawanda (C)	61	60	4	6.6%	4	6.7%
Tonawanda (T)	266	265	114	42.9%	114	43.0%
Wales (T)	82	68	0	0.0%	0	0.0%
West Seneca (T)	145	140	0	0.0%	0	0.0%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**507**	**12.1%**	**493**	**12.5%**

Source: Erie County GIS 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.7-16 Estimated Number of Critical Facilities and Lifelines Built Within 0.5 Mile of Petroleum Pipelines

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Petroleum Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	0	0.0%	0	0.0%
Alden (T)	76	68	14	18.4%	13	19.1%
Alden (V)	19	17	0	0.0%	0	0.0%
Amherst (T)	391	387	41	10.5%	41	10.6%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	0	0.0%	0	0.0%
Blasdell (V)	22	22	0	0.0%	0	0.0%
Boston (T)	81	75	0	0.0%	0	0.0%
Brant (T)	39	39	0	0.0%	0	0.0%
Buffalo (C)	751	748	35	4.7%	35	4.7%
Cheektowaga (T)	224	221	31	13.8%	29	13.1%
Clarence (T)	121	115	18	14.9%	16	13.9%
Colden (T)	67	56	0	0.0%	0	0.0%
Collins (T)	71	55	0	0.0%	0	0.0%
Concord (T)	84	68	0	0.0%	0	0.0%
Depew (V)	63	63	2	3.2%	2	3.2%
East Aurora (V)	42	41	0	0.0%	0	0.0%
Eden (T)	78	72	0	0.0%	0	0.0%
Elma (T)	83	75	0	0.0%	0	0.0%
Evans (T)	112	109	0	0.0%	0	0.0%
Farnham (V)	10	10	0	0.0%	0	0.0%
Gowanda (V)	7	7	0	0.0%	0	0.0%
Grand Island (T)	69	66	0	0.0%	0	0.0%
Hamburg (T)	189	181	0	0.0%	0	0.0%
Hamburg (V)	27	23	0	0.0%	0	0.0%
Holland (T)	90	70	0	0.0%	0	0.0%
Kenmore (V)	14	13	0	0.0%	0	0.0%
Lackawanna (C)	94	93	0	0.0%	0	0.0%
Lancaster (T)	109	103	11	10.1%	10	9.7%
Lancaster (V)	58	53	16	27.6%	12	22.6%
Marilla (T)	48	37	0	0.0%	0	0.0%
Newstead (T)	64	61	2	3.1%	2	3.3%
North Collins (T)	69	56	0	0.0%	0	0.0%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	0	0.0%	0	0.0%
Orchard Park (V)	21	18	0	0.0%	0	0.0%
Sardinia (T)	78	57	0	0.0%	0	0.0%
Sloan (V)	8	8	0	0.0%	0	0.0%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Petroleum Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Springville (V)	35	32	0	0.0%	0	0.0%
Tonawanda (C)	61	60	0	0.0%	0	0.0%
Tonawanda (T)	266	265	116	43.6%	116	43.8%
Wales (T)	82	68	0	0.0%	0	0.0%
West Seneca (T)	145	140	6	4.1%	6	4.3%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**292**	**7.0%**	**282**	**7.2%**

Source: Erie County GIS 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-17 Estimated Number of Critical Facilities and Lifelines Built Within 0.5 Mile of Natural Gas Pipelines

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Natural Gas Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	0	0.0%	0	0.0%
Alden (T)	76	68	28	36.8%	24	35.3%
Alden (V)	19	17	16	84.2%	15	88.2%
Amherst (T)	391	387	47	12.0%	47	12.1%
Angola (V)	20	18	0	0.0%	0	0.0%
Aurora (T)	95	81	51	53.7%	44	54.3%
Blasdell (V)	22	22	0	0.0%	0	0.0%
Boston (T)	81	75	43	53.1%	41	54.7%
Brant (T)	39	39	12	30.8%	12	30.8%
Buffalo (C)	751	748	159	21.2%	158	21.1%
Cheektowaga (T)	224	221	90	40.2%	88	39.8%
Clarence (T)	121	115	59	48.8%	56	48.7%
Colden (T)	67	56	23	34.3%	19	33.9%
Collins (T)	71	55	22	31.0%	12	21.8%
Concord (T)	84	68	29	34.5%	23	33.8%
Depew (V)	63	63	24	38.1%	24	38.1%
East Aurora (V)	42	41	37	88.1%	36	87.8%
Eden (T)	78	72	12	15.4%	10	13.9%
Elma (T)	83	75	50	60.2%	44	58.7%
Evans (T)	112	109	13	11.6%	12	11.0%
Farnham (V)	10	10	0	0.0%	0	0.0%
Gowanda (V)	7	7	5	71.4%	5	71.4%
Grand Island (T)	69	66	16	23.2%	16	24.2%

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Within 0.5 Mile of Natural Gas Pipeline			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Hamburg (T)	189	181	37	19.6%	36	19.9%
Hamburg (V)	27	23	0	0.0%	0	0.0%
Holland (T)	90	70	8	8.9%	3	4.3%
Kenmore (V)	14	13	1	7.1%	1	7.7%
Lackawanna (C)	94	93	0	0.0%	0	0.0%
Lancaster (T)	109	103	35	32.1%	32	31.1%
Lancaster (V)	58	53	32	55.2%	28	52.8%
Marilla (T)	48	37	32	66.7%	24	64.9%
Newstead (T)	64	61	0	0.0%	0	0.0%
North Collins (T)	69	56	28	40.6%	24	42.9%
North Collins (V)	14	13	14	100.0%	13	100.0%
Orchard Park (T)	141	129	104	73.8%	99	76.7%
Orchard Park (V)	21	18	16	76.2%	14	77.8%
Sardinia (T)	78	57	26	33.3%	15	26.3%
Sloan (V)	8	8	8	100.0%	8	100.0%
Springville (V)	35	32	7	20.0%	7	21.9%
Tonawanda (C)	61	60	13	21.3%	13	21.7%
Tonawanda (T)	266	265	112	42.1%	112	42.3%
Wales (T)	82	68	26	31.7%	18	26.5%
West Seneca (T)	145	140	60	41.4%	60	42.9%
Williamsville (V)	16	14	2	12.5%	2	14.3%
Erie County Total	**4,184**	**3,933**	**1,297**	**31.0%**	**1,195**	**30.4%**

Source: Erie County GIS 2020; EIA 2020
% = Percent; C = City; T = Town; V = Village
**Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.7-18 Critical Facility Type Within 0.5 Mile of Railways

Jurisdiction	Critical Facilities within 0.5 Mile of Railways																																			
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	4	0	0	0	0	2	2	0	0	0	2	4	1	0	0	0	0	2	0	0	1	0	0	5	1	0	0	0	0	3	1	0	2
Alden (V)	0	0	1	1	0	0	1	0	0	1	0	0	0	1	1	1	0	1	0	0	0	0	1	0	0	0	1	3	0	0	0	1	2	1	0	0
Amherst (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angola (V)	0	0	0	3	0	0	2	0	0	1	1	0	0	2	2	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	3	1	0	0
Aurora (T)	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1
Blasdell (V)	0	0	0	7	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	2	1	0	1	0	0	2	1	1	3
Boston (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brant (T)	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
Buffalo (C)	0	0	0	177	3	0	11	32	1	2	8	0	1	16	74	4	1	1	8	0	3	7	6	5	0	0	3	53	1	0	21	2	14	1	2	2
Cheektowaga (T)	0	0	0	14	0	1	0	0	0	0	3	0	1	7	24	0	0	0	0	0	0	1	0	6	0	0	0	7	0	0	0	1	7	1	0	1
Clarence (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collins (T)	0	0	0	6	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	3	0	0	1	0	0	0	0	1	0	1	0	0
Concord (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	16	0	0	0	1	0	1	0	0	0	3	11	2	0	0	0	0	0	1	1	0	0	0	1	2	1	0	0	1	3	1	0	7
East Aurora (V)	0	0	0	7	0	0	1	1	0	0	0	0	0	2	2	0	0	1	0	0	0	1	0	1	0	0	0	3	0	0	0	2	0	2	0	3
Eden (T)	0	0	0	3	0	0	1	1	0	1	0	1	0	1	2	1	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	0	1	1	0	1
Elma (T)	0	0	0	12	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	0	0	2
Evans (T)	0	0	0	10	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Farnham (V)	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	2
Gowanda (V)	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Grand Island (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Railways																																			
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Hamburg (T)	0	0	0	46	0	0	1	0	0	5	0	0	0	7	13	1	0	0	0	1	0	0	2	1	0	0	2	8	0	0	16	0	0	0	1	23
Hamburg (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	0	0	0
Holland (T)	0	0	1	7	0	0	1	1	0	10	0	0	0	1	2	2	0	0	0	0	0	0	1	3	0	1	9	5	0	0	0	0	3	1	1	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Lackawanna (C)	0	0	0	21	0	0	1	2	0	0	6	0	0	3	9	1	0	1	0	0	0	1	1	0	0	0	0	15	0	0	0	2	7	1	2	18
Lancaster (T)	1	2	0	7	0	0	0	0	0	3	1	0	0	1	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lancaster (V)	0	0	0	8	0	0	2	1	0	4	2	1	0	2	6	2	0	1	0	0	0	0	1	2	0	0	0	4	0	0	0	0	5	2	1	1
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Collins (T)	0	0	0	3	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	2	0	1	1	0	0	4	2	0	0	0	1	1	0	0	0
North Collins (V)	0	0	0	1	0	0	1	0	0	0	0	1	0	1	2	0	0	1	0	0	0	1	1	0	0	0	0	2	0	0	0	0	1	2	0	0
Orchard Park (T)	0	0	0	19	0	0	0	0	0	0	0	0	0	1	4	1	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Orchard Park (V)	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0
Sardinia (T)	0	0	0	1	0	0	0	0	0	3	1	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Sloan (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	1	0	0
Springville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (C)	0	0	0	23	0	0	1	1	0	0	0	1	0	2	4	2	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	1	4	0	0	0
Tonawanda (T)	0	0	0	21	0	0	0	2	0	1	11	0	0	4	43	3	0	0	0	1	69	0	0	7	0	0	0	4	0	0	0	1	1	0	0	0
Wales (T)	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	1	0	0	0
West Seneca (T)	0	0	0	32	0	0	0	0	0	2	1	0	0	2	12	1	0	0	0	0	6	0	0	0	0	0	0	12	0	0	0	0	6	0	0	2
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**1**	**2**	**3**	**472**	**3**	**1**	**24**	**45**	**3**	**40**	**35**	**5**	**2**	**68**	**231**	**34**	**2**	**10**	**8**	**3**	**82**	**16**	**23**	**31**	**1**	**1**	**41**	**138**	**2**	**1**	**37**	**14**	**75**	**20**	**8**	**71**

Source: Erie County GIS 2020; NYSDOT 2013

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-19 Critical Facility Type Within 0.5 Mile of Roads

Jurisdiction	Critical Facilities within 0.5 Mile of Major Roads																																				
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Akron (V)	0	0	0	5	0	0	1	0	0	2	0	0	0	1	4	1	0	1	0	0	0	1	1	1	0	0	1	0	0	0	0	1	2	0	0	0
Alden (T)	0	0	0	8	0	0	0	0	2	4	0	0	0	3	4	1	0	0	0	0	2	0	0	1	0	0	7	2	0	0	0	4	1	0	2	0
Alden (V)	0	0	1	1	0	0	1	1	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	0	0	0	1	3	0	0	1	2	1	0	0	0
Amherst (T)	0	0	0	76	0	0	3	6	0	3	6	0	0	13	20	0	0	0	0	0	0	0	3	5	0	0	5	27	0	150	0	16	0	0	2	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	22	0	1	0	0	0	5	0	0	0	1	1	2	0	0	0	0	0	0	2	2	0	0	7	2	0	0	0	0	0	0	5	0
Blasdell (V)	0	0	0	6	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	2	1	1	3	0
Boston (T)	0	0	0	10	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	4	1	0	0	0	1	0	0	0	0
Brant (T)	0	0	1	8	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	1	0	0	5	0	0	0	1	1	1	0	0	0
Buffalo (C)	0	0	0	207	8	0	18	51	2	4	9	1	1	23	88	6	6	1	13	0	4	10	6	10	0	0	4	108	1	86	4	24	1	2	2	0
Cheektowaga (T)	0	4	0	61	0	1	1	3	0	0	4	0	1	13	39	3	1	0	0	0	0	2	2	8	0	2	2	29	0	3	1	10	1	0	9	0
Clarence (T)	0	1	0	7	0	0	1	0	0	2	0	0	0	3	6	1	0	0	0	0	0	1	3	1	0	0	5	5	0	0	2	3	0	0	7	0
Colden (T)	0	0	0	9	0	0	0	0	0	4	0	0	0	1	1	1	0	0	0	1	0	0	2	0	0	0	10	1	0	0	1	1	1	0	0	0
Collins (T)	0	0	1	9	0	0	0	0	0	2	0	0	0	2	0	1	0	1	0	0	0	0	2	4	0	0	5	1	0	0	1	1	1	0	0	0
Concord (T)	0	0	0	15	0	0	0	0	0	8	0	0	0	2	0	1	0	0	0	0	0	0	1	1	0	0	9	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	16	0	0	0	1	0	1	0	0	0	2	11	3	0	0	0	0	0	1	1	0	0	0	1	6	1	0	1	3	1	0	7	0
East Aurora (V)	0	0	0	10	0	0	1	1	0	2	0	0	0	2	3	1	0	1	0	0	0	1	0	1	0	0	0	6	0	0	2	0	2	1	4	0
Eden (T)	0	0	0	11	0	0	1	1	0	3	0	1	0	1	3	1	0	1	0	0	0	1	1	2	1	0	3	2	0	0	0	1	1	0	3	0
Elma (T)	0	0	0	22	0	0	0	0	0	3	0	0	0	3	4	0	0	0	0	0	0	0	1	0	4	2	0	0	0	0	2	2	1	0	4	0
Evans (T)	0	0	0	22	0	0	0	0	0	1	0	0	0	5	1	0	0	0	0	0	0	1	2	0	0	0	4	5	0	0	2	3	1	0	4	0
Farnham (V)	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	2	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Major Roads																																				
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Gowanda (V)	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Grand Island (T)	0	0	0	15	0	0	1	0	0	1	1	0	0	3	10	1	0	0	0	0	0	1	1	2	0	0	1	3	0	0	2	1	1	1	0	0
Hamburg (T)	1	1	0	54	0	0	1	0	0	7	0	0	0	10	14	2	0	0	0	1	0	1	4	4	0	0	3	9	0	18	0	2	1	1	31	0
Hamburg (V)	0	0	0	1	0	0	1	1	0	3	0	0	0	1	1	2	0	1	0	0	0	1	0	0	0	0	0	6	0	0	0	6	1	0	2	0
Holland (T)	0	0	1	9	0	0	1	1	0	10	0	0	0	1	2	2	0	0	0	0	0	0	1	3	0	0	9	5	0	0	0	4	1	1	1	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	2	2	0	0	0
Lackawanna (C)	0	0	0	19	0	0	1	2	0	0	5	0	0	3	8	1	0	1	0	0	0	1	1	0	0	0	0	14	0	0	2	6	1	2	15	0
Lancaster (T)	1	2	0	26	0	0	2	0	0	5	1	0	0	4	18	1	0	0	0	0	0	1	2	4	0	0	0	2	0	1	0	4	0	0	11	0
Lancaster (V)	0	0	0	12	0	0	2	1	0	5	0	1	0	2	7	2	0	1	0	0	0	0	1	2	0	0	0	5	0	0	0	7	2	1	1	0
Marilla (T)	0	0	0	5	0	0	0	1	0	4	0	0	0	1	0	2	0	1	0	0	0	0	1	0	0	0	4	1	0	0	0	1	1	0	0	0
Newstead (T)	0	0	1	7	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	2	2	0	0	0	0
North Collins (T)	0	0	0	3	0	0	0	0	0	8	0	0	0	2	1	0	0	0	0	0	2	0	1	1	0	0	10	2	0	0	1	1	0	0	0	0
North Collins (V)	0	0	0	1	0	0	1	0	0	0	0	1	0	1	2	0	0	1	0	0	0	1	1	0	0	0	0	2	0	0	0	1	2	0	0	0
Orchard Park (T)	0	0	0	52	0	0	1	1	0	7	3	0	0	5	11	1	1	0	0	1	0	1	0	4	1	2	2	7	0	5	0	1	0	0	7	0
Orchard Park (V)	0	0	0	4	0	0	0	1	0	2	0	0	0	2	0	1	0	1	0	0	0	1	1	0	0	0	0	3	0	0	1	2	2	0	0	0
Sardinia (T)	0	0	0	7	0	2	0	0	0	5	3	0	0	2	2	1	0	0	0	0	0	0	2	0	0	0	9	0	0	0	0	0	1	0	0	0
Sloan (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	1	0	0	0
Springville (V)	0	0	0	2	0	0	1	1	0	2	0	0	0	3	3	2	1	1	0	0	0	1	1	1	0	0	0	2	0	0	1	3	2	0	0	4
Tonawanda (C)	0	0	0	25	0	0	1	1	0	0	0	1	0	4	6	2	0	1	0	0	0	2	1	3	0	0	0	5	0	0	2	6	1	0	0	0
Tonawanda (T)	0	0	0	38	0	0	1	2	0	2	16	1	0	7	48	3	1	0	0	1	84	1	1	8	0	0	0	20	0	0	1	9	0	0	0	0
Wales (T)	0	0	0	12	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	19	1	0	0	0	2	1	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Major Roads																																		
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
West Seneca (T)	1	1	0	47	0	0	1	1	0	5	2	0	0	7	16	1	0	1	0	0	6	1	1	2	0	0	1	24	0	0	2	11	1	0	11	0
Williamsville (V)	0	0	0	5	0	0	1	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	2	0	0	0
Erie County Total	**3**	**9**	**5**	**876**	**8**	**4**	**43**	**79**	**4**	**115**	**50**	**7**	**2**	**146**	**342**	**50**	**10**	**16**	**13**	**4**	**100**	**35**	**54**	**71**	**6**	**6**	**139**	**315**	**2**	**263**	**33**	**151**	**41**	**10**	**133**	**4**

Source: Erie County GIS 2020; NYSGIS 2020
C = City; T = Town; V = Village

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-20 Critical Facility Type Within Unique Buffer Areas of Hazardous Materials Facilities

Juris.	Critical Facilities within Sara Site Radius																																		
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Akron (V)	0	0	0	6	0	0	1	0	0	3	0	0	0	1	4	1	0	1	0	0	0	1	1	1	0	0	1	3	0	0	0	0	2	2	0	0
Alden (T)	0	0	0	1	0	0	0	0	1	1	0	0	0	0	4	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1
Alden (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	0	83	0	0	4	5	0	4	7	0	0	12	28	1	1	1	0	0	0	1	3	5	0	0	4	34	0	0	147	0	17	0	1	1
Angola (V)	0	0	0	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Blasdell (V)	0	0	0	7	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	2	1	0	1	0	0	2	1	1	3
Boston (T)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Juris.	Critical Facilities within Sara Site Radius																																			
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Brant (T)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Buffalo (C)	0	0	0	225	8	0	18	56	2	4	9	1	1	25	94	6	6	1	13	0	4	10	9	11	0	0	4	118	1	0	86	4	30	1	2	2
Cheektowaga (T)	1	3	0	64	0	1	2	3	0	2	5	0	1	16	45	3	1	1	0	0	0	2	2	8	0	2	2	27	0	0	3	1	10	1	0	9
Clarence (T)	0	0	0	2	0	0	2	0	0	0	0	0	0	0	13	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Colden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0
Collins (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concord (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	7	0	0	0	0	0	0	0	0	0	1	11	1	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	5
East Aurora (V)	0	0	0	3	0	0	1	1	0	1	0	0	0	1	3	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	1	1	1
Eden (T)	0	0	0	3	0	0	1	1	0	1	0	1	0	2	5	1	0	1	0	0	0	1	1	6	1	0	5	3	0	0	0	0	3	1	0	2
Elma (T)	0	0	0	9	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	3	0	0	1
Evans (T)	0	0	0	4	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	0	0	23	0	0	1	0	0	3	2	0	0	4	13	1	0	1	0	0	0	1	1	2	0	0	3	7	0	0	0	2	2	1	2	0
Hamburg (T)	0	0	0	49	0	0	1	0	0	5	0	0	0	9	18	0	0	0	0	1	0	1	3	4	0	0	2	8	0	0	18	0	4	1	1	23
Hamburg (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0
Holland (T)	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	0	1	1	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	1	0	0	0	1	1	0	0	0	0	2	0	0	0	0	2	2	0	0
Lackawanna (C)	0	0	0	22	0	0	1	2	0	0	6	0	0	4	9	1	0	1	0	0	0	1	1	0	0	0	0	15	0	0	0	2	7	1	2	19
Lancaster (T)	0	1	0	8	0	0	1	0	0	2	1	0	0	1	19	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0	1

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Juris.	Critical Facilities within Sara Site Radius																																			
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Railway Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Lancaster (V)	0	0	0	0	0	0	2	0	0	3	2	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	6	1	1	0
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	1	9	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
North Collins (T)	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
North Collins (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	0	31	0	0	1	1	0	3	3	0	0	2	11	1	1	0	0	1	0	0	0	3	1	0	0	10	0	0	5	1	0	0	0	4
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0
Sardinia (T)	0	0	0	3	0	3	1	0	0	1	0	0	0	1	4	1	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	0	1	0	0
Sloan (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	1	0	0
Springville (V)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Tonawanda (C)	0	0	0	25	0	0	1	1	0	0	0	1	0	4	6	2	0	1	0	0	0	2	1	3	0	0	0	5	0	0	0	2	6	1	0	0
Tonawanda (T)	0	0	0	40	0	0	1	3	0	2	16	1	0	10	52	4	1	0	0	1	85	1	1	9	0	0	0	24	0	0	0	1	12	0	2	0
Wales (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Seneca (T)	1	1	0	45	0	0	1	0	0	5	2	0	0	8	16	1	0	1	0	0	6	1	1	0	0	0	1	25	0	0	0	2	11	1	0	3
Williamsville (V)	0	0	0	4	0	0	1	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0
Erie County Total	**3**	**14**	**1**	**669**	**8**	**4**	**50**	**74**	**3**	**43**	**54**	**4**	**2**	**110**	**397**	**29**	**10**	**11**	**13**	**5**	**101**	**26**	**27**	**57**	**5**	**4**	**36**	**307**	**2**	**1**	**259**	**22**	**130**	**21**	**13**	**76**

Source: Erie County GIS 2020; NYSGIS 2020
C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.7-21 Critical Facility Types Within 0.5 Mile of Crude Oil Pipelines

Jurisdiction	Critical Facilities within 0.5 Mile of Crude Oil Pipelines																											
	Bridge	Bus Stop	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blasdell (V)	7	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	1	0	0	2	1	1	0	0
Boston (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brant (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buffalo (C)	58	2	5	10	1	0	3	1	8	31	1	1	0	2	0	0	4	5	5	2	38	4	1	15	0	0	0	0
Cheektowaga (T)	6	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	1	2	1	0	2	0	0	0	0
Clarence (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collins (T)	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0
Concord (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Aurora (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eden (T)	4	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	1
Elma (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evans (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Hamburg (T)	11	0	0	0	0	1	0	0	3	6	0	0	0	0	1	0	1	1	1	2	5	12	0	1	1	0	7	0
Hamburg (V)	1	0	1	1	0	3	0	0	1	1	0	0	1	0	0	0	1	0	0	0	5	0	0	4	1	0	2	0
Holland (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Lackawanna (C)	11	0	1	1	0	0	1	0	2	4	1	0	1	0	0	0	1	1	0	0	9	0	1	3	1	0	2	0
Lancaster (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Jurisdiction	Critical Facilities within 0.5 Mile of Crude Oil Pipelines																											
	Bridge	Bus Stop	Communications Facility	Community Center	Correctional Facility	Dam	Electric Power Station	EMS	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Lancaster (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Collins (T)	0	0	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	0	0
Springville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (C)	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Tonawanda (T)	16	0	1	1	0	0	3	0	3	17	1	0	0	0	1	57	0	1	1	0	7	0	0	5	0	0	0	0
Wales (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Seneca (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**117**	**2**	**8**	**14**	**1**	**13**	**7**	**1**	**25**	**64**	**5**	**1**	**2**	**2**	**2**	**57**	**8**	**9**	**10**	**14**	**71**	**17**	**3**	**35**	**5**	**1**	**12**	**1**

Source: Erie County GIS 2020; EIA 2020
C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.7-22 Critical Facility Types Within 0.5 Mile of Petroleum Pipelines

Jurisdiction	Critical Facilities within 0.5 Mile of Petroleum Pipelines																			
	Bridge	Communications Facility	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Material	Highway Garage	Library	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Wastewater Pump Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	5	0	0	1	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	12	1	1	0	1	3	3	1	0	0	0	0	1	0	0	6	10	0	2	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brant (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buffalo (C)	13	0	2	0	0	2	9	0	0	0	0	1	0	0	1	3	0	1	3	0
Cheektowaga (T)	10	0	1	1	1	1	2	2	1	0	0	0	0	0	1	4	0	0	1	6
Clarence (T)	0	1	0	2	0	1	4	1	0	0	0	1	1	1	3	1	0	0	2	0
Colden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collins (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concord (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
East Aurora (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eden (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elma (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evans (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hamburg (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hamburg (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holland (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (T)	5	0	0	1	0	1	0	2	0	0	0	0	1	0	0	0	0	0	0	1
Lancaster (V)	4	0	0	3	0	0	1	0	1	0	0	0	0	0	0	3	0	2	2	0
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
North Collins (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Petroleum Pipelines																			
	Bridge	Communications Facility	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Material	Highway Garage	Library	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Wastewater Pump Station
Orchard Park (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (T)	15	0	1	0	0	4	14	2	0	1	66	0	0	0	0	7	0	1	5	0
Wales (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Seneca (T)	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**68**	**2**	**5**	**8**	**2**	**12**	**33**	**8**	**2**	**1**	**66**	**2**	**3**	**1**	**13**	**29**	**10**	**4**	**15**	**8**

Source: Erie County GIS 2020; EIA 2020
C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-23 Critical Facility Types Within 0.5 Mile of Natural Gas Pipelines

Jurisdiction	Critical Facilities within 0.5 Mile of Natural Gas Pipelines																															
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Pump Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	3	0	0	0	0	4	0	0	0	1	2	1	0	0	0	0	2	0	0	1	0	0	10	1	0	0	0	2	0	1
Alden (V)	0	0	1	2	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	1	2	1	0
Amherst (T)	0	0	0	10	0	0	2	1	0	1	0	0	3	6	1	1	0	0	0	0	0	1	0	0	0	3	7	0	9	0	2	0	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Natural Gas Pipelines																															
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Pump Station
Aurora (T)	0	0	0	17	0	0	0	0	7	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	1	17	2	0	0	0	0	0	3
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston (T)	0	0	0	12	0	0	1	0	2	1	0	0	1	1	0	0	0	0	0	1	0	2	3	0	1	16	1	0	0	0	1	0	0
Brant (T)	0	0	1	4	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0
Buffalo (C)	0	0	0	40	1	0	4	26	1	2	0	0	5	16	1	2	0	1	0	0	3	4	0	0	0	1	34	0	10	1	7	0	0
Cheektowaga (T)	1	4	0	27	0	1	0	0	2	3	0	1	10	21	2	0	0	0	0	0	1	0	6	0	0	0	4	0	0	1	4	1	1
Clarence (T)	0	2	0	12	0	0	1	0	2	0	0	0	2	5	3	0	1	0	1	0	0	1	1	0	0	5	6	0	0	2	5	1	9
Colden (T)	0	0	0	2	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0
Collins (T)	0	0	1	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0
Concord (T)	0	0	0	9	0	0	0	0	6	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	10	0	0	0	0	0	0	0
Depew (V)	0	0	0	6	0	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	4
East Aurora (V)	0	0	0	10	0	0	1	1	2	0	0	0	2	3	0	0	1	0	0	0	1	0	1	0	0	0	6	0	0	2	0	2	5
Eden (T)	0	0	0	1	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	3	1	0	3	0	0	0	0	0	0	0
Elma (T)	0	0	0	15	0	0	0	2	5	1	0	0	3	4	1	0	1	0	0	0	0	2	0	3	0	0	5	0	0	2	4	1	1
Evans (T)	0	0	0	8	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Grand Island (T)	0	0	0	5	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	1	0	0
Hamburg (T)	0	0	0	9	0	0	0	0	1	0	0	0	2	1	0	0	0	0	1	0	0	1	2	0	0	1	1	0	16	0	1	0	1
Hamburg (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holland (T)	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (T)	0	0	0	12	0	0	0	0	3	0	0	0	2	7	2	0	0	0	0	0	1	1	2	0	0	1	0	0	0	0	2	0	2
Lancaster (V)	0	0	0	8	0	0	1	1	3	0	0	0	1	2	1	0	1	0	0	0	0	1	2	0	0	0	5	0	0	0	3	2	1
Marilla (T)	0	0	0	10	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	11	1	0	0	0	1	1	0
Newstead (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities within 0.5 Mile of Natural Gas Pipelines																																
	Airport	Airport Runway	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	EOC	Fire Station	Hazardous Material	Highway Garage	Hospital	Library	Metro Station	Natural Gas Facility	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Rail Station	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Pump Station
North Collins (T)	0	0	0	7	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0	0	9	2	0	0	0	1	0	0
North Collins (V)	0	0	0	1	0	0	1	0	0	0	1	0	1	2	0	0	1	0	0	0	1	1	0	0	0	0	2	0	0	0	1	2	0
Orchard Park (T)	0	0	0	45	0	0	1	0	6	3	0	0	2	11	1	1	0	0	1	0	0	0	4	1	2	3	9	0	4	1	1	0	8
Orchard Park (V)	0	0	0	2	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	1	2	2	0
Sardinia (T)	0	0	0	4	0	1	0	0	11	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0
Sloan (V)	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	1	0
Springville (V)	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0
Tonawanda (C)	0	0	0	2	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	3	0	0
Tonawanda (T)	0	0	0	15	0	0	1	2	0	0	1	0	4	21	4	0	0	0	1	48	1	0	0	0	0	0	8	0	0	1	5	0	0
Wales (T)	0	0	0	3	0	0	0	1	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	1	0	0
West Seneca (T)	0	0	0	27	0	0	0	0	0	1	0	0	3	8	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	2	3	0	2
Williamsville (V)	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Erie County Total	**1**	**6**	**3**	**334**	**1**	**2**	**15**	**37**	**100**	**12**	**3**	**1**	**55**	**125**	**26**	**4**	**7**	**1**	**4**	**51**	**9**	**17**	**34**	**5**	**4**	**147**	**128**	**1**	**39**	**17**	**56**	**14**	**38**

Source: Erie County GIS 2020; EIA 2020
C = City; T = Town; V = Village
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.7-24 FEMA Lifelines Within 0.5 Mile of Hazardous Material Release Areas

FEMA Lifeline Category	Total Number of Lifelines	Estimated Lifeline Exposed to Hazmat Areas		
		Estimated Population within SARA Site Hazard Areas	Estimated Population within 0.5 Mile of Major Roadways	Estimated Population within 0.5 Mile of Major Railways
		Number of Lifelines	Number of Lifelines	Number of Lifelines
Communications	59	54	47	25
Energy	176	161	156	121
Food, Water, Shelter	951	324	530	234
Hazardous Material	398	397	342	231
Health and Medical	144	110	129	66
Safety and Security	1,047	789	913	343
Transportation	1,158	712	913	490
Erie County Total	**3,933**	**2,547**	**3,030**	**1,510**

Source: Erie County GIS 2020; FEMA 2020; NYSDOT 2013; NYSGIS 2020

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-25 FEMA Lifelines Within 0.5 Mile of Pipelines

FEMA Lifeline Category	Total Number of Lifelines	Estimated Lifelines within 0.5 Mile of Pipelines		
		Crude Oil Pipelines	Petroleum Pipelines	Natural Gas Pipelines
		Number of Lifelines	Number of Lifelines	Number of Lifelines
Communications	59	8	2	17
Energy	176	67	69	68
Food, Water, Shelter	951	73	37	290
Hazardous Material	398	64	33	125
Health and Medical	144	19	9	61
Saftey and Security	1,047	141	64	290
Transportation	1,158	121	68	344
Erie County Total	**3,933**	**493**	**282**	**1,195**

Source: Erie County GIS 2020; EIA 2020; FEMA 2020

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

In addition to critical facilities and lifelines, an analysis was performed on the number of miles of major transportation routes that are exposed within unique SARA site buffer areas and within 0.5 mile of railways (Table 5.4.7-26). Out of the 5,818 miles of roadway in the county, 3,644.3 miles are exposed to SARA sites and 1,468.4 miles are exposed to a railway release. Additionally, the number of miles of major transportation routes exposed to 0.5 mile of pipelines is summarized in Table 5.4.7-27. A total of 598.6 miles, 425.2 miles, and 1,871.1 miles of roadway are exposed to crude oil pipelines, petroleum pipelines, and natural gas pipelines, respectively.

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.7-26 Major Transportation Routes Built Within Unique SARA Site Hazard Areas and Within 0.5 Mile of Railways

Road Type	Total Miles	Within Sara Site Hazard Areas		Within 0.5 Mile of Railways	
		Miles	Percent of Total	Miles	Percent of Total
Local and Private Roads	3,692.5	2,678.9	72.5%	1,050.2	28.4%
County Roads	1,221.3	373.4	30.6%	135.0	11.1%
State Routes	541.7	367.8	67.9%	179.8	33.2%
US Highways	195.0	98.5	50.5%	60.3	30.9%
Interstate	167.5	125.8	75.1%	43.1	25.7%
Erie County Total	**5,818.0**	**3,644.3**	**62.6%**	**1,468.4**	**25.2%**

Source: Erie County GIS 2020; NYSGIS 2020; NYSDOT 2013

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Table 5.4.7-27 Major Transportation Routes Built Within 0.5 Mile of Pipelines

Road Type	Total Miles	Roadways within 0.5 Mile of Pipelines					
		Crude Oil Pipelines		Petroleum Pipelines		Natural Gas Pipelines	
		Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total
Local and Private Roads	3,692.5	473.2	12.8%	290.4	7.9%	1,107.9	30.0%
County Roads	1,221.3	44.2	3.6%	67.8	5.5%	452.7	37.1%
State Routes	541.7	44.4	8.2%	30.6	5.6%	172.6	31.9%
US Highways	195.0	19.6	10.0%	11.3	5.8%	94.9	48.7%
Interstate	167.5	17.2	10.2%	25.2	15.0%	43.0	25.7%
Erie County Total	**5,818.0**	**598.6**	**10.3%**	**425.2**	**7.3%**	**1,871.1**	**32.2%**

Source: Erie County GIS 2020; NYSGIS 2020; EIA 2020

* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Impact on Economy

If a significant hazardous substances incident occurred, not only would life, safety, and building stock be at risk, but the economy of Erie County may be impacted as well. A significant incident in an urban area may force businesses to close for an extended period of time because of contamination or direct damage caused by an explosion, if one occurred. The exact impact on the economy is difficult to determine given the uncertain nature of the size and scope of incidents.

Hazardous substance incidents have the potential to lead to major transportation route closures in Erie County. According to the county, roadways that are considered major transit routes for hazardous materials (and are therefore most at risk for closure) include Interstate 90, Interstate 190, US Route 20, US Route 62, and State Route 5. The closure of waterways, railroads, airports, and highways as a result of these incidents has the potential to impact the ability to deliver goods and services efficiently. Potential impacts may be local, regional, or statewide, depending on the magnitude of the event and the level of service disruptions.

The greatest risk associated with pipelines is the possibility of a fire or explosion, which could potentially damage and destroy infrastructure. In 2019, New York State experienced $1.8 million in damages from pipeline incidents (PHMSA 2019).

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Impact on Environment

Hazardous wastes that are released into the environment can be harmful to species and their habitats (EPA 2020). Wastes that get into waterways will be disruptive and sometimes deadly to aquatic species. Consequentially, wastes that get into waterways can also contaminate drinking water supplies. Hazardous wastes can also leach into soils and travel with wind, which not only impacts the local habitat, but can create issues for surrounding communities. Strict disposal regulations have been defined by organizations like EPA to ensure that the environment and community is protected from these types of events.

In addition, pipeline incidents and explosion incidents can profoundly affect the surrounding environment. Contamination of soil, surface water, and groundwater can result in many direct impacts on surrounding populations and ecosystems. When a large volume of product is released, much of it remains unrecovered as product disperses into the environment (Belvederesi, et al. 2018). This can have an immense and lasting impact on the local flora and fauna.

Future Changes That May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The county considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

Any areas of growth could be potentially impacted by the hazardous materials hazard. Development near the transit routes for hazardous materials and facilities will increase the county's overall risk. Therefore, the county should take precautions when determining the location of new development to consider the development's proximity to hazardous material facilities and transit routes. The county may also want to consider implementing designs into the new development that enable improved evacuation or protection from residual impacts from the hazardous materials. Section 4, County Profile, includes more information about the county's anticipated and recent new development plans.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has increased by a negligible amount between 2010 and 2019 (American Community Survey 2019). Estimated population projections provided by the Cornell Program on Applied Demographics indicate that the county's population will increase into 2040, bringing the total population to approximately 945,891 persons (Cornell Program on Applied Demographics 2018). Any changes in the density of population can impact the number of persons living near hazardous materials facilities, transit routes, and pipelines.

Climate Change

As temperatures change, excessive heat on hazardous materials containers may alter the properties of the material. In addition, fixed hazmat storage locations in the floodplain may experience an increase in flood events due to the projected changes in increased precipitation events, such as changes in magnitude and frequency.

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Change of Vulnerability Since the 2015 HMP

Overall, the county's vulnerability has not changed, and the entire county will continue to be exposed and vulnerable to hazardous substance incidents. For this HMP update, any additional information regarding localized concerns and past impacts have been collected. Unique buffer areas were established surrounding hazardous material sites. Additionally, exposure regarding railways, major roadways, and pipelines were all documented and analyzed.

Attachment: 17-Section-5.4.7-Haz-Mat-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.8 Landslide

This section provides a profile and vulnerability assessment of the landslide hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.8.1 Hazard Profile

This section provides information regarding the description, extent, location, previous occurrences and losses, and the probability of future occurrences for the landslide hazard.

Description

Landslides are composed of natural rock, soil, artificial fill, or a combination and move along a downward slope. They flow rapidly, striking at avalanche speeds that can travel several miles, growing as they pick up trees, boulders, cars, and other materials (New York State Division of Homeland Security and Emergency Services [NYS DHSES] 2019).

Landslides occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, volcanic eruptions, erosion, fire, or additional human-induced activities. Typically, the steeper the slope, the higher the risk for landslide occurrence. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high. However, landslides can occur with very little slope, sometimes classified as earth slumping or earth flow (NYS DHSES 2019).

Several different types of landslides include:

- *Rock Falls:* Blocks of rock that fall away from a bedrock unit without a rotational component
- *Rock Topples:* Blocks of rock that fall away from a bedrock unit with a rotational component
- *Rotational Slump:* Blocks of fine-grained sediment that rotate and move down slope
- *Transitional Slide:* Sediments that move along a flat surface without a rotational component
- *Earth Flows:* Fine-grained sediments that flow downhill and typically form a fan structure
- *Creep:* A slow-moving landslide often noticed only by presence of crooked trees and disturbed structures
- *Block Slides:* Blocks of rock that slide along a slip plane as a unit down a slope
- *Debris Avalanche:* Predominantly gravel, cobble, boulder, and sediment portions, and trees that move quickly down slope
- *Debris Flows:* Coarse sediments that flow downhill and spread out over relatively flat areas (NYS DHSES 2019)

Extent

Extent of a landslide hazard is determined by identifying affected areas and assessing probability of a landslide occurring within a time period. Natural variables that contribute to overall extent of potential landslide activity in any particular area include soil properties, topographic position and slope, and historical incidence. Predicting a landslide is difficult, even under ideal conditions. As a result, the landslide hazard is often represented by landslide incidence and susceptibility, defined as follows:

- *Landslide incidence:* Categorized by percentage of a given geographic area that has undergone landslides. High incidence means greater than 15 percent of a given area has been involved in

landsliding, medium incidence means that 1.5 to 15 percent of an area has been involved, and low incidence means that less than 1.5 percent of an area has been involved. (Radbruch-Hall et al. 1982).

- *Landslide susceptibility:* Defined as the probable degree of response of geologic formations to natural or artificial cutting, to loading of slopes, or to unusually high precipitation. Assumedly, unusually high precipitation or changes in existing conditions can initiate landslide movement in areas where rocks and soils have been involved with landslides in the past. Landslide susceptibility depends on slope angle and geologic material underlying the slope. Landslide susceptibility applies only to areas potentially affected and does not imply a time frame within which a landslide might occur. High, medium, and low susceptibility are delimited by the same percentages used for classifying incidence of landslides (Radbruch-Hall et al. 1982).

Location

The potential for landslides exists throughout New York State (NYS), including Erie County. Generally, the highest potential for landslides is located along major rivers and lake valleys that were previously glacial lakes resulting in glacial lake deposits (glacial lake clays) and areas associated with steeper slopes.

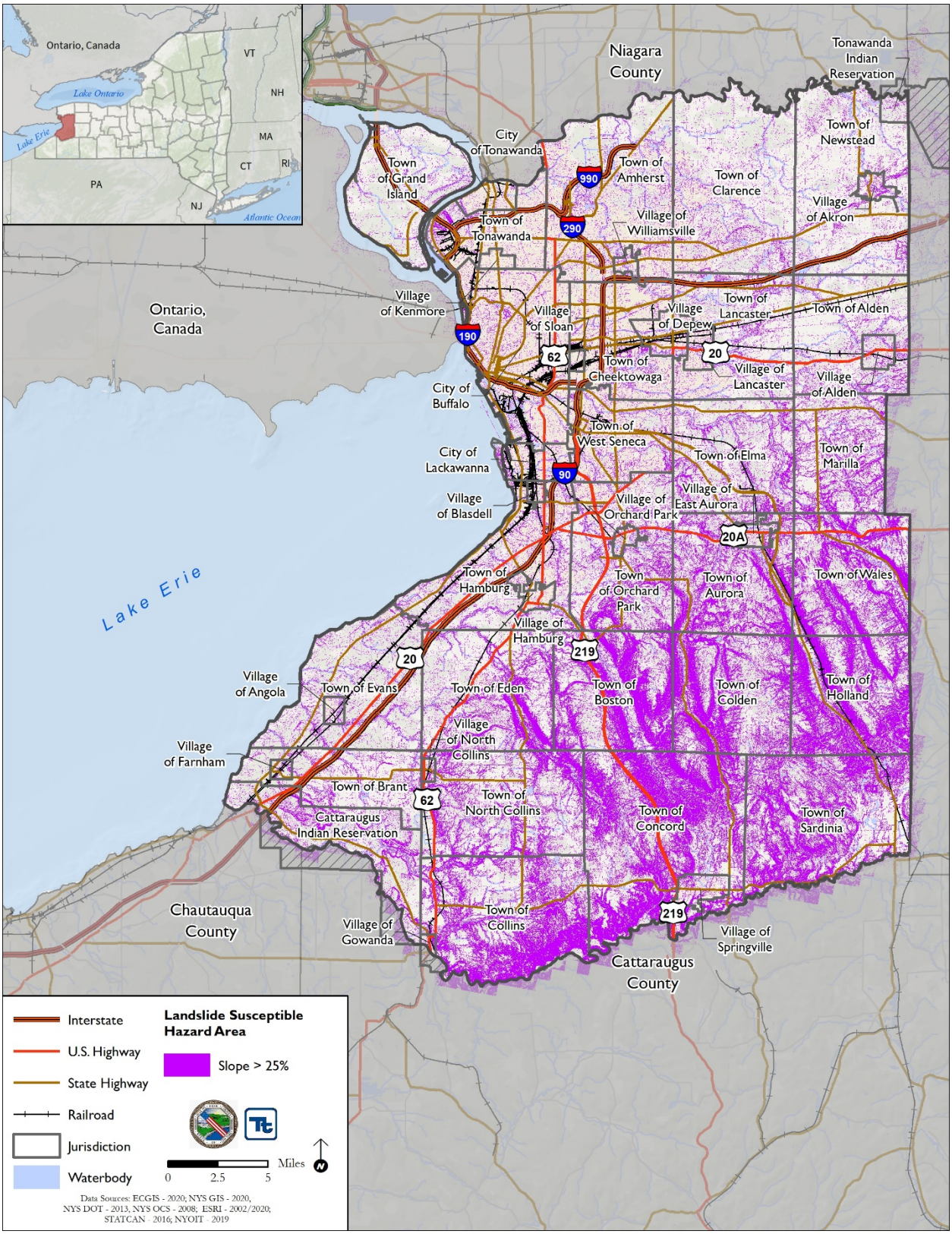
Landslides in Erie County occur after heavy rains when steep banks wash down into the roadways. Information contained in Erie County's 2015 HMP indicate that the northwestern region of the County is moderately susceptible to landslides. According to New York State Geological Survey's (NYSGS) Landslide Inventory Map of New York, Erie County has had 11 landslide incidences between 1837 to 1989 (NYSGS 1989).

In the 2015 HMP, there are three areas noted as areas of slumping and landslides where individual slides are too numerous to map. Locations included: along Buffalo Creek in East Aurora; Springville/Route 39; Sardinia; Scajaquada Creek in Cheektowaga; and Cayuga Creek in Lancaster.

Figure 5.4.8-1 shows landslide susceptibility based upon areas with slopes greater than 25-percent degrees. Overall, the southern and southeastern portions of the County have the greatest amount of areas with slopes greater than or equal to 25-percent degrees, indicating these areas are more susceptible to landslides than other portions of the County.

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.8-1. Landslide Susceptibility in Erie County



Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Previous Occurrences and Losses

Descriptive data on historic events are limited. The NYS HMP contained no records of any events from 1996–2017 (NYS DHSES 2019). Between 1837 to 1989, there have been 11 landslides that have occurred within the state (NYSGS 1989). Between 1954 and 2020, the Federal Emergency Management Agency (FEMA) issued one disaster declaration (DR) for landslides in NYS (DR-487), but Erie County was not included in the DR. Annualized loss is negligible for landslide damage.

Probability of Future Occurrences

As indicated in the 2019 NYS HMP, and given the history of landslides in the state, future landslides certainly will occur, but the severity of these landslides cannot be determined. Therefore, probability of future landslides in the state is considered high; however, because documentation on landslides in Erie County is sparse, predicting the extent of future landslides in the County is difficult.

According to the NYSGS Landslide Inventory Study to estimate probability of future landslides (based on documented historical occurrences), NYS can expect on average approximately two major landslides each year, a greater number of smaller but still significant slides, slumps, or flows each year, and at least one landslide causing a fatality once every 12 years.

It is extremely difficult to predict landslide hazards in absolute terms since landslides can occur as a result of many factors within the County, including past landslides and their distribution, bedrock, slope steepness or inclination, hydrologic factor, and human-initiated effects. However, a sufficient understanding of landslide processes within the County exists through various studies and mapping sources to be able to make an estimation of landslide hazard potential. The potential increase in the risk posed by the landslide hazard can be curbed through a continued understanding and mapping of the hazards and improved capabilities to mitigate and respond to the landslide hazard (Spiker and Gori, 2000).

Based on historical records and input from the Planning Partnership, probability of occurrence of landslides in Erie County is considered “rare” (1 to 10 percent annual probability of a hazard event occurring).

Climate Change Impacts

Projecting future climate change within a specific region is challenging. Shorter-term projections are more closely tied to existing trends, rendering longer-term projections even more challenging. The further into the future a prediction extends, the more it is subject to change.

Through the 2020s, average annual temperature is expected to increase by 1.8°F in the region of NYS, where Erie County is located. By the 2050s, this increase will be 3.6 °F, and by 2100, it will be 4.5 °F (New York State Energy Research and Development Authority [NYSERDA] 2014). Future climate change may impact storm patterns, increasing probability of more frequent, intense storms with varying duration. Global temperature increase could affect the snowpack and its ability to hold and store water. Warming temperatures also could increase occurrence and duration of droughts, which could increase probability of wildfire and likely reduce the vegetation that helps support steep slopes. All these factors could increase the probability of landslide occurrence.

5.4.8.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed and/or vulnerable to the identified hazard. Because of the lack of spatially delineated landslide hazard areas in the County, a spatial analysis referenced areas with slopes greater than 25 percent to delineate the landslide hazard area. Slope degrees greater than 25 percent are categorized as the most at-risk slopes in the study.

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Impact on Life, Health, and Safety

Generally, a landslide event would be an isolated incidence and impact the populations within the immediate area of the incident. Specifically, the population located downslope of the landslide hazard areas are particularly vulnerable to this hazard. In addition to causing damages to residential buildings and displacing residents, landslide events can block off or damage major roadways and inhibit travel for emergency responders or populations trying to evacuate the area.

Table 5.4.8-1 summarizes the population located in the landslide-susceptible hazard area or areas where slopes have degree angles greater than 25 percent. The City of Buffalo has the greatest number of persons located in the landslide-susceptible hazard area with 3,726 people, or 1.5 percent of its total population. The Town of Holland has the greatest percentage of its population located in the landslide-susceptible hazard area (24.7 percent of its total population).

Table 5.4.8-1. Estimated Population Located in the Landslide-Susceptible Hazard Area

Jurisdiction	American Community Survey (2015–2019) Population	Estimated Population Located in the Landslide Hazard Area (Over 25-Percent Grade)	
		Persons Exposed	Percent of Total
Akron (V)	2,871	381	13.3%
Alden (T)	7,418	495	6.7%
Alden (V)	2,577	107	4.1%
Amherst (T)	120,276	2,370	2.0%
Angola (V)	2,373	150	6.3%
Aurora (T)	7,599	1,296	17.1%
Blasdell (V)	2,645	69	2.6%
Boston (T)	8,042	1,637	20.4%
Brant (T)	1,541	109	7.1%
Buffalo (C)	256,480	3,726	1.5%
Cheektowaga (T)	73,129	949	1.3%
Clarence (T)	32,440	2,135	6.6%
Colden (T)	3,328	718	21.6%
Collins (T)	5,418	857	15.8%
Concord (T)	4,186	979	23.4%
Depew (V)	15,102	161	1.1%
East Aurora (V)	6,184	435	7.0%
Eden (T)	7,631	792	10.4%
Elma (T)	11,732	1,198	10.2%
Evans (T)	13,782	1,051	7.6%
Farnham (V)	459	11	2.4%
Gowanda (V)	1,043	90	8.6%
Grand Island (T)	21,047	787	3.7%
Hamburg (T)	45,985	2,121	4.6%
Hamburg (V)	9,636	400	4.2%
Holland (T)	3,355	828	24.7%
Kenmore (V)	15,132	55	0.4%
Lackawanna (C)	17,831	322	1.8%
Lancaster (T)	27,625	843	3.1%
Lancaster (V)	10,144	231	2.3%
Marilla (T)	5,378	720	13.4%
Newstead (T)	5,804	253	4.4%

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	American Community Survey (2015–2019) Population	Estimated Population Located in the Landslide Hazard Area (Over 25-Percent Grade)	
		Persons Exposed	Percent of Total
North Collins (T)	2,130	289	13.6%
North Collins (V)	1,370	118	8.6%
Orchard Park (T)	26,361	2,615	9.9%
Orchard Park (V)	3,148	402	12.8%
Sardinia (T)	2,780	460	16.5%
Sloan (V)	3,562	0	0.0%
Springville (V)	4,298	510	11.9%
Tonawanda (C)	14,830	125	0.8%
Tonawanda (T)	57,027	298	0.5%
Wales (T)	3,020	614	20.3%
West Seneca (T)	45,344	1,544	3.4%
Williamsville (V)	5,233	276	5.3%
Erie County Total	**917,296**	**33,525**	**3.7%**

Source: New York Office of Information Technology Services (NYOIT) 2019; American Community Survey 2019
C = City; T = Town; V = Village; % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Socially vulnerable populations (e.g., the elderly and low-income populations) are particularly vulnerable to a landslide event. There are approximately 161,498 persons over 65 and 126,041 persons living below the poverty level in Erie County. The City of Buffalo, which also has the greatest number of people in the steep-slope area, also has the greatest elderly and low-income population (i.e., 31,818 and 74,552 people, respectively).

Impact on General Building Stock

In general, the built environment located in the landslide susceptibility area and the population, structures, and infrastructure located downslope are vulnerable to this hazard. Landslides also have the potential of destabilizing the foundation of structures, which may result in monetary losses to businesses and residents. There are 15,416 buildings with a replacement cost value of $10 billion located in the landslide hazard area countywide. The City of Buffalo has the greatest number of buildings and estimated replacement cost value located in landslide-susceptible hazard area where slopes are greater than 25 percent; there are approximately 1,390 buildings with a total replacement cost value of $2 billion built in the landslide-susceptible hazard area within this city. Table 5.4.8-2 summarizes the exposed building stock located in the landslide susceptibility area throughout the County by jurisdiction.

Table 5.4.8-2. Estimated Number of Buildings in the Landslide Hazard Area

Jurisdiction	Number of Buildings	Total Replacement Cost Value	Estimated Building Stock Located in the Landslide Hazard Area (Over 25-Percent Grade)			
			Number of Buildings Exposed	Percent of Total	Replacement Cost Value Exposed	Percent of Total
Akron (V)	1,275	$866,609,574	170	13.3%	$117,401,954	13.5%
Alden (T)	3,400	$1,748,473,245	221	6.5%	$93,267,906	5.3%
Alden (V)	1,102	$602,655,574	45	4.1%	$26,954,094	4.5%
Amherst (T)	38,528	$27,372,255,690	800	2.1%	$912,304,720	3.3%
Angola (V)	874	$525,704,230	56	6.4%	$25,280,372	4.8%
Aurora (T)	4,280	$2,496,885,036	701	16.4%	$352,913,703	14.1%

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Number of Buildings	Total Replacement Cost Value	Estimated Building Stock Located in the Landslide Hazard Area (Over 25-Percent Grade)			
			Number of Buildings Exposed	Percent of Total	Replacement Cost Value Exposed	Percent of Total
Blasdell (V)	1,026	$638,571,953	27	2.6%	$8,174,380	1.3%
Boston (T)	4,040	$1,702,475,276	810	20.0%	$327,059,951	19.2%
Brant (T)	1,325	$657,594,060	90	6.8%	$46,067,429	7.0%
Buffalo (C)	83,471	$58,603,851,634	1,390	1.7%	$2,129,933,182	3.6%
Cheektowaga (T)	30,938	$17,530,893,277	411	1.3%	$263,607,732	1.5%
Clarence (T)	13,660	$9,866,246,863	860	6.3%	$606,366,356	6.1%
Colden (T)	2,110	$854,417,381	434	20.6%	$159,653,405	18.7%
Collins (T)	2,521	$1,189,158,504	395	15.7%	$155,847,114	13.1%
Concord (T)	3,245	$1,338,570,261	713	22.0%	$255,837,114	19.1%
Depew (V)	6,532	$3,841,823,815	72	1.1%	$29,857,073	0.8%
East Aurora (V)	2,441	$1,723,816,550	172	7.0%	$137,488,512	8.0%
Eden (T)	4,290	$2,180,455,513	431	10.0%	$191,345,150	8.8%
Elma (T)	6,093	$3,775,039,302	601	9.9%	$314,669,752	8.3%
Evans (T)	7,952	$3,335,060,692	591	7.4%	$200,184,321	6.0%
Farnham (V)	189	$87,990,422	5	2.6%	$2,093,480	2.4%
Gowanda (V)	396	$249,516,940	34	8.6%	$16,484,507	6.6%
Grand Island (T)	8,426	$4,674,517,058	310	3.7%	$195,053,961	4.2%
Hamburg (T)	19,130	$11,911,210,828	866	4.5%	$565,352,691	4.7%
Hamburg (V)	3,794	$2,005,172,252	152	4.0%	$108,984,956	5.4%
Holland (T)	2,182	$1,151,194,342	508	23.3%	$219,050,203	19.0%
Kenmore (V)	6,017	$2,305,529,001	24	0.4%	$15,690,832	0.7%
Lackawanna (C)	6,751	$4,030,622,400	141	2.1%	$84,858,014	2.1%
Lancaster (T)	10,973	$6,845,493,469	338	3.1%	$214,056,427	3.1%
Lancaster (V)	4,323	$2,217,331,122	105	2.4%	$108,123,110	4.9%
Marilla (T)	2,956	$1,099,846,031	392	13.3%	$154,392,271	14.0%
Newstead (T)	4,202	$2,181,758,974	202	4.8%	$114,240,225	5.2%
North Collins (T)	1,898	$889,517,676	245	12.9%	$98,083,140	11.0%
North Collins (V)	551	$383,968,909	47	8.5%	$22,199,405	5.8%
Orchard Park (T)	10,748	$8,174,650,530	1,027	9.6%	$749,658,871	9.2%
Orchard Park (V)	1,211	$867,347,745	155	12.8%	$148,094,403	17.1%
Sardinia (T)	2,184	$1,068,523,829	338	15.5%	$135,243,967	12.7%
Sloan (V)	1,674	$634,998,253	1	0.1%	$537,703	0.1%
Springville (V)	1,816	$1,354,905,864	205	11.3%	$163,147,532	12.0%
Tonawanda (C)	6,452	$3,291,492,557	62	1.0%	$33,783,167	1.0%
Tonawanda (T)	23,999	$14,694,684,404	153	0.6%	$198,182,202	1.3%
Wales (T)	1,923	$833,853,270	389	20.2%	$165,068,400	19.8%
West Seneca (T)	17,970	$9,583,482,689	612	3.4%	$352,447,522	3.7%
Williamsville (V)	2,057	$1,126,868,443	115	5.6%	$84,431,469	7.5%
Erie County Total	**360,925**	**$222,515,035,436**	**15,416**	**4.3%**	**$10,303,472,674**	**4.6%**

Source: New York Office of Information Technology Services (NYOIT) 2019; RS Means 2020; Erie County GIS 2020
C = City; T = Town; V = Village; % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Impact on Critical Facilities and Lifelines

Landslides can also impact the critical facilities in Erie County. There are 567 critical facilities located in the identified landslide susceptibility hazard area, 472 of which are considered lifelines (Table 5.4.8-3). The distribution of critical facilities built within the landslide hazard area are summarized in Table 5.4.8-4. Most of the critical facilities built within the landslide hazard areas are bridges (175 total). Furthermore, Table 5.4.8-5 shows the number of lifelines exposed to the landslide-susceptible hazard area in the County. Of the 472 lifelines in the landslide susceptibility area, a majority fall under the Transportation and Food, Water, and Shelter categories (i.e., 179 for each). Section 4 (County Profile) provides more information about these critical facilities and lifelines.

Table 5.4.8-3. Critical Facilities Located in the Landslide-Susceptible Hazard Areas (Slope Degrees >25%)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Landslide Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	9	30.0%	6	23.1%
Alden (T)	76	68	12	15.8%	9	13.2%
Alden (V)	19	17	0	0.0%	0	0.0%
Amherst (T)	391	387	25	6.4%	25	6.5%
Angola (V)	20	18	2	10.0%	2	11.1%
Aurora (T)	95	81	17	17.9%	12	14.8%
Blasdell (V)	22	22	4	18.2%	4	18.2%
Boston (T)	81	75	18	22.2%	16	21.3%
Brant (T)	39	39	3	7.7%	3	7.7%
Buffalo (C)	751	748	69	9.2%	67	9.0%
Cheektowaga (T)	224	221	11	4.9%	10	4.5%
Clarence (T)	121	115	20	16.5%	20	17.4%
Colden (T)	67	56	24	35.8%	20	35.7%
Collins (T)	71	55	22	31.0%	15	27.3%
Concord (T)	84	68	26	31.0%	18	26.5%
Depew (V)	63	63	2	3.2%	2	3.2%
East Aurora (V)	42	41	5	11.9%	5	12.2%
Eden (T)	78	72	15	19.2%	12	16.7%
Elma (T)	83	75	4	4.8%	2	2.7%
Evans (T)	112	109	18	16.1%	18	16.5%
Farnham (V)	10	10	2	20.0%	2	20.0%
Gowanda (V)	7	7	1	14.3%	1	14.3%
Grand Island (T)	69	66	4	5.8%	3	4.5%
Hamburg (T)	189	181	19	10.1%	17	9.4%
Hamburg (V)	27	23	5	18.5%	3	13.0%
Holland (T)	90	70	34	37.8%	22	31.4%
Kenmore (V)	14	13	1	7.1%	1	7.7%
Lackawanna (C)	94	93	13	13.8%	13	14.0%
Lancaster (T)	109	103	15	13.8%	11	10.7%
Lancaster (V)	58	53	9	15.5%	8	15.1%
Marilla (T)	48	37	11	22.9%	7	18.9%
Newstead (T)	64	61	7	10.9%	7	11.5%
North Collins (T)	69	56	13	18.8%	8	14.3%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	28	19.9%	23	17.8%
Orchard Park (V)	21	18	3	14.3%	3	16.7%
Sardinia (T)	78	57	32	41.0%	20	35.1%
Sloan (V)	8	8	0	0.0%	0	0.0%

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Landslide Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Springville (V)	35	32	3	8.6%	1	3.1%
Tonawanda (C)	61	60	5	8.2%	5	8.3%
Tonawanda (T)	266	265	13	4.9%	13	4.9%
Wales (T)	82	68	22	26.8%	20	29.4%
West Seneca (T)	145	140	17	11.7%	16	11.4%
Williamsville (V)	16	14	4	25.0%	2	14.3%
Erie County Total	**4,184**	**3,933**	**567**	**13.6%**	**472**	**12.0%**

Source: New York Office of Information Technology Services (NYOIT) 2019; Erie County GIS 2020

C = City; T = Town; V = Village; % = Percent

** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.8-4. Distribution of Critical Facilities in the Landslide-Susceptible Hazard Area (Slope Degrees >25%) by Type and Jurisdiction

Jurisdiction	Critical Facilities Located in the Landslide Hazard Area (Over 25-Percent Grade)																								
	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	Fire Station	Hazardous Material	Hospital	Library	Metro Station	Oil Facility	Police Station	Potable Water Facility	Potable Water Pumping Station	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Akron (V)	0	2	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	2	0	0
Alden (T)	0	1	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	9	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	10	0	1	0	0	1
Angola (V)	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	1
Blasdell (V)	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Boston (T)	0	3	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0
Brant (T)	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buffalo (C)	0	26	1	0	1	3	2	0	0	0	11	0	0	3	1	0	2	0	0	10	7	1	1	0	0	0
Cheektowaga (T)	0	7	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Clarence (T)	0	15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
Colden (T)	0	6	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0
Collins (T)	1	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0
Concord (T)	0	5	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0
Depew (V)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
East Aurora (V)	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Eden (T)	0	1	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	4
Elma (T)	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evans (T)	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	3

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities Located in the Landslide Hazard Area (Over 25-Percent Grade)																								
	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	Fire Station	Hazardous Material	Hospital	Library	Metro Station	Oil Facility	Police Station	Potable Water Facility	Potable Water Pumping Station	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Farnham (V)	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Hamburg (T)	0	7	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6
Hamburg (V)	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Holland (T)	1	1	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	1	0	1	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2	2
Lancaster (T)	0	6	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lancaster (V)	0	3	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marilla (T)	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
Newstead (T)	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
North Collins (T)	0	3	0	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	16	0	0	0	0	5	1	0	0	4	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
Orchard Park (V)	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Sardinia (T)	0	6	0	2	1	0	12	1	0	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities Located in the Landslide Hazard Area (Over 25-Percent Grade)																									
	Aquifer	Bridge	Bus Stop	Communication Tower	Communications Facility	Community Center	Dam	Electric Power Station	EMS	Fire Station	Hazardous Material	Hospital	Library	Metro Station	Oil Facility	Police Station	Potable Water Facility	Potable Water Pumping Station	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Tonawanda (C)	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
Tonawanda (T)	0	2	0	0	0	0	0	0	0	1	6	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0
Wales (T)	0	3	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	14	0	0	0	1	0	0	0
West Seneca (T)	0	3	0	0	0	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	6
Williamsville (V)	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**3**	**175**	**1**	**2**	**4**	**4**	**97**	**3**	**1**	**6**	**45**	**1**	**1**	**3**	**2**	**3**	**7**	**1**	**118**	**13**	**18**	**4**	**12**	**5**	**5**	**33**

Source: NYOIT 2017; Erie County GIS 2020

Notes: C = City; T = Town; V = Village; EMS = Emergency Medical Services; % = Percent

**Please note that only critical facilities exposed to the landslide hazard area are represented in this table. Critical facility types that are found within each municipality but are not exposed to the landslide hazard area may not be listed in the table.*

Table 5.4.8-5. Lifelines Located in the Landslide-Susceptible Hazard Area (Slope Degrees >25%)

FEMA Lifeline Category	Number of Lifelines	Number of Lifelines Located in the Landslide Hazard Area
Communications	59	6
Energy	176	7
Food, Water, and Shelter	951	179
Hazardous Materials	398	45
Health and Medical	144	10
Safety and Security	1,047	46
Transportation	1,158	179
Erie County Total	**3,933**	**472**

Source: NYOIT 2019; Erie County GIS 2020; FEMA 2020

Notes: % = Percent

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

In addition to critical facilities, a significant amount of infrastructure can be exposed to mass movements of geological material:

- *Roads*—Access to major roads is crucial to life-safety after a disaster event and to response and recovery operations. Landslides can block egress and ingress on roads, causing isolation for neighborhoods, traffic problems, and delays for public and private transportation. This can result in economic losses for businesses.
- *Bridges*—Landslides can significantly impact road bridges. Mass movements can knock out bridge abutments or significantly weaken the soil supporting them, making them hazardous for use.
- *Power Lines*—Power lines are generally elevated above steep slopes, but the towers supporting them can be subject to landslides. A landslide could trigger failure of the soil underneath a tower, causing it to collapse and ripping down the lines. Power and communication failures due to landslides can create problems for vulnerable populations and businesses.
- *Rail Lines*—Similar to roads, rail lines are important for response and recovery operations after a disaster. Landslides can block travel along the rail lines, which would become especially troublesome because it would not be as easy to detour a rail line as it is on a local road or highway. Many residents rely on public transport to get to work around the County and into Philadelphia and New York City, and a landslide event could prevent travel to and from work.

Impact on the Economy

The impact of a landslide on the economy and estimated dollar losses are difficult to measure. As stated earlier, landslides can exert direct and indirect effects on society. Direct costs include actual damage sustained by buildings, property, and infrastructure and estimated costs to repair or replace damaged buildings. Indirect costs include clean-up costs, business interruption, loss of tax revenues, reduced property values, and loss of productivity. The 2019 NYS HMP shows that Erie County has experienced zero economic damages from landslide events between 1996 and 2017 (NYS HMP 2019). Historic losses discussed earlier in this section also show that Erie County has not experienced any economic losses from landslides besides one event that was reported to have caused $250,000 in damages (1980s dollars). Therefore, the impact landslides have on the economy for Erie County is minimal.

Impact on the Environment

A landslide event alters the landscape. In addition to changes in topography, vegetation and wildlife habitats may be damaged or destroyed. Soil and sediment runoff will accumulate downslope, potentially blocking waterways and roadways and impacting quality of streams and other water bodies. Additional environmental impacts include loss of forest productivity.

Furthermore, soil and sediment runoff can accumulate downslope potentially blocking waterways and roadways and impacting quality of streams and other water bodies. Mudflows that erode into downstream waterways can threaten the life of freshwater species (USGS 2020). The impacts of eroded landscape can travel for miles downstream into adjacent waterways and create issues for surrounding watersheds.

Cascading Impacts on Other Hazards

Landslide events can have cascading impacts on utility failure in Erie County. As discussed in earlier sections, landslides may disrupt the functionality of utilities if the debris falls, topples, or spreads over the utilities providing services to the County. For example, electric utilities may become disconnected if power lines are broken from displaced geologic material. Water utilities may become breached with excess debris and/or

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

contaminants carried by landslide events. More information about utility interruptions can be found in Section 5.4.12, Utility Failure.

Future Changes that May Impact Vulnerability

Understanding future changes that impact vulnerability in the County can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The County considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across the County. Any areas of growth located in the landslide-susceptible hazard areas could be potentially impacted by the geologic ground movement caused by landslides. It is recommended that the County and jurisdictional partners implement design strategies that mitigate against the risk of landslides. The maps in the jurisdictional annexes in Section 9 show new development locations throughout the county and their proximity to the landslide-susceptible hazard areas (i.e., where slope degrees are greater than 25 percent).

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has remained stable between 2010 and 2019 (919,040 persons in 2010 and 919,355 persons in 2019). Estimated population projections provided by the 2017 Cornell Program on Applied Demographics indicate that the County's population will decrease into 2040, decreasing the total population to approximately 769,396 persons (Cornell Program on Applied Demographics 2017). While fewer people will reside in the County, those that remain may move into areas that are susceptible to landslide events. Section 4, County Profile, provides additional discussion on population trends.

Climate Change

A direct impact of climate change on landslides is difficult to determine. However, as discussed earlier, multiple secondary effects of climate change have the potential to increase the likelihood of landslides. Warming temperatures resulting in wildfires would reduce vegetative cover along steep slopes and destabilize the soils due to destruction of the root system; increased intensity of rainfall events would increase saturation of soils on steep slopes. Under these future conditions, the County's assets located on or at the base of these steep slopes will have an increased risk to landslides. Roadways and other transportation infrastructure located in these areas will also be at an increased risk of closure, which would impact the County's risk as described above.

Change of Vulnerability Since 2015 HMP

The 2015 HMP included a quantitative assessment of the historical occurrences, areas of slumping, and land sliding areas identified by USGS and NYSGS. For this HMP, slope data was derived from the 2019 New York Office of Information Technology Services (NYOIT) Digital Elevation Model (DEM). Areas within Erie County that have slope degrees greater than 25 percent were selected as areas with landslide susceptibility. Population statistics have also been updated using the 5-Year 2015-2019 American Community Survey Population Estimates. The general building stock was updated using RSMeans 2020 building valuations that estimated replacement cost value for each building in the inventory.

Attachment: 18-Section-5.4.8-Landslide-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.9 Pandemic

This section provides profile information, including description, location, extent, previous occurrences and losses, probability of future occurrences, and climate change impacts as well as the vulnerability assessment for the epidemic hazard in Erie County.

5.4.9.1 Hazard Profile

Description

An outbreak or an epidemic exists when there are more cases of a particular disease than expected in a given area, or among a specific group of people, over a particular period of time. An aggregation of cases in a given area over a particular period, regardless of the number of cases, is called a cluster. In an outbreak or epidemic, it is presumed that the cases are related to one another or that they have a common cause (Center for Disease Control and Prevention [CDC] 2004). Diseases that impact Erie County include foodborne illness, vaccine-preventable disease, and vector-borne diseases (tick-borne and mosquito-borne). However, for the disease outbreak profile, the county identified influenza, the Ebola virus, and COVID-19 as the diseases that may lead to an epidemic.

Influenza

The risk of a global influenza pandemic has increased over the last several years. This disease is capable of claiming thousands of lives and adversely affecting critical infrastructure and key resources. An influenza pandemic has the ability to reduce the health, safety, and welfare of the essential services workforce; immobilize core infrastructure; and induce fiscal instability.

Pandemic influenza is different from seasonal influenza (or "the flu") because outbreaks of seasonal flu are caused by viruses that are already among people. Pandemic influenza is caused by an influenza virus that is new to people and is likely to affect many more people than seasonal influenza. In addition, seasonal flu occurs every year, usually during the winter season, while the timing of an influenza pandemic is difficult to predict. Pandemic influenza is likely to affect more people than the seasonal flu, including young adults. A severe pandemic changes daily life for some time, including limitations on travel and public gatherings (CDC 2016).

At the national level, the CDC's Influenza Division has a long history of working with the World Health Organization (WHO) and its global network of National Influenza Centers (NIC). With limited resources, most international assistance provided in the early years was through hands-on laboratory training of in-country staff, the annual provision of WHO reagent kits (produced and distributed by CDC), and technical consultations for vaccine strain selections. The Influenza Division also conducts epidemiologic research, including vaccine studies and serologic assays, and provides international outbreak investigation assistance (CDC 2020).

Ebola Virus

Ebola, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus strains. According to the CDC, the 2014 Ebola epidemic was the largest in history, affecting multiple countries in West Africa. From 2014–2016, 11 people were treated in the United States, two of whom died (CDC 2019).

COVID-19 Virus

Coronavirus disease (COVID-19) is an infectious disease first identified in 2019. The virus rapidly spread into a global pandemic by spring of 2020. Older people and those with underlying medical problems like

cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness (WHO 2020). With the virus being relatively new, information regarding transmission and symptoms of the virus is still fresh. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. Illnesses have ranged from mild symptoms to severe illness and death. Reported symptoms include flu-like symptoms, trouble breathing, persistent pain or pressure in the chest, headaches, and loss of taste. Symptoms may appear 2–14 days after exposure to the virus (based on the incubation period of MERS-CoV viruses) (CDC 2020).

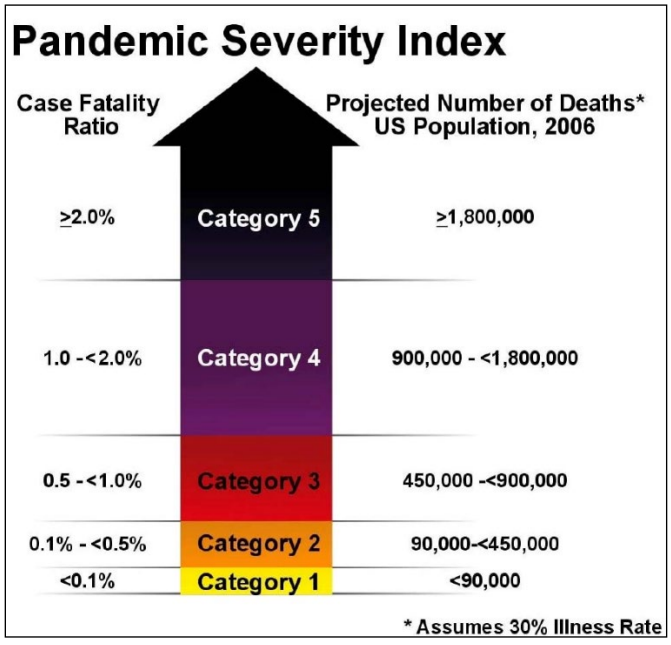
In order to slow the spread of the virus, the federal government and states have urged the public to avoid touching of the face, properly wash hands often, wear a face mask in public areas, and use various social distancing measures. Vaccines and treatments have been developed and are continuing to be refined for COVID-19. Many ongoing clinical trials are evaluating potential treatments (WHO 2020).

Extent

The exact size and extent of an infected population depends on how easily the illness is spread, the mode of transmission, and the amount of contact between infected and uninfected individuals. The transmission rates of pandemic illnesses are often higher in more densely populated areas. The transmission rate of infectious diseases will depend on the mode of transmission of a given illness. The Ebola virus is spread to others through direct contact; it is not spread through the air like influenza or COVID-19.

The CDC and Prevention Community Strategy for Pandemic Influenza Mitigation guidance introduced a Pandemic Severity Index (PSI), which uses the case fatality ratio as the critical driver for categorizing the severity of a pandemic. The index is designed to estimate the severity of a pandemic on a population to allow better forecasting of the impact of a pandemic and to enable recommendations on the use of mitigation interventions that are matched to the severity of influenza pandemic. Pandemics are assigned to one of five discrete categories of increasing severity (Category 1 to Category 5) (CDC 2016). Figure 5.4.9-1 illustrates the five categories of the PSI.

Figure 5.4.9-1. Pandemic Severity Index



Source: CDC 2016

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

WHO and CDC identify pandemics according to a number of pandemic classification levels. Additionally, New York State Department of Health (NYSDOH) and State Emergency Operations Center (EOC) have their own activation levels in response to a pandemic event. Multiple waves of a pandemic can be anticipated throughout the life cycle of an event. Refer to https://www.health.ny.gov/diseases/communicable/influenza/pandemic/ for information regarding the various levels in New York State.

Location

Erie County's geographic location and demographic characteristics make it vulnerable to importation and spread of infectious diseases. The county has experienced the effects of a pandemic or diseases outbreak, including influenza and COVID-19. There are some densely populated municipalities in the county, which can lead to the spread of influenza and COVID-19 more quickly than less densely populated communities. See Section 4 (County Profile) for a population density map of Erie County.

Previous Occurrences and Losses

Between 1954 and 2020, New York State was included in two disease outbreak-related emergency (EM) declarations, classified as a virus threat due to both West Nile Virus (EM-3155, May–November 2000) and COVID-19 (EM-3434, January 2020–Ongoing) impacting the State. Generally, epidemic disasters cover a wide region of the State; therefore, they may have impacted many, but not all, counties. Erie County was included in these two declarations (Federal Emergency Management Agency [FEMA] 2020). Table 5.4.9-1 provides details on epidemic episodes that occurred in Erie County between 2015 and 2020.

Table 5.4.9-1. Influenza, Ebola and COVID-19 Epidemics Affecting Erie County, 2015 to 2020

Date(s) of Event	Event Type	FEMA Declaration Number (if applicable)	County Designated?	Event Details
2020 & ongoing	COVID-19	EM-3434	Yes	COVID-19 epidemic. 1,600 deaths in county reported (as of March 5, 2021
2019–(June) 2020 Season	Influenza	N/A	N/A	454 cases of influenza reported
2015–2016 Season	Influenza	N/A	N/A	117 cases of influenza reported
2016–2017 Season	Influenza	N/A	N/A	63 cases of influenza reported
2017–2018 Season	Influenza	N/A	N/A	284 cases of influenza reported
2018–2019 Season	Influenza	N/A	N/A	288 cases of influenza reported
2015–2019	Ebola	N/A	N/A	0 confirmed cases of Ebola

Source: *NYSDOH 2021*
Note: **COVID-19 count as of March 5, 2021*

Probability of Future Events

Predicting the future occurrences of disease outbreaks is difficult; however, based on the history of occurrences in Erie County, it is possible to predict the likelihood of a disease outbreak impacting the County. Additionally, increases in population and population density in the county have the potential to increase exposure and susceptibility of its residents to outbreaks.

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

In Section 5.3, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Committee, the probability of occurrence for disease outbreaks in the county is considered "occasional" (likely to occur within 100 years, as presented in Table 5.3-1).

Impacts of Climate Change

Climate change is beginning to affect both people and resources in New York State, and these impacts are projected to continue growing. Impacts related to increasing temperatures and sea-level rise are already being felt in the State. ClimAID: the Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision-makers with information on the State's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge (New York State Energy Research and Development Authority [NYSERDA] 2011).

Each region in New York State, as defined by ClimAID, has attributes that will be affected by climate change. Erie County is part of geographical Region 1, Western New York and the Great Lakes Plain. Some of the issues in this region affected by climate change include: relatively low seasonal rainfall and increased summer drought risk, high-value crops could need irrigation, and growing conditions will improve for some crops, such as grapes. (NYSERDA 2014). The relationship between climate change and increase in infectious diseases is difficult to predict with certainty; there are scientific linkages between the two. As warm habitats that host insects such as mosquitoes increase, more of the population becomes exposed to potential virus threats (The Washington Post, 2017).

Temperatures and precipitation amounts are expected to increase throughout the State as well as within Region 1. Within Region 1, temperatures are anticipated to increase between 4.3 to 6.3 ºF by the 2050s and 5.7 to 9.6 ºF by the 2080s (baseline of 47.7 ºF, middle-range projection). Precipitation totals will increase between 4 and 10 percent by the 2050s and 6 to 13 percent by the 2080s (baseline of 34.0 inches, middle-range projection).

Annual temperatures have been rising throughout New York State since the start of the 20th century. State average temperatures have increased by approximately 0.6 °F since 1970, with winter warming exceeding 1.1 °F per decade. Extreme heat events are likely to increase throughout New York State, and short-duration warm season droughts will become more common (NYSERDA 2014).

With the increase in temperatures, heat waves will become more frequent and intense, as shown in Table 5.4.9-2 below. Heat waves are defined as three or more consecutive days with maximum temperatures at or above 90 ˚F. Summer droughts are projected to increase under these conditions, affecting water supply, agriculture, ecosystems, and energy projects (NYSERDA 2014).

Table 5.4.9-2. Extreme Event Projections for Region 1

Middle Range (25th to 75th Percentile)	2020s	2050s	2080s
Days over 90 °F (8 days)	14 to 17	22 to 34	27 to 57
# of Heat Waves (0.7 heat waves)	2 to 2	3 to 4	3 to 8
Duration of Heat Waves (4 days)	4 to 4	4 to 5	5 to 6
Days below 32 °F (133 days)	103 to 111	84 to 96	68 to 88
Days over 1" Rainfall (5 days)	5 to 5	5 to 5	5 to 6
Days over 2" Rainfall (0.6 days)	0.6 to 0.7	0.6 to 0.8	0.6 to 0.9

Source: NYSERDA 2014

Warmer temperatures and changing rainfall patterns provide an environment where mosquitoes can remain active longer, greatly increasing the risk for animals and humans. Lyme disease could also expand throughout

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

the United States as temperatures warm, allowing ticks to move into new areas of the country. The changes in climate can also allow tropical and subtropical insects to move from regions where diseases thrive into new places (Natural Resources Defense Council 2017).

An increase in temperature and humidity may also lead to a larger number of influenza outbreaks. Studies have shown that warmer winters lead to an increase in influenza cases. During warm winters, fewer people contract influenza, which causes a large number in population to remain vulnerable into the next season. This causes an early and strong occurrence of the virus (Natural Resources Defense Council 2018).

5.4.9.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed or vulnerable in the identified hazard area. For disease outbreaks, all of Erie County is considered exposed to the hazard. Therefore, all assets in the county, as described in the County Profile (Section 4), are exposed and potentially vulnerable.

Impact on Life, Health, and Safety

The entire population of Erie County is vulnerable to the epidemic hazard. Healthcare providers and first responders have an increased risk of exposure due to their frequent contact with infected populations. As of February 27, 2021, the total confirmed cases of COVID within the county over the past year was 64,838 and the death toll was 1,651.

Most recently with COVID-19, the CDC has indicated that persons over 65 years and older, persons living in a nursing home or long-term care facility, and persons with underlying medical conditions such as cancer, chronic kidney disease, severe obesity, serious heart conditions, immunocompromised, etc. are at a higher risk of getting severely ill (CDC 2020). Population data from the 2019 U.S. Census Population Estimates indicates that 161,806 persons over 65 years old in Erie County would be considered at risk for getting severely ill from the COVID-19 virus. While the statistics of this virus are subject to change during the publication of this Hazard Mitigation Plan (HMP), the New York Department of Health dashboard shows that there is a higher percentage of illnesses within this particular age group.

Impact on General Building Stock, Critical Facilities, and Lifelines

No structures are anticipated to be directly affected by epidemics. An important secondary impact of a pandemic is that health care facilities can become overwhelmed with patient numbers and intensity of care needs.

Impact on Economy

The impact epidemics have on the economy and estimated dollar losses are difficult to measure and quantify. Costs associated with the activities and programs implemented to conduct surveillance and address epidemics have not been quantified in available documentation. Instead, activities and programs implemented by the county to address this hazard are described below, all of which could impact the local economy.

Most recently, the New York State Health Department has played an active role in maintaining and controlling COVID-19 protocols across the state. This activity requires additional costs from the State and Erie County to manage COVID-19 in the communities. Further, there has been secondary economic impact of closing non-essential facilities to reduce the spread of the virus. At the time of this HMP Update, the final costs of this virus are yet to be determined.

Impact on Environment

Disease outbreaks may have an impact on the environment if the outbreaks are caused by invasive species. Invasive species tend to be competitive with native species and their habitat and can be the major transmitters of

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

diseases like Zika, dengue, and yellow fever (Placer Mosquito and Vector Control District 2019). Secondary impacts from mitigating disease outbreaks could also have an impact on the environment. Pesticides used to control disease-carrying insects like mosquitoes have been reviewed by the Environmental Protection Agency (EPA) and the New York Department of Environmental Conservation. If these sprays are applied in large concentrations, they could potentially leach into waterways and harm nearby terrestrial species. As a result, pesticides must be registered before they can be sold, distributed, or used in the state (New York Department of Environmental Conservation 2020).

Cascading Impacts on Other Hazards

There are no known cascading impacts that disease outbreaks can cause to other hazards of concern for Erie County.

Future Changes that May Impact Vulnerability

Understanding future changes that effect vulnerability in the county can assist in planning for future development and ensure establishment of appropriate mitigation, planning, and preparedness measures. Changes in the natural environment and built environment and how they interact can also provide insight about ways to plan.

Project Development

As discussed in Section 4, areas targeted for future growth and development have been identified across the county. Any areas of growth could be potentially impacted by the epidemic hazard because the entire planning area is exposed and vulnerable.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has increased by a negligible amount between 2010 and 2019 (U.S. Census Bureau 2020). Estimated population projections provided by the Cornell Program on Applied Demographics indicate that the county's population will grow overall up to 2040, resulting in a projected population of 945,891 persons. (Cornell Program on Applied Demographics 2017). While fewer people will reside in the county, those who remain are still vulnerable to an epidemic or pandemic event. Section 4, County Profile, presents additional discussion on population trends.

Climate Change

The relationship between climate change and infectious diseases is somewhat controversial. The notion that rising temperatures will increase the number of mosquitoes that can transmit diseases among humans (rather than just shift their range) has been the subject of debate over the past decade. Climate change may affect the spread of disease. However, many researchers point out that climate is not the only force at work in increasing the spread of infectious diseases into the future. Other factors, such as expanded rapid travel and evolution of resistance to medical treatments, are already changing the ways pathogens infect people, plants, and animals. Climate change accelerations may likely work synergistically with many of these factors, especially in populations increasingly subject to massive migration and malnutrition (American Journal of Epidemiology 2019).

Changes in Vulnerability Since the 2015 HMP

An epidemics analysis was not conducted as part of the 2015 HMP risk assessment. Therefore, it is not possible to compare the change in vulnerability to the pandemic hazard.

Attachment: 19-Section-5.4.9-Pandemic-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.10 Severe Storm

This section provides a hazard profile and vulnerability assessment of the severe storm hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.10.1 Hazard Profile

This section presents information regarding the description, extent, location, previous occurrences and losses, and probability of future occurrences for the severe storm hazard.

Description

For the purpose of this HMP update and as deemed appropriate by Erie County, the severe storm hazard includes thunderstorms, lightning, hailstorms, windstorms, tornadoes, and hurricanes/tropical storms, which are defined in the sections below.

Thunderstorms

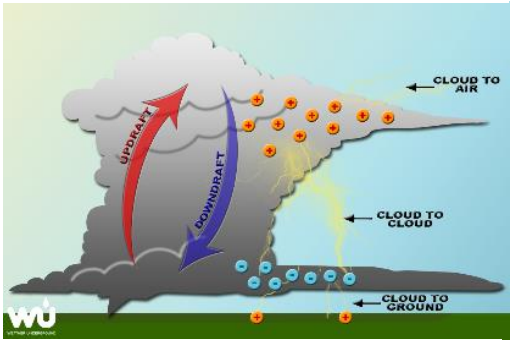
A thunderstorm is a local storm produced by a cumulonimbus cloud and accompanied by lightning and thunder (National Weather Service [NWS] 2009). A thunderstorm forms from a combination of moisture; rapidly rising warm air; and a force capable of lifting air, such as a warm front, cold front, a sea breeze, or a mountain. Thunderstorms form from the equator to as far north as Alaska. Although thunderstorms generally affect a small area when they occur, they have the potential to become dangerous due to their ability to generate tornadoes, hailstorms, strong winds, flash flooding, and lightning.

Thunderstorms can lead to heavy rain-induced flooding, landslides, strong winds, and lightning. Roads may become impassable from flooding, downed trees or power lines, or a landslide. Downed power lines can lead to loss of utility services, such as water, phone, and electricity. Typical thunderstorms are 15 miles in diameter and last an average of 30 minutes. During the summer, thunderstorms are responsible for most of the rainfall.

Lightning

Lighting is a bright flash of electrical energy produced by a thunderstorm. The resulting clap of thunder is the result of a shock wave created by the rapid heating and cooling of the air in the lightning channel. All thunderstorms produce lightning and are very dangerous. Lightning ranks as one of the top weather killers in the United States, killing approximately 50 people and injuring hundreds each year. Lightning can occur anywhere there is a thunderstorm. Lightning can be cloud to air, cloud to cloud, and cloud to ground. Figure 5.4.10-1 illustrates the variety of lightning types.

Figure 5.4.10-1. Types of Lightning



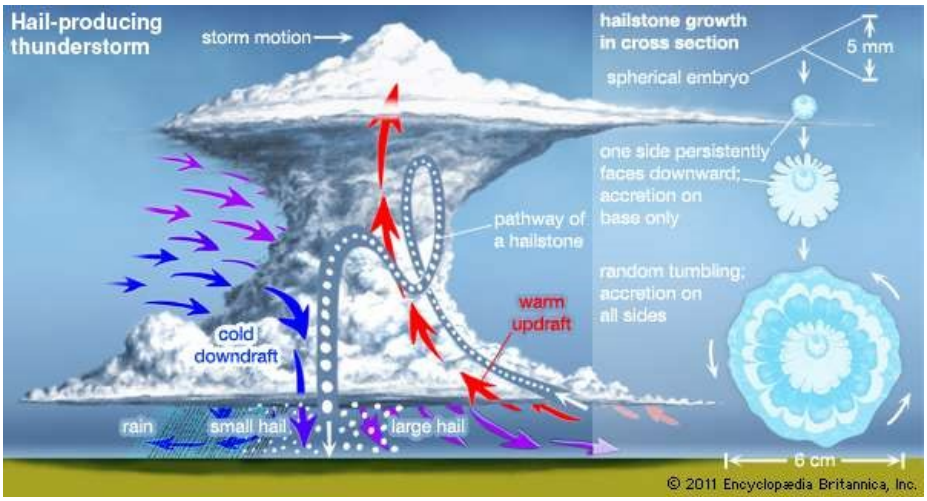
Source: Weather Underground n.d.

Hailstorms

Hail forms inside a thunderstorm or other storms with strong updrafts of warm air and downdrafts of cold water. If a water droplet is picked up by the updrafts, it can be carried well above the freezing level. Water droplets freeze when temperatures reach 32 degrees Fahrenheit (°F) or colder. As the frozen droplet begins to fall, it may thaw as it moves into warmer air toward the bottom of the thunderstorm. However, the droplet may be picked up again by another updraft and carried back into the cold air and re-freeze. With each trip above and below the freezing level, the frozen droplet adds another layer of ice. The frozen droplet, with many layers of ice, falls to

the ground as hail. Most hail is small and typically less than 2 inches in diameter (NWS 2010). Figure 5.4.10-2 shows how hail is formed within thunderstorms.

Figure 5.4.10-2. Hail Formation in Thunderstorms



Source: Encyclopedia Britannica 2011

Windstorms

Wind begins with differences in air pressures and occurs through rough horizontal movement of air caused by uneven heating of the earth's surface. Wind occurs at all scales, from local breezes lasting a few minutes to global winds resulting from solar heating of the earth. High winds are often associated with other severe weather events such as thunderstorms, derechos, tornadoes, nor'easters, hurricanes, and tropical storms (all discussed further in this section).

Tornadoes

A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 250 miles per hour (mph). Damage paths can be greater than 1 mile wide and 50 miles long. Tornadoes typically develop from either a severe thunderstorm or hurricane as cool air rapidly overrides a layer of warm air. Tornadoes typically move at speeds between 30 and 125 mph and can generate combined wind speeds (forward motion and speed of the whirling winds) exceeding 300 mph. The lifespan of a tornado rarely is longer than 30 minutes (Federal Emergency Management Agency [FEMA] 1997). Tornadoes can occur at any time of the year, with peak seasons at different times for different states (National Oceanic and Atmospheric Administration [NOAA] National Severe Storms Laboratory [NSSL] 2013).

Hurricanes and Tropical Storms

Tropical cyclones (hurricanes) are fueled by a different heat mechanism than other cyclonic windstorms such as nor'easters and polar lows. The characteristic that separates a tropical storm from another cyclonic system is that at any height in the atmosphere, the center of a tropical storm will be warmer than its surroundings, a phenomenon called "warm core" storm systems (NOAA 2013). Tropical cyclones strengthen when water evaporated from the ocean is released as the saturated air rises, resulting in condensation of water vapor contained in the moist air. Tropical cyclones begin as disturbed areas of weather, often referred to as tropical waves. As the storm organizes, it is designated as a tropical depression.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

A tropical storm system is characterized by a low-pressure center and numerous thunderstorms that produce strong winds of 39 to 73 mph and heavy rain. A hurricane is a tropical storm that attains hurricane status when its wind speed reaches 74 mph or higher. Tropical systems may develop in the Atlantic between the Lesser Antilles and the African coast or may develop in the warm tropical waters of the Caribbean and Gulf of Mexico. These storms may move up the Atlantic coast of the United States and impact the eastern seaboard or move into the United States through the states along the Gulf Coast, bringing wind and rain as far north as New England before moving offshore and heading east.

Despite Erie County's inland location, coastal storms, such as hurricanes and tropical storms, can impact the County (New York State [NYS] Division of Homeland Security and Emergency Services [DHSES] 2014). Hurricanes and tropical storms can impact Erie County from June to November, the official eastern U.S. hurricane season; however, late July to early October is the most likely period for hurricanes and tropical storms to impact the county due to the cooling of the North Atlantic Ocean waters (NYS DHSES 2019). Although one of the most severe impacts associated with hurricanes is storm surge, due to Erie County's location, storm surge is not a concern for the county and has not been detailed in this profile.

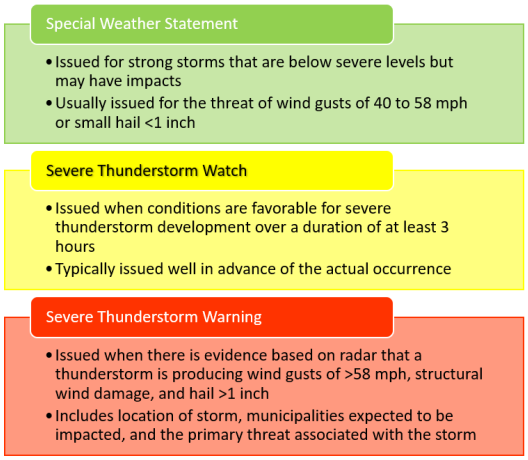
Extent

The extent (severity or magnitude) of a severe storm is largely dependent upon the most damaging aspects of each type of severe weather. This section describes the extent of thunderstorms, lighting, hail, windstorms, tornadoes, and hurricanes and tropical storms in Erie County. Historical data presented in Table 5.4.10-1 show the most powerful severe weather records in Erie County.

Table 5.4.10-1. Severe Storm Extent in Erie County

Extent of Severe Storms in Erie County	
Largest Hailstone on Record	2.0 inches
Highest Wind Speed on Record	75 mph
Strongest Tropical Storm/Hurricane on Record	No events in the county

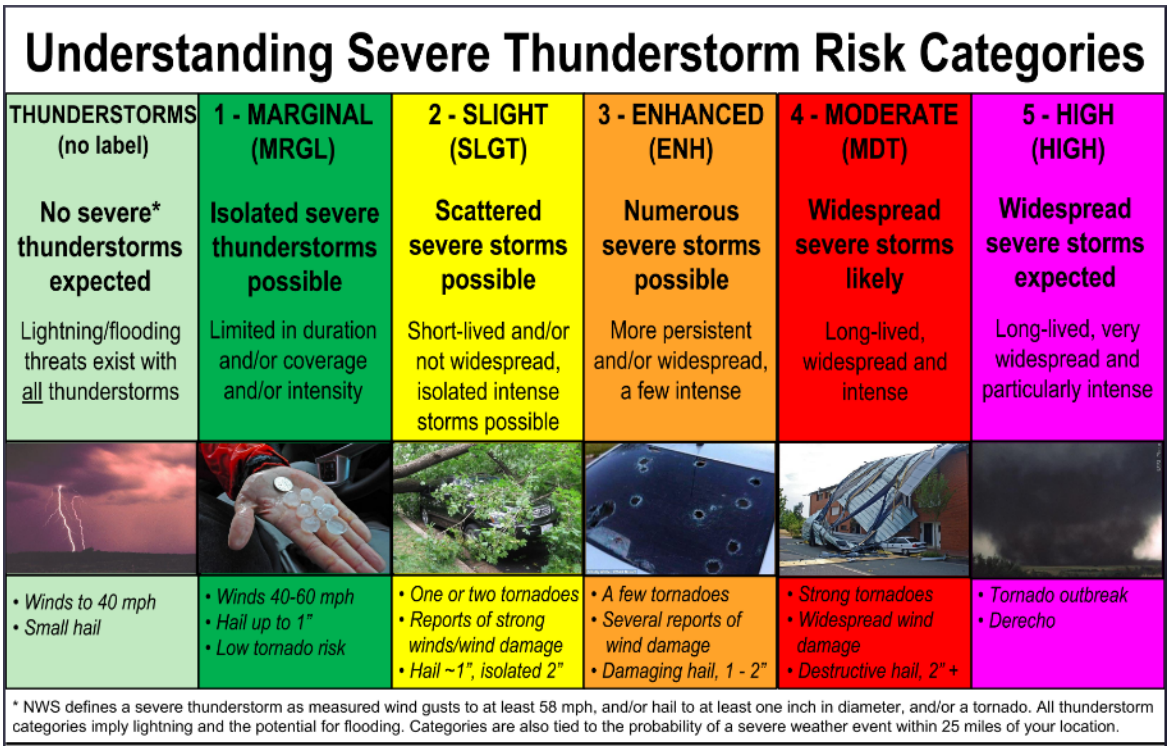
Thunderstorms



NWS considers a thunderstorm severe if it produces damaging wind gusts of 58 mph or higher, hail 1 inch (quarter size) in diameter or larger, or tornadoes (NWS 2010). Severe thunderstorm watches and warnings are issued by the local NWS office and NOAA's Storm Prediction Center (SPC). NWS and SPC will update the watches and warnings and will notify the public when they are no longer in effect. In addition, the SPC issues severe thunderstorm risk maps based on the likelihood of different severities of thunderstorms. Figure 5.4.10-3 shows the SPC's severe thunderstorm risk categories.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.10-3. Severe Thunderstorm Risk Categories



Source: NOAA SPC 2017

Lightning

Lightning is most often associated with moderate to severe thunderstorms. The severity of lightning refers to the frequency of lightning strikes during a storm. The New York City Office of Emergency Management (NYC OEM) notes that lightning strikes occur with moderate frequency in the State of New York, with 3.8 strikes occurring per square mile each year. Multiple devices are available to track and monitor the frequency of lightning.

Hail

The severity of a hailstorm is measured by duration, hail size, and geographic extent. Most hail stones from hailstorms are made up of variety of sizes. Only the very largest hail stones pose serious risk to people, if exposed (NYS DHSES 2014). The size of hail is estimated by comparing it to a known object. Table 5.4.10-2 describes the different sizes of hail as compared to real-world objects and lists approximate measurements.

Table 5.4.10-2. Hail Size

Description	Diameter (in inches)		Description	Diameter (in inches)
Pea	0.25		Golf ball	1.75
Marble or mothball	0.50		Hen's egg	2.00
Penny or dime	0.75		Tennis ball	2.75
Nickel	0.88		Baseball	2.75
Quarter	1.00		Tea cup	3.00
Half dollar	1.25		Grapefruit	4.00

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

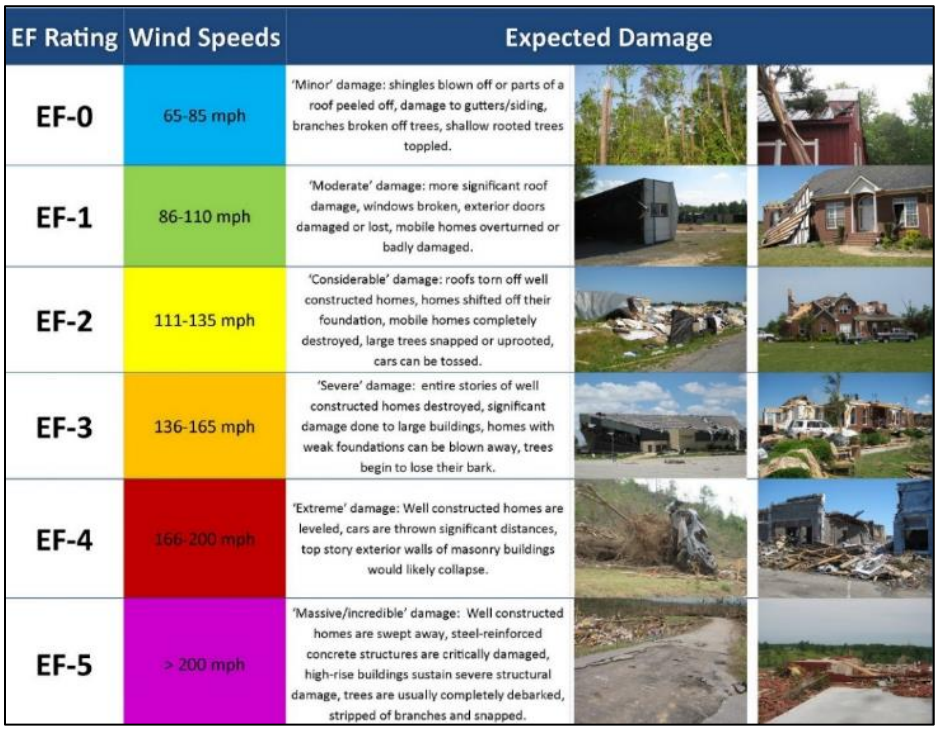
Description	Diameter (in inches)		Description	Diameter (in inches)
Walnut or ping pong ball	1.50		Softball	4.50

Source: NYS DHSES 2014

Tornado

The magnitude or severity of a tornado is categorized using the Enhanced Fujita Tornado Intensity Scale (EF Scale). Figure 5.4.10-4 illustrates the relationship between EF Scale ratings, wind speed, and expected tornado damage.

Figure 5.4.10-4. Enhanced Fujita Tornado Intensity Scale Ratings, Wind Speeds, and Expected Damage



Source: NWS 2018

Tornado watches and warning are issued by the local NWS office. A tornado watch is released when tornadoes are possible in an area. A tornado warning means a tornado has been sighted or indicated by weather radar. The current average lead time for tornado warnings is 13 minutes. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible (NOAA 2011).

Windstorms

Table 5.4.10-3 provides the NWS descriptions of winds during wind-producing events.

Table 5.4.10-3. NWS Wind Descriptions

Descriptive Term	Sustained Wind Speed (mph)
Strong, dangerous, or damaging	≥40
Very windy	30-40
Windy	20-30
Breezy, brisk, or blustery	15-25

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Descriptive Term	Sustained Wind Speed (mph)
None	5-15 or 10-20
Light or light and variable wind	0-5

Source: NWS 2015

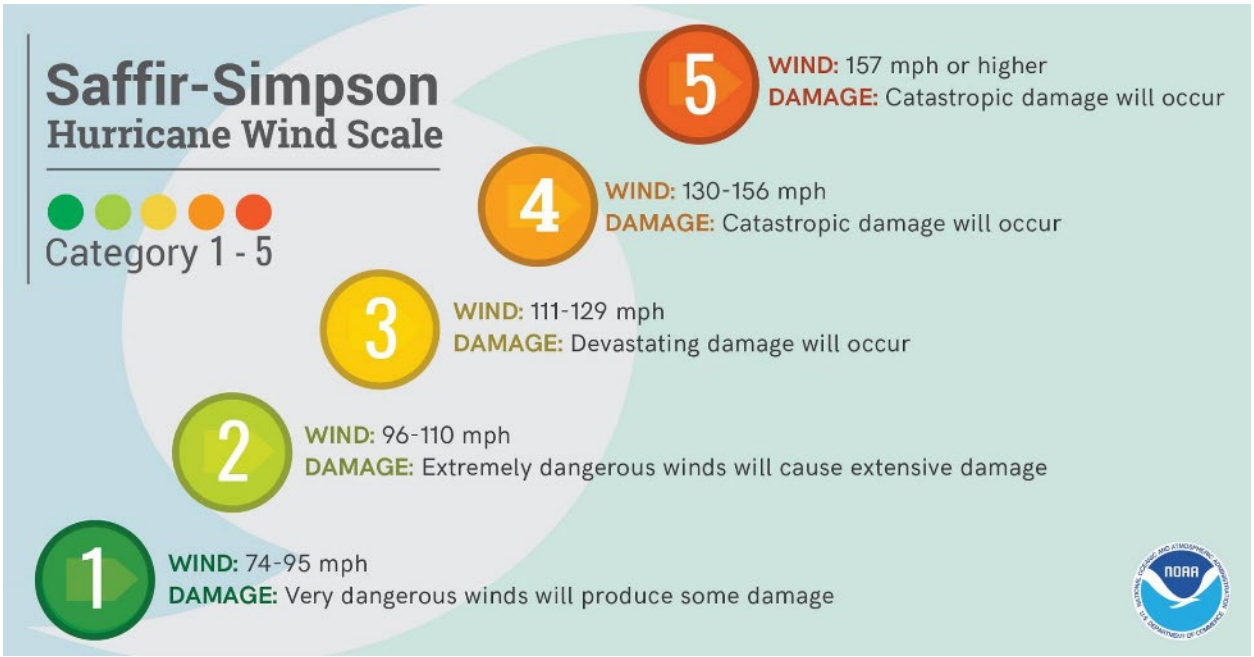
NWS issues advisories and warnings for winds, which are normally site-specific. High wind advisories, watches, and warnings are issued by the NWS when wind speeds may pose a hazard or may be life-threatening. The criterion for each of these varies from state to state. Wind warnings and advisories for New York State are as follows:

- *High Wind Warnings* are issued when sustained winds of 40 mph or greater are forecast for 1 hour or longer, or wind gusts of 58 mph or greater are forecast for any duration.
- *Wind Advisories* are issued when sustained winds of 30 to 39 mph are forecast for one 1 hour or longer, or wind gusts of 46 to 57 mph are forecast for any duration (NWS n.d.).

Hurricanes and Tropical Storms

The extent of a hurricane or tropical storm is commonly categorized in accordance with the Saffir-Simpson Hurricane Wind Scale, which assigns a designation of tropical storm for storms with sustained wind speeds below 74 mph and a hurricane category rating of 1 to 5 based on a hurricane's increasing sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Tropical storms and Category 1 and 2 hurricanes are dangerous and require preventative measures (NOAA 2013). Figure 5.4.10-5 presents this scale, which is used to estimate the potential property damage and flooding expected when a hurricane makes landfall.

Figure 5.4.10-5. The Saffir-Simpson Hurricane Wind Scale



Source: NOAA - Disaster Preparedness Portal 2017

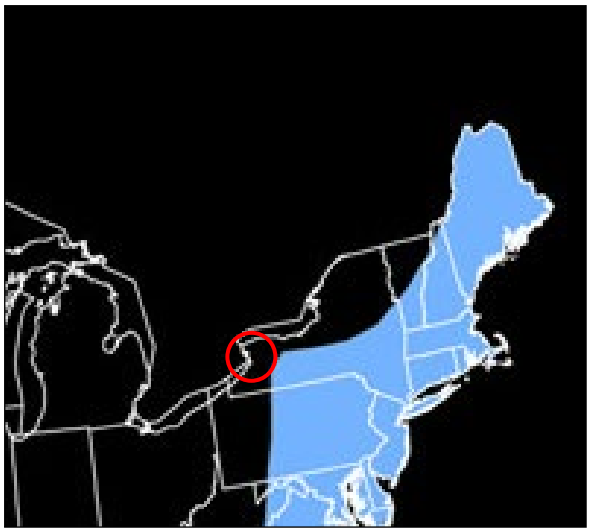
Mean Return Period

In evaluating the potential for hazard events of a given magnitude, a mean return period (MRP) is often used. The MRP provides an estimate of the magnitude of an event that may occur within any given year based on past

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

recorded events. MRP is the average period, in years, between occurrences of a hazard event, equal to the inverse of the annual frequency of exceedance (Dinicola 2009). Figure 5.4.10-6 shows the number of hurricanes expected for the 100-year MRP in the northeast region. Erie County is on the edge of the area that could expect 20−40 hurricanes in a 100-year period.

Figure 5.4.10-6. Number of Hurricanes for a 100-Year Mean Return Period

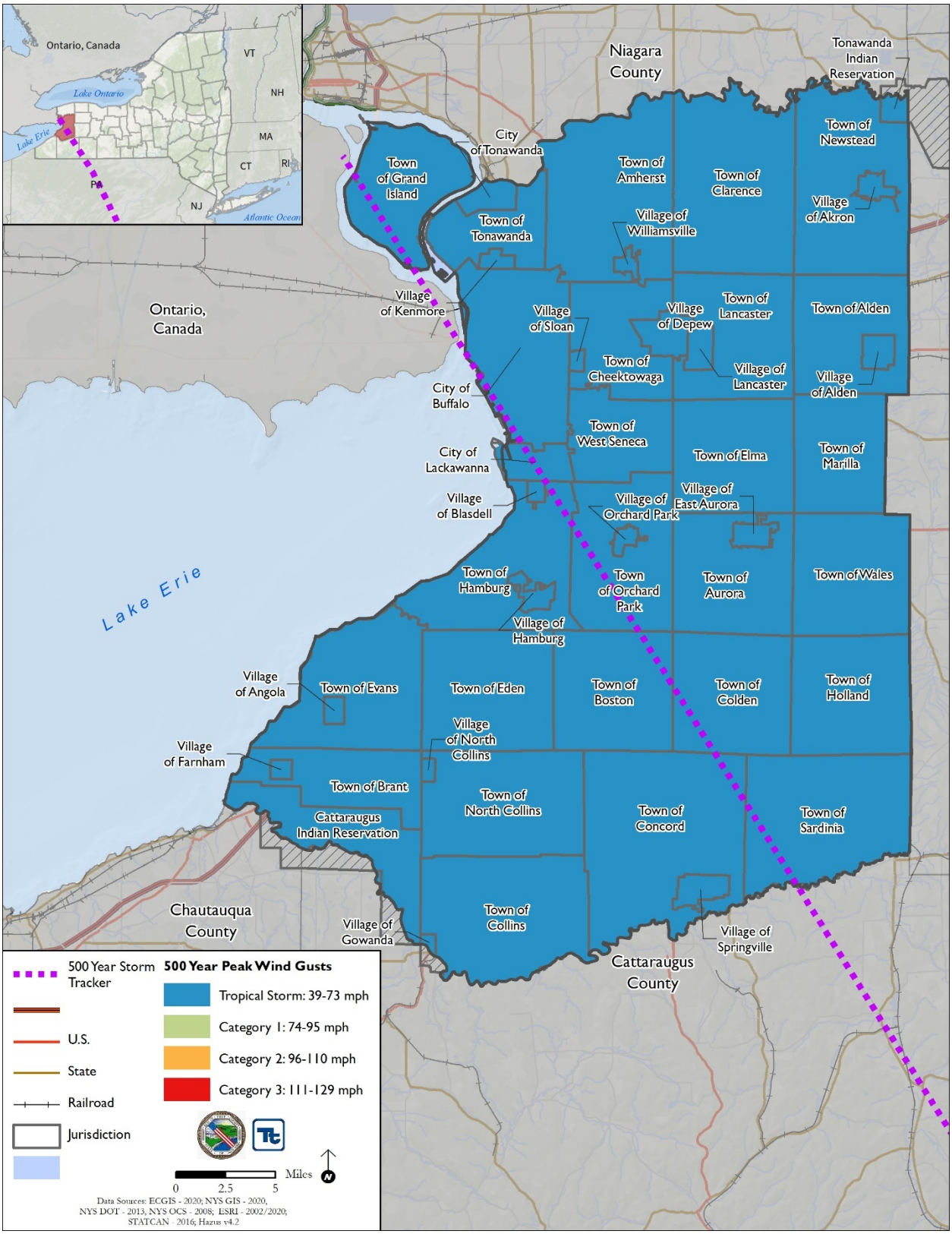


Source: U.S. Geological Survey (USGS) 2005
Notes:
Red circle indicates Erie County's approximate location within the region.
The map shows the number of hurricanes expected to occur during a 100-year MRP based on historical data using the following scale:
Light blue area: 20 to 40 hurricanes expected in a 100-year period.

Figure 5.4.10-7 shows the estimated maximum 3-second gust wind speeds that can be anticipated in the study area associated with the 500-year MRP event. These peak wind speed projections were generated using Hazards U.S. Multi-Hazard (Hazus) model runs. Hazus v 4.2 estimated the maximum 3-second gust wind speeds for Erie County to be below 39 mph for the 100-year MRP event and not strong enough to be considered a tropical storm. The maximum 3-second gust wind speeds for Erie County range from 39−73 mph for the 500-year MRP event, which are wind speeds categorizing this event as a tropical storm. The associated impacts and losses from the 500-year MRP hurricane event modeled event is reported in the Vulnerability Assessment section for this hazard presented below.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.10-7. Wind Speeds for the 500-Year Mean Return Period Event



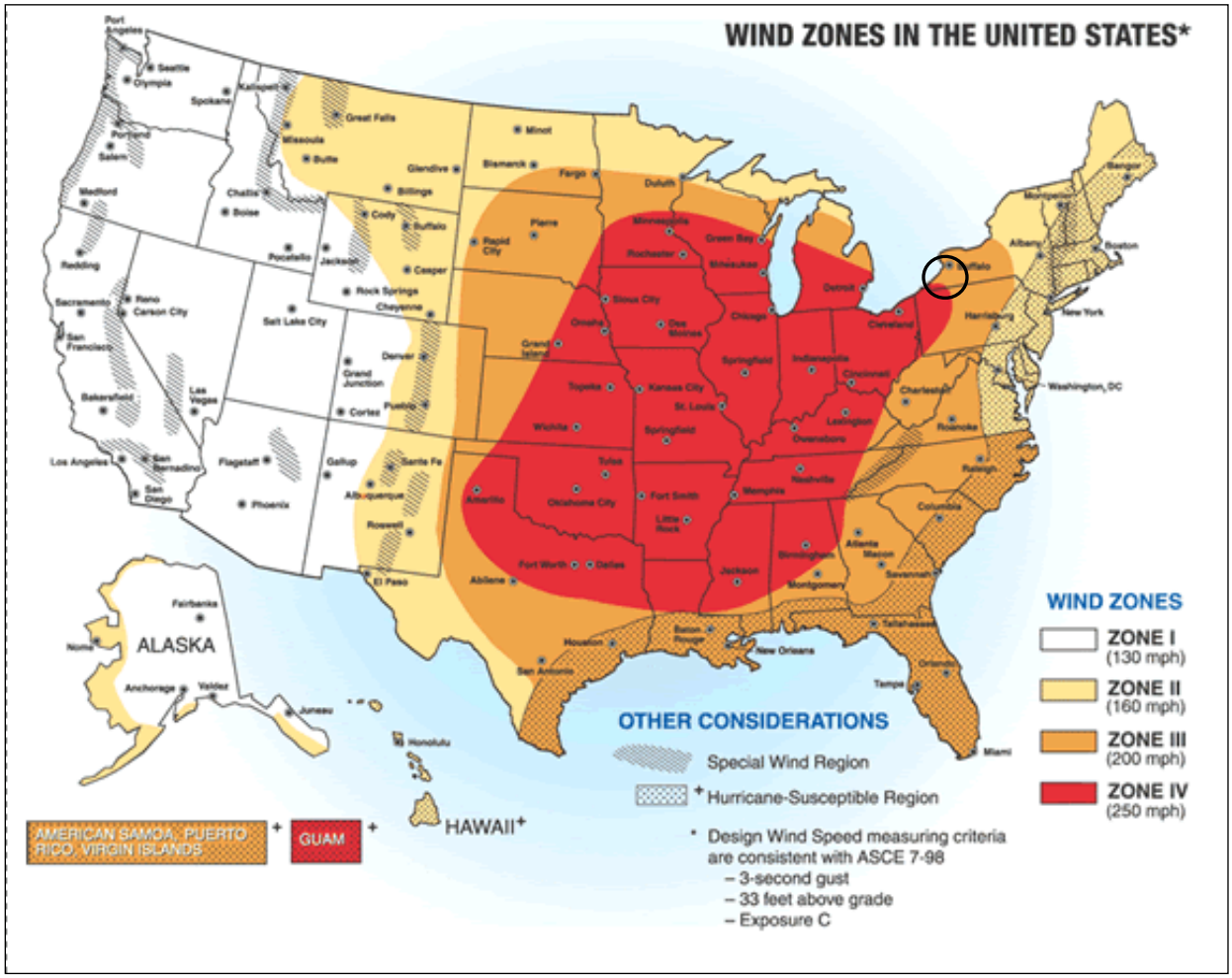
Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Location

All of Erie County is exposed to hail, lightning, windstorms and high wind, thunderstorms, and hurricanes and tropical storms, and all the county is subject to high winds from severe weather events. Erie County is located in far Western New York State; its entire western border is Lake Erie. As storm fronts reach increased elevations inland, greater amounts of rainfall and winds are experienced.

According to the FEMA Winds Zones of the United States map, Erie County is located within Wind Zone III where wind speeds can reach up to 200 mph. Figure 5.4.10-8 illustrates wind zones across the United States, which indicate the impacts of the strength and frequency of wind activity per region. The information on the figure is based on 40 years of tornado data and 100 years of hurricane data collected by FEMA.

Figure 5.4.10-8. Wind Zones in the United States



Source: *FEMA 2012*
Note: *The black oval indicates the approximate location of Erie County.*

Previous Occurrences and Losses

Many sources provided historical information regarding previous occurrences and losses associated with severe storms throughout New York State and Erie County; therefore, the loss and impact information for many events varies depending on the source. The accuracy of monetary figures discussed is based on the available information in cited sources.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

FEMA Disaster Declarations

Between 1954 and 2020, Erie County has been included in seven declarations for severe storm-related events classified as one or a combination of the following disaster types: severe storm, straight-line winds, coastal storm, hurricane/tropical storm, and tornado (FEMA 2020). Table 5.4.10-4 lists these events.

Table 5.4.10-4. Severe Storm-Related FEMA Declarations for Erie County, 1954–2020

FEMA Declaration Number	Date(s) Of Event	Event Type	Details
494	March 19, 1976	Severe Ice Storm	Ice Storm, Severe Storms, & Flooding
1233	June 25, 1998 - July 10, 1998	Severe Storm(s)	Severe Storms and Flooding
1335	May 3, 2000 - August 12, 2000	Severe Storm(s)	Severe Storms and Flooding
1534	May 13, 2004 - June 17, 2004	Severe Storm(s)	Severe Storms and Flooding
1665	October 12, 2006 - October 25, 2006	Severe Storm(s)	Severe Storms and Flooding
1857	August 8, 2009 - August 10, 2009	Severe Storm(s)	Severe Storms and Flooding
4472	October 31, 2019 - November 1, 2019	Severe Storm(s)	Severe Storms, Straight-line Winds, and Flooding

Source: FEMA 2021

U.S. Department of Agriculture Agricultural Disaster Declarations

The Secretary of Agriculture from the U.S. Department of Agriculture (USDA) is authorized to designate counties as disaster areas to make emergency loans to producers suffering losses in those counties and in counties that are contiguous to a designated county. There have been two USDA agricultural disasters since 2013 attributed to severe weather:

- S3593 – 2013 Excessive rain and related flooding, high winds, and hail
- S3885 – 2015 Excessive Rain, High Winds, Hail, Lightning, and Tornado

The USDA crop loss data provide another indicator of the severity of previous events. Additionally, crop losses can have a significant impact on the economy by reducing produce sales and purchases. Such impacts may have long-term consequences, particularly if crop yields are low the following years as well. USDA records indicate that Erie County has experienced crop losses from severe storm events. Table 5.4.10-5 provides details regarding crop losses in Erie County according to USDA records.

Table 5.4.10-5. USDA Crop Losses from Severe Storms in Erie County (2014–2019)

Year	Crop Type	Cause of Loss	Losses
2014	Wheat, corn, oats, beans, soybeans, all cover crops	Excess Moisture/Precipitation/Rain	$2 million
2015	Wheat, corn, oats, beans, soybeans	Excess Moisture/Precipitation/Rain	$1.6 million
2016	Wheat, corn, oats, beans, soybeans, oats	Excess Moisture/Precipitation/Rain	$1.2 million
2017	Wheat, corn, oats, beans, soybeans, grapes	Excess Moisture/Precipitation/Rain	$1.6 million
2018	Wheat, corn, oats, beans, soybeans	Excess Moisture/Precipitation/Rain	$1.1 million
2019	Wheat, corn, oats, beans, soybeans, oats	Excess Moisture/Precipitation/Rain	$2.1 million

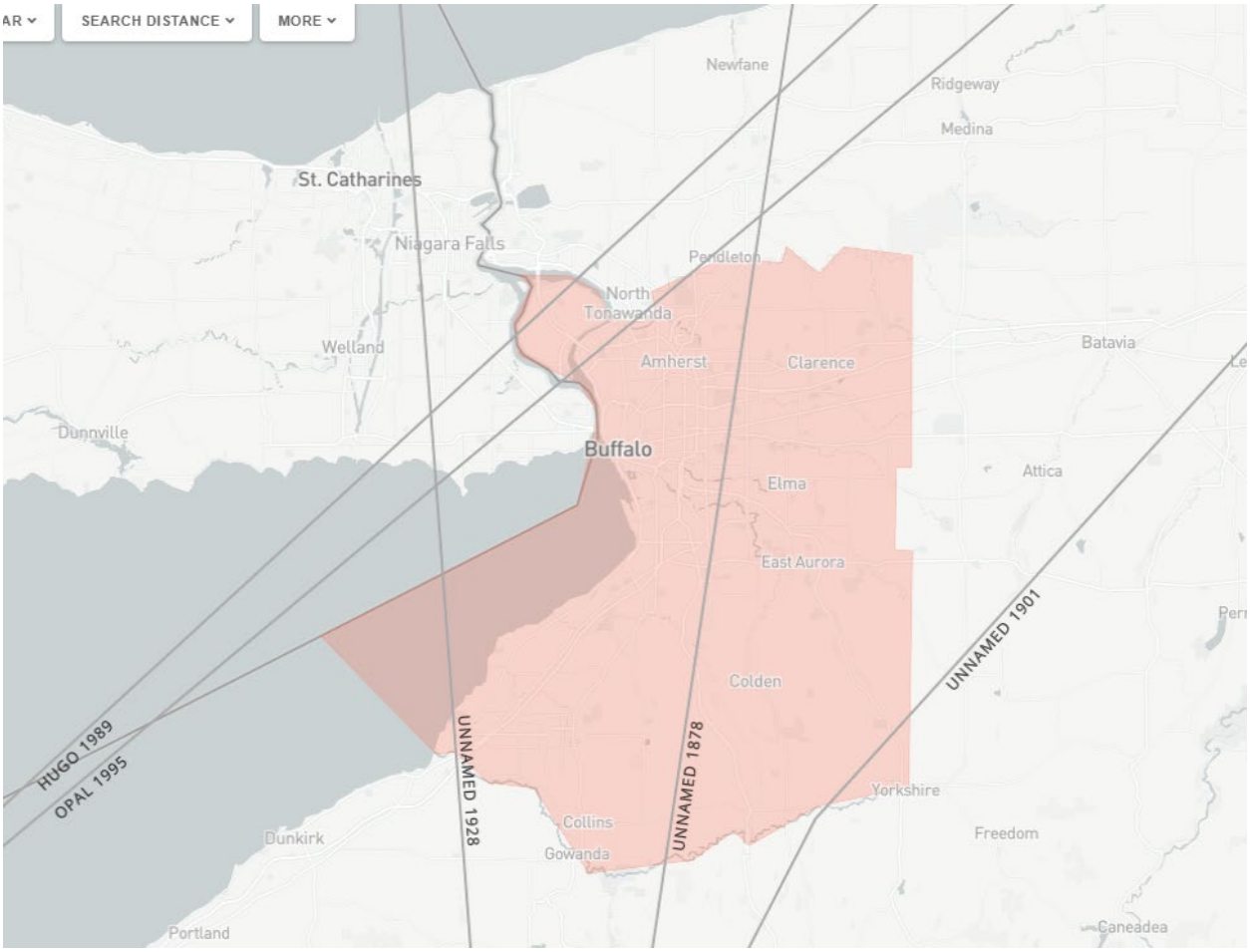
Source: USDA 2021

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Previous Events

Figure 5.4.10-9, from the NOAA Historical Hurricane Tracker, illustrates the tracks of storms between 1842 and 2018 that passed through Erie County. Erie County is not frequently impacted by hurricanes, tropical storms, or tropical depressions but has recently experienced the direct and indirect landward effects associated with hurricanes and tropical storms.

Figure 5.4.10-9. Historical Hurricane Tracks within 65 miles of Erie County, 1842–2018



Source: NOAA Historical Hurricane Tracks 2018
Notes: Category refers to tropical cyclone strength. ET = Extra-tropical Storm; H1 = Category 1 Hurricane; H2 = Category 2 Hurricane; H3 = Category 3 Hurricane; H4 = Category 4 Hurricane; TS = Tropical Storm; TD = Tropical Depression

The NOAA National Centers for Environmental Information (NCEI) Storm Events database records severe storm events. For this 2022 HMP Update, known severe storm events that have impacted Erie County between 2013 and 2020 are identified in Table 5.4.10-6. With severe storm documentation for New York State and Erie County being so extensive, not all sources have been identified or researched. Therefore, Table 5.4.10-6 may not include all events that have occurred in the county.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.10-6. Severe Storm Events in Erie County, 2015–2020

Dates of Event	Event Type	FEMA Declaration Number	County Designated?	Event Details
5/11/15	Thunderstorm Wind	-	-	A line of thunderstorms moved across the Niagara Frontier during the late evening hours. The thunderstorms produced strong wind gusts estimated to near 60 mph. Trees and power lines were downed in East Aurora, Darien, and Pembroke. In Millgrove, five trees fell onto and caused damage to sheds. Damages from the event were estimated at $25,000.
5/11/15	Thunderstorm Wind	-	-	A line of thunderstorms moved across the Niagara Frontier during the late evening hours. The thunderstorms produced strong wind gusts estimated to near 60 mph. Trees and power lines were downed in East Aurora, Darien, and Pembroke. In Millgrove, five trees fell onto and caused damage to sheds.
6/12/15	Thunderstorm Wind	-	-	Two lines of showers and thunderstorms moved across the region during the afternoon and early evening hours. The strong thunderstorms produced damaging winds that downed trees and powers lines across the western southern tier and Finger Lakes Region. Damages from the event were estimated at $30,000.
6/23/15	Thunderstorm Wind	-	-	An area of showers and thunderstorms moved across the lower Great Lakes region during the overnight and very early morning hours. The thunderstorms produced strong winds that downed trees and power lines. Several of the downed trees damaged structures and cars. Some roads were temporarily blocked by debris. Damage from the storm was estimated to be approximately $35,000.
8/11/15	Flash Flood	-	-	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches per hour were observed on radar. Damage from the storm was estimated to be approximately $100,000.
8/15/15	Flash Flood	-	-	Thunderstorms developed and tracked along a stalled frontal boundary across Niagara and northern Erie counties. The slow-moving thunderstorms produced intense rainfall with reports of five to eight inches in just a couple of hours. Damage from the storm was estimated to be approximately $45,000.
06/20/16	Thunderstorm Wind	-	-	Thunderstorms developed ahead of an approaching cold front. The first round of storms developed across Southern Ontario just west of the St. Lawrence River and moved east across Jefferson and northern Lewis counties producing fairly widespread wind damage. Damages from the storm were estimated to be approximately $65,000.
07/14/16	Thunderstorm Wind	-	-	Thunderstorms moved across Southern Ontario and the eastern Great Lakes crossing Western New York during the early morning hours of the 14th. Damage from the storm was estimated to be approximately $35,000.
07/25/16	Thunderstorm Wind	-	-	Several rounds of strong to severe storms developed during the morning and early afternoon hours ahead of an approaching cold front. Storms first developed along a line from the east end of Lake Erie to the west end of Lake Ontario, shifting south and east through the morning then pushing east of the region during the early afternoon. The thunderstorm winds downed trees and power lines throughout the region. Several thousand power outages were reported. Damage from the storm was estimated to be approximately $39,000.
09/10/16	Thunderstorm Wind	-	-	A strong cold front crossed the region during the evening hours. Thunderstorms that accompanied the front produced damaging wind gusts. Damage from the storm was estimated to be approximately $50,000

Dates of Event	Event Type	FEMA Declaration Number	County Designated?	Event Details
4/20/17	Flood	-		Several rounds of thunderstorms brought one to three inches of rain to the area in just a couple of hours. This resulted in ponding of water on area roadways. Several roads were closed by flood waters. Debris flowing in Tonawanda creek jammed near Royalton. Water backed up because of the log jam, and Foote Road between Ditch and Wolcottsville Road was closed. Damage from the storm was estimated to be $55,000.
5/1/17	Thunderstorm Wind	-	-	A strong cold front moved across the region during the afternoon and evening hours. A line of thunderstorms just ahead of the front produced damaging winds that downed trees and wires across Western New York through the Finger Lakes Region as well as areas east of Lake Ontario. Damage from the storm was estimated to be $105,000.
5/28/17	Thunderstorm Wind	-	-	A convective complex moved across Western New York late in the morning. This produced a quick 2 to 4 inches of rain which covered a significant portion of the region and resulted in flash flooding that impacted the Buffalo metro area, the Boston/Wyoming hills, and parts of the northern Finger Lakes Region. Damages from the storm were estimated to be $50,000.
7/13/17	Flash Flood	-	-	A convective complex moved across Western New York late in the morning. This produced a quick 2 to 4 inches of rain which covered a significant portion of the region and resulted in flash flooding that impacted the Buffalo metro area, the Boston/Wyoming hills, and parts of the northern Finger Lakes Region. Damage from the storm was estimated to be $55,000.
7/20/17	Thunderstorm Wind	-	-	This storm was responsible for all four tornadoes across Western NY. |The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds, where trees were downed and several buildings including the Grandstand sustained damage. Damage from the storm was estimated to be $138,000.
8/4/17	Thunderstorm Wind	-		Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams. Damage from the storm was estimated to be $90,000.
9/4/17	Thunderstorm Wind	-		Thunderstorms ahead of an approaching strong cold front produced damaging winds during the late evening and early overnight hours. The thunderstorm winds downed trees and power lines throughout parts of the western southern tier and Finger Lakes Region. Damage from the storm was estimated to be $35,000.
11/5/17	Flood	-	-	After a warm front brought soaking rains to the region, a cold front brought additional rain. Damage from the storm was estimated to be $25,000
6/13/2018	Thunderstorm Wind	-		A strong shortwave passed to the north of the area late afternoon into early evening. Damages from this event were estimated to be approximately $55,000
10/6/2018	Flash Flood	-		A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. Damage from this event was estimated to be approximately $210,000.
8/21/2019	Flash Flood	-		Well ahead of an approaching cold front and more tied to convective enhanced shortwave, strong thunderstorms developed in clusters early morning. Damage from this event is estimated at $52,000.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Dates of Event	Event Type	FEMA Declaration Number	County Designated?	Event Details
10/31/2019	Lakeshore Flood/High Wind	4472	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. Heavy rain also brought flooding concerns. All three climate stations broke their daily October 31 records with 1 to 3 inches of rain falling across the CWA. High winds and lakeshore flooding continued into November 1.
3/29/2020	Thunderstorm Wind	-		A strong, nearly vertically stacked low moved into the western Great Lakes. Downstream of the low, a warm front moved northeast across the area during the storm. Damage from this event was estimated to be approximately $70,000
6/2/2020	Thunderstorm Wind	-		A low-level boundary pushed southeast ahead of a mesoscale convective system late in the afternoon. This boundary followed the passage of a warm front with effective shear values jumping to 50-60 knots as the low-level boundary made its way across Southern Ontario and into Western New York. Damage from this event was estimated to be approximately $75,000.
8/15/2020	Flash Flood	-		Scattered thunderstorms developed by midafternoon, with new storm development and subsequent storm motion then driven mainly by outflow boundaries, resulting in slow and chaotic storm motion over the event. A few storms pulsed high enough and long enough to produce severe weather. A few storms also latched onto outflow boundaries and remained nearly stationary or trained for one to two hours, producing isolated flash flooding from northeast Cattaraugus County to the Buffalo Metro area. Damage from this event was estimated to be approximately $140,000.

Sources: FEMA 2020; NOAA-NCEI 2020; SPC 2020
Notes: Due to the large number of events present in the NOAA-NCEI database for thunderstorm wind, only events resulting in $25K in property damage or greater have been included.
FEMA Federal Emergency Management Agency
mph miles per hour

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.10-7 documents the total number of severe storm events that have occurred between 1950 and 2020, based on the NOAA-NCEI database and National Hurricane Center (NHC) records.

Table 5.4.10-7. Severe Storm Events 1950–2020

Hazard Type	Number of Occurrences Between 1950 and 2020	Total Fatalities	Total Injuries	Total Property Damage ($)	Total Crop Damage ($)
Thunderstorm	199	0	12	$4.5 million	$0
Lightning	14	0	7	$1.3 million	$0
Hailstorms	70	0	1	$1.3 million	$1.8 million
Windstorms	79	0	16	$11.2 million	$0
Tornadoes	22	0	6	$4.7 million	$0
Hurricanes/ Tropical Storms	0	0	0	0	$0
TOTAL	**384**	**0**	**42**	**$23 million**	$1.8 million

Source: *NOAA-NCEI 2021; NHC 2020*
Notes: *Number of events were collected from NHC and includes events that occurred within 65 nautical miles of Erie County. K = Thousand;. M = Million*
** Based on NHC historical storm tracks, fatalities, injuries, property damage, and crop damage unavailable.*

Probability of Future Occurrences

Erie County is expected to continue experiencing direct and indirect impacts of severe storms annually. These storms may induce secondary hazards such as flooding and utility failure. Table 5.4.10-8 summarizes data regarding the probability of occurrences of severe storm events in Erie County. Based on historic occurrences, thunderstorm events are the most common in Erie County, followed by windstorms. The information used to calculate the probability of occurrences is based solely on NOAA-NCEI storm events database results.

Table 5.4.10-8. Probability of Occurrence of Severe Storm Events in Erie County

Hazard Type	Number of Occurrences Between 1950 and 2020	% Chance of Occurring in Any Given Year
Thunderstorm	199	100.00
Lightning	14	20.00
Hailstorms	70	100.00
Windstorms	79	100.00
Tornadoes	22	31.43
Hurricanes/ Tropical Storms	0	0
Total	**384**	**100.00**

Source: *NOAA-NCDC 2021; NHC 2020*
Notes: *Probability was calculated using the available data provided in the NOAA-NCDC storm events database and the NHC Historical Hurricane Tracks database and includes events that occurred within 65 nautical miles of Erie County*
* *Any probability greater than 100 percent was rounded to 100 percent.*

In Section 5.3, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for ranking hazards. Based on historical records and input from the Planning Partnership, the probability of occurrence for severe storms in the county is considered *frequent* (100 percent annual probability, occurring multiple times a year).

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Climate Change Impacts

Climate change is beginning to affect both people and resources in Erie County, and these impacts are projected to continue growing. The Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision-makers with information on the state's vulnerability to climate change and to facilitate the development of adaptation strategies informed by both local experience and scientific knowledge (New York State Energy Research and Development Authority [NYSERDA] 2011).

Each region in New York State, as defined by ClimAID, has attributes that will be affected by climate change. Erie County is part of Region 1, Western New York and Great Lakes Plain. In Region 1, it is estimated that temperatures will increase by 4.3 ºF to 6.3 ºF by the 2050s and 5.7 ºF to 9.6 ºF by the 2080s (baseline of 47.7 ºF, middle-range projection).

Erie County is part of Region 1, Western New York, Great Lakes Plain. In Region 1, it is estimated that temperatures will increase by 3.0 ºF to 5.5 ºF by the 2050s and 4.5 ºF to 8.5 ºF by the 2080s (baseline of 48.0 ºF, mid-range projection). Precipitation totals will increase between 0 and 10% by the 2050s and 0 to 15% by the 2080s (baseline of 37.0 inches, mid-range projection). Table 5.4.10-9 displays the projected seasonal precipitation change for ClimAID Region 1 (NYSERDA 2014).

Table 5.4.10-9. Projected Seasonal Precipitation Change in Region 1, 2050s (% change)

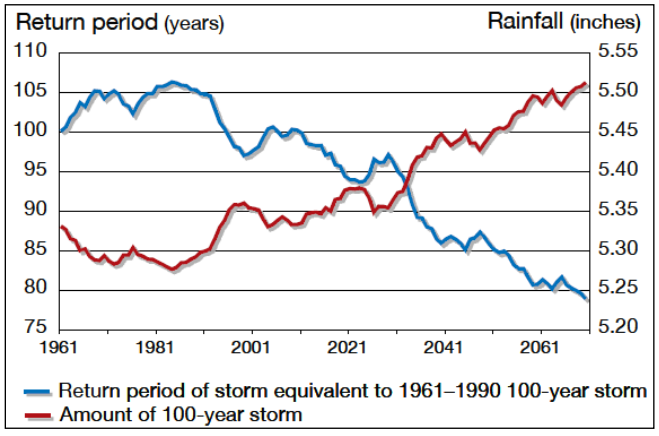
Winter	Spring	Summer	Fall
+5 to +15	0 to +10	-5 to +10	-5 to +10

Source: NYSERDA 2014

The projected increase in precipitation is expected to fall in heavy downpours and less in light rains. Downpours are very likely to increase in frequency and intensity, a change which has the potential to affect drinking water; heighten the risk of riverine flooding; flood key rail lines, roadways, and transportation hubs; and increase delays and hazards related to extreme weather events (NYSERDA 2011). Less frequent rainfall during the summer months may impact the ability of water supply systems. Increasing water temperatures in rivers and streams will affect aquatic health and reduce the capacity of streams to assimilate effluent wastewater treatment plants (NYSERDA 2011).

Figure 5.4.10-10 displays the project rainfall and frequency of extreme storms in New York State. The amount of rainfall in a 100-year event is projected to increase, while the number of years between such storms (return period) is projected to decrease. Rainstorms will become more severe and more frequent (NYSERDA 2011).

Figure 5.4.10-10. Projected Rainfall and Frequency of Extreme Storms



Source: NYSERDA 2011

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.10.2 Vulnerability Assessment

A probabilistic assessment was conducted for the 100- year and 500-year MRP hurricane wind event through a Level 2 analysis in Hazus v4.2 to analyze the severe storm hazard and provide a range of loss estimates due to wind impacts. Section 5.1, Methodology includes additional details on the methodology used to assess the severe storm risk.

Impact on Life, Health, and Safety

The impact of a severe weather event and wind on life, health, and safety is dependent upon several factors, including the severity of the event and whether adequate warning time was provided to residents. For the purposes of this HMP, all of Erie County is considered vulnerable to a severe weather event and wind impacts (i.e., 919,355 persons total, American Community Survey 2019). Hazus estimates that zero persons will be displaced from their homes or will seek shelter during a 500-year MRP hurricane wind event. Secondary impacts caused by extreme wind events include downed trees, damaged buildings, and debris carried by high winds, which can lead to injury or loss of life.

Socially vulnerable populations are most susceptible to severe weather events based on several factors, including their physical and financial ability to react or respond during a hazard and the location and construction quality of their housing. Vulnerable populations include homeless persons, elderly (over 65 years old), low income or linguistically isolated populations, people with life-threatening illnesses, and residents living in areas that are isolated from major roads. The population over the age of 65 is also more vulnerable and, physically, they may have more difficulty evacuating. They may require extra time or outside assistance during evacuations and are more likely to seek or need medical attention, which may not be available due to isolation during a storm event. According to the 5-Year 2018 American Community Survey Population Estimates, there are 161,806 persons over 65 and 126,806 persons living in poverty in Erie County (American Community Survey 2019).

Additionally, people located outdoors (i.e., recreational activities and farming) are considered most vulnerable to hailstorms, thunderstorms, and tornadoes. This is because there is little to no warning, and shelter may not be available. Moving to a lower risk location will decrease a person's vulnerability. See Section 4, County Profile for population statistics for each participating jurisdiction.

Impact on General Building Stock

Damage to buildings is dependent upon several factors, including wind speed, storm duration, and path of the storm track. Building construction also plays a major role in the extent of damage resulting from a coastal storm. Due to differences in construction, residential structures are generally more susceptible to wind damage than commercial and industrial structures. Wood and masonry buildings, in general, regardless of their occupancy class, tend to experience more damage than concrete or steel buildings. Furthermore, high-rise buildings are also very vulnerable structures.

Hazus estimates that there will be no damages in the event of a 100-year MRP wind event. There will be $41,265 of replacement cost damages caused by the 500-year MRP hurricane wind event (Table 5.4.10-12). These damages would occur primarily in residential buildings.

To better understand these risks, Hazus was used to estimate the expected wind-related building damages. Table 5.4.10-10 summarizes the definitions of the damage categories. Hazus estimates that there is only one commercial structure that would experience minor damage during a 500-year MRP hurricane wind event (Table 5.4.10-11). Furthermore, Hazus estimated damages are summarized by general occupancy classes in Table 5.4.10-12. Hazus estimates that all the damages caused by severe wind will occur to residential structures in the county for the 500-year MRP wind events, causing approximately $41,265 in damages. These cumulative

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

damages are minute, which accounts for the difference in number of buildings and cost of damages between occupancy classes.

Table 5.4.10-10. Description of Damage Categories

Qualitative Damage Description	Roof Cover Failure	Window Door Failures	Roof Deck	Missile Impacts on Walls	Roof Structure Failure	Wall Structure Failure
No Damage or Very Minor Damage Little or no visible damage from the outside. No broken windows, or failed roof deck. Minimal loss of roof over, with no or very Limited water penetration.	≤2%	No	No	No	No	No
Minor Damage Maximum of one broken window, door or garage door. Moderate roof cover loss that can be covered to prevent additional water entering the building. Marks or dents on walls requiring painting or patching for repair.	>2% and ≤15%	One window, door, or garage door failure	No	<5 impacts	No	No
Moderate Damage Major roof cover damage, moderate window breakage. Minor roof sheathing failure. Some resulting damage to interior of building from water.	>15% and ≤50%	> one and ≤ the larger of 20% & 3	1 to 3 panels	Typically 5 to 10 impacts	No	No
Severe Damage Major window damage or roof sheathing loss. Major roof cover loss. Extensive damage to interior from water.	>50%	> the larger of 20% & 3 and ≤50%	>3 and ≤25%	Typically 10 to 20 impacts	No	No
Destruction Complete roof failure and/or failure of wall frame. Loss of more than 50% of roof sheathing.	Typically >50%	>50%	>25%	Typically >20 impacts	Yes	Yes

Source: FEMA 2020

Table 5.4.10-11. Damage State Categories for Buildings During 500-Year MRP Hurricane Wind Event in Erie County

Occupancy Class	Total Number of Buildings in Occupancy	Severity of Expected Damage	500-year	
			Building Count	Percent Buildings in Occupancy Class
Residential Exposure (Single and Multi-Family Dwellings)	334,595	None	334,595	100.0%
		Minor	0	0.0%
		Moderate	0	0.0%
		Severe	0	0.0%
		Complete Destruction	0	0.0%
Commercial Buildings	18,761	None	18,760	>99.9%
		Minor	1	<0.1%
		Moderate	0	0.0%
		Severe	0	0.0%
		Complete Destruction	0	0.0%
Industrial Buildings	1,759	None	1,759	100.0%
		Minor	0	0.0%
		Moderate	0	0.0%
		Severe	0	0.0%

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Occupancy Class	Total Number of Buildings in Occupancy	Severity of Expected Damage	500-year	
			Building Count	Percent Buildings in Occupancy Class
		Complete Destruction	0	0.0%
Government, Religion, Agricultural, and Education Buildings	5,810	None	5,810	100.0%
		Minor	0	0.0%
		Moderate	0	0.0%
		Severe	0	0.0%
		Complete Destruction	0	0.0%

Source: HAZUS v4.2

Table 5.4.10-12. Expected Building Damage for All Occupancies for 500-Year MRP Hurricane Wind Events for Erie County

Jurisdiction	Total Replacement Cost Value (All Occupancies)	Estimated Total Damages 500-Year	Percent of Total Building and Contents Replacement Cost Value 500-Year	Estimated Residential Damages 500-Year	Estimated Commercial Damages 500-Year	Estimated Damages for All Other Occupancies 500-Year
Akron (V)	$628,463,030	$2,071	0.1%	$2,071	$0	$0
Alden (T)	$3,609,679,724	$31	0.1%	$31	$0	$0
Alden (V)	$6,590,896,419	$31,709	0.1%	$31,709	$0	$0
Amherst (T)	$9,572,113,113	$0	0.1%	$0	$0	$0
Angola (V)	$12,553,329,808	$0	0.2%	$0	$0	$0
Aurora (T)	$15,534,546,502	$0	0.2%	$0	$0	$0
Blasdell (V)	$18,515,763,197	$0	0.2%	$0	$0	$0
Boston (T)	$21,496,979,891	$0	0.2%	$0	$0	$0
Brant (T)	$24,478,196,586	$0	0.2%	$0	$0	$0
Buffalo (C)	$27,459,413,280	$0	0.2%	$0	$0	$0
Cheektowaga (T)	$30,440,629,974	$0	0.3%	$0	$0	$0
Clarence (T)	$33,421,846,669	$0	0.3%	$0	$0	$0
Colden (T)	$36,403,063,363	$0	0.3%	$0	$0	$0
Collins (T)	$39,384,280,058	$0	0.3%	$0	$0	$0
Concord (T)	$42,365,496,752	$0	0.3%	$0	$0	$0
Depew (V)	$45,346,713,447	$0	0.4%	$0	$0	$0
East Aurora (V)	$48,327,930,141	$0	0.4%	$0	$0	$0
Eden (T)	$51,309,146,836	$0	0.4%	$0	$0	$0
Elma (T)	$54,290,363,530	$0	0.4%	$0	$0	$0
Evans (T)	$57,271,580,224	$0	0.4%	$0	$0	$0
Farnham (V)	$60,252,796,919	$0	0.5%	$0	$0	$0
Gowanda (V)	$63,234,013,613	$0	0.5%	$0	$0	$0
Grand Island (T)	$66,215,230,308	$0	0.5%	$0	$0	$0
Hamburg (T)	$69,196,447,002	$0	0.5%	$0	$0	$0
Hamburg (V)	$72,177,663,697	$0	0.5%	$0	$0	$0
Holland (T)	$75,158,880,391	$0	0.5%	$0	$0	$0
Kenmore (V)	$78,140,097,086	$0	0.6%	$0	$0	$0
Lackawanna (C)	$81,121,313,780	$0	0.6%	$0	$0	$0
Lancaster (T)	$84,102,530,474	$0	0.6%	$0	$0	$0

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Replacement Cost Value (All Occupancies)	Estimated Total Damages 500-Year	Percent of Total Building and Contents Replacement Cost Value 500-Year	Estimated Residential Damages 500-Year	Estimated Commercial Damages 500-Year	Estimated Damages for All Other Occupancies 500-Year
Lancaster (V)	$87,083,747,169	$0	0.6%	$0	$0	$0
Marilla (T)	$90,064,963,863	$0	0.6%	$0	$0	$0
Newstead (T)	$93,046,180,558	$7,455	0.7%	$7,455	$0	$0
North Collins (T)	$96,027,397,252	$0	0.7%	$0	$0	$0
North Collins (V)	$99,008,613,947	$0	0.7%	$0	$0	$0
Orchard Park (T)	$101,989,830,641	$0	0.7%	$0	$0	$0
Orchard Park (V)	$104,971,047,336	$0	0.7%	$0	$0	$0
Sardinia (T)	$107,952,264,030	$0	0.8%	$0	$0	$0
Sloan (V)	$110,933,480,724	$0	0.8%	$0	$0	$0
Springville (V)	$113,914,697,419	$0	0.8%	$0	$0	$0
Tonawanda (C)	$116,895,914,113	$0	0.8%	$0	$0	$0
Tonawanda (T)	$119,877,130,808	$0	0.8%	$0	$0	$0
Wales (T)	$122,858,347,502	$0	0.8%	$0	$0	$0
West Seneca (T)	$125,839,564,197	$0	0.9%	$0	$0	$0
Williamsville (V)	$128,820,780,891	$0	0.9%	$0	$0	$0
Erie County Total	**$131,801,997,586**	**$41,265**	**0.9%**	**$41,265**	**$0**	**$0**

Sources: HAZUS v4.2; Erie County GIS 2020; RSMeans 2020
C = City; T = Town; V = Village % = Percent
* *Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Impact on Critical Facilities

Critical facilities are at risk of being impacted by high winds associated with structural damage or falling tree limbs/flying debris, which can result in the loss of power. Power loss can greatly impact households, business operations, public utilities, and emergency personnel. For example, vulnerable populations in Erie County are at risk if power loss results in interruption of heating and cooling services, stagnated hospital operations, and potable water supplies. Emergency personnel such as police, fire, and emergency medical services (EMS) will not be able to effectively respond in a power loss event to maintain the safety of its citizens.

Hazus estimates the probability that critical facilities (i.e., medical facilities, fire/EMS, police, emergency operation centers [EOC], schools, and user-defined facilities such as shelters and municipal buildings) may sustain damage as a result of the 100-year or 500-year MRP hurricane wind events. Additionally, Hazus estimates the loss of use for each facility in number of days. Overall, Hazus estimates that none of the critical facilities in Erie County are estimated to experience damage or loss of functionality due to a 100-year or a 500-year MRP hurricane wind event.

Impact on Economy

Severe storm events can have short- and long-lasting impacts on the economy. When a business is closed during storm recovery, there is lost economic activity in the form of day-to-day business and wages to employees.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Overall, economic impacts include the loss of business function (e.g., tourism, recreation), damage to inventory, relocation costs, wage loss, and rental loss due to the repair/replacement of buildings.

Impacts to transportation lifelines affect both short-term (e.g., evacuation activities) and long-term (e.g., day-to-day commuting and goods transport) transportation needs. Utility infrastructure (power lines, gas lines, electrical systems) could suffer damage and impacts can result in the loss of power, which can impact business operations and can impact heating or cooling provision to the population.

Hazus estimates the total economic loss associated with the 100-year and 500-year MRP hurricane wind events (direct building losses and business interruption losses). Direct building losses are the estimated costs to repair or replace the damage caused to the building. This is reported in the "Impact on General Building Stock" section discussed earlier. Business interruption losses are the losses associated with the inability to operate a business because of the wind damage sustained during the storm or the temporary living expenses for those displaced from their home because of the event. Hazus estimates that there would be $55,020 in building and content losses in the event of a 500-year MRP wind event.

Debris management can be costly and may also impact the local economy. Hazus estimates the amount of building and tree debris that may be produced as a result of the 100-year and 500-year MRP hurricane wind events. Because the estimated debris production does not include flooding, this is likely a conservative estimate and may be higher if multiple impacts occur. According to the Hazus Hurricane User Manual, estimates of weight and volume of eligible tree debris consist of downed trees that would likely be collected and disposed at public expense. Hazus estimates that the 100-year and 500-year MRP hurricane wind event will not cause any debris for Erie County.

Impact on the Environment

The impact of severe weather events on the environment varies, but researchers are finding that the long-term impacts of more severe weather can be destructive to the natural and local environment. National organizations such as USGS and NOAA have been studying and monitoring the impacts of extreme weather phenomena as it impacts long-term climate change, streamflow, river levels, reservoir elevations, rainfall, floods, landslides, erosion, etc. (USGS 2020). For example, severe weather that creates longer periods of rainfall can erode natural banks along waterways and degrade soil stability for terrestrial species. Tornadoes can tear apart habitats, causing fragmentation across ecosystems. Researchers also believe that a greater number of diseases will spread across ecosystems because of impacts that severe weather and climate change will have on water supplies (NOAA 2019). Overall, as the physical environment becomes more altered, species will begin to contract or migrate in response, which may cause additional stressors to the entire ecosystem within Erie County.

Cascading Impacts on Other Hazards

Severe weather events and severe wind events can escalate the impacts of flooding and utility failure. Severe winds can be destructive to the functionality of utilities by breaching power lines and disconnecting the utility systems. Severe weather may carry extreme rainfall that could exacerbate flooding. More information about flooding and utility failure can be found in Section 5.4.6 and Section 5.4.12 of this HMP, respectively.

Future Changes that May Impact Vulnerability

Understanding future changes that effect vulnerability in the county can assist in planning for future development and ensure establishment of appropriate mitigation, planning, and preparedness measures. Changes in the natural environment and built environment and how they interact can also provide insight about ways to plan.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Projected Development

Any areas of growth could be potentially impacted by the severe storm hazard because the entire county is exposed and vulnerable to the wind hazard associated with severe storms. However, due to increased standards and codes, new development may be less vulnerable to the severe storm hazard compared to the aging building stock in the county. Please refer to Section 4 and Section 9 for additional information regarding the areas targeted for future growth and development in the county.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has increased by a negligible amount between 2010 and 2019 (U.S. Census Bureau 2020). Estimated population projections provided by the Cornell Program on Applied Demographics indicates that the county's population will grow overall up to 2040, resulting in a projected population of 945,891 persons. (Cornell Program on Applied Demographics 2017). While fewer people will reside in the county, those who remain are still vulnerable to severe weather and severe wind events. Section 4, County Profile presents additional discussion on population trends.

Climate Change

As displayed in Figure 5.4.10-10, the entire State of New York is projected to experience an increase in the frequency and severity of extreme storms and rainfall. Major clusters of summertime thunderstorms in North America will grow larger, more intense, and more frequent later this century in a changing climate, unleashing far more rain and posing a greater threat of flooding across wide areas (NASA 2013). Section 5.4.6, Flood, includes a discussion related to the impact of climate change due to increases in rainfall. An increase in storms will produce more wind events and may increase tornado activity. Additionally, an increase in temperature will provide more energy to produce storms that generate tornadoes (NASA 2013). With an increased likelihood of strong winds and tornado events, all the county's assets will experience additional risk for losses as a result of extreme wind events.

Changes in Vulnerability Since the 2015 HMP

Since the 2015 HMP analysis, population statistics have been updated using the 5-Year 2015-2019 American Community Survey Population Estimates (American Community Survey 2019). The general building stock was also established using RS Means 2020 building valuations that estimated replacement cost value for each building in the inventory. Additionally, a critical facility dataset was provided from the county. The updated building stock inventory was imported into Hazus v4.2 to complete a hurricane wind analysis for the 100-year and 500-year MRP hurricane wind event.

Overall, this vulnerability assessment uses a more accurate and updated building inventory than that used in the 2015 HMP. This information provides more accurate exposure and potential loss estimates for Erie County.

Attachment: 20-Section-5.4.10-Sev-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

5.4.11 Severe Winter Storm

The following section provides the hazard profile (hazard description, location, extent, previous occurrences and losses, probability of future occurrences, and impact of climate change) and vulnerability assessment for the severe winter storm hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.11.1 Hazard Profile

Hazard Description

A winter storm is a weather event in which the main types of precipitation are snow, sleet, or freezing rain. They can be a combination of heavy snow, blowing snow, and dangerous wind chills. According to the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory (NSSL), the three basic components needed to make a winter storm include the following:

- Below freezing temperatures (cold air) in the clouds and near the ground to make snow and ice.
- Lift, something to raise the moist air to form clouds and cause precipitation, such as warm air colliding with cold air and being forced to rise over the cold dome or air flowing up a mountainside (oleographic lifting).
- Moisture to form clouds and precipitation, such as air blowing across a large lake or the ocean (NOAA-NSSL n.d.).

In Erie County, winter storms include blizzards, snowstorms, sleet, freezing rain, and ice storms. Extreme cold temperatures and wind chills are associated with winter storms. Important issues associated with a severe winter storm in the planning area include the following:

- Older building stock in Erie County might be more vulnerable to the aftermath of a winter storm event. Heavy snow loads on the roofs of buildings might not be able to withstand the extra weight.
- Ice and freezing temperatures can lead to frost heaving, damaging roads, bridges, buildings, home foundations, and railroad tracks.
- The impacts of drought and invasive species can lead to dead or dying trees. These trees are more susceptible to falling during winter storm events from the weight of snow and ice, causing power outages, closed roadways, and damage to buildings and property.
- Downed power lines from the weight of snow and ice lead to power outages, leaving many homes without a source of heat.
- Loss of economic activity when travel is restricted.

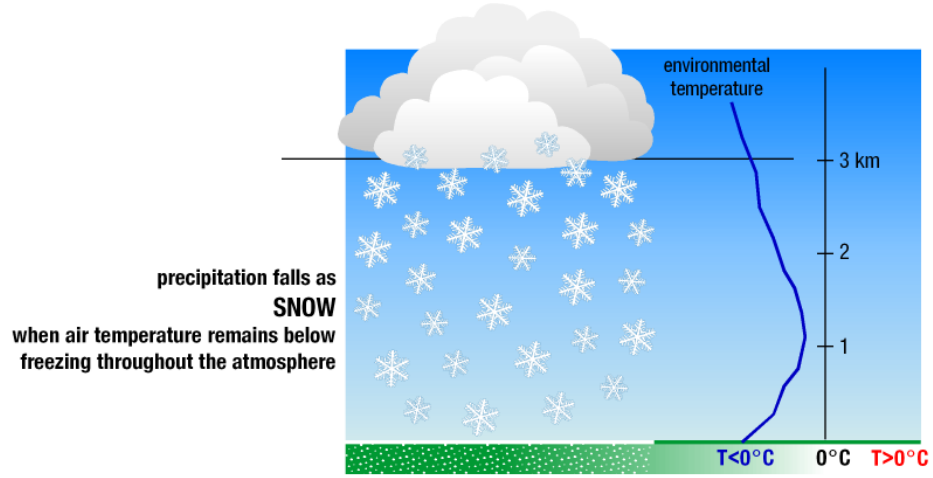
Blizzards

A blizzard is a winter snowstorm with sustained or frequent wind gusts of 35 miles per hour (mph) or more, accompanied by falling or blowing snow reducing visibility to or below 0.25 mile. These conditions must be predominant over a 3-hour period to be considered a blizzard. Extremely cold temperatures are often associated with blizzard conditions but are not a formal part of the definition. The hazard created by the combination of snow, wind, and low visibility significantly increases with temperatures below 20 °F. A severe blizzard is categorized as having temperatures near or below 10 °F, winds exceeding 45 mph, and visibility reduced by snow to near 0 mile. Storm systems powerful enough to cause blizzards usually form when the jet stream dips far to the south, allowing cold air from the north to clash with warm air from the south (The Weather Channel 2012).

Heavy Snow

According to the National Snow and Ice Data Center (NSIDC), snow is precipitation in the form of ice crystals. It originates in clouds when temperatures are below the freezing point (32 °F) and water vapor in the atmosphere condenses directly into ice without going through the liquid stage. Once an ice crystal has formed, it absorbs and freezes additional water vapor from the surrounding air, growing into snow crystals or a snow pellet, which then falls to the earth. Snow falls in different forms: snowflakes, snow pellets, or sleet. Snowflakes are clusters of ice crystals that form from a cloud. Figure 5.4.11-1 depicts snow creation.

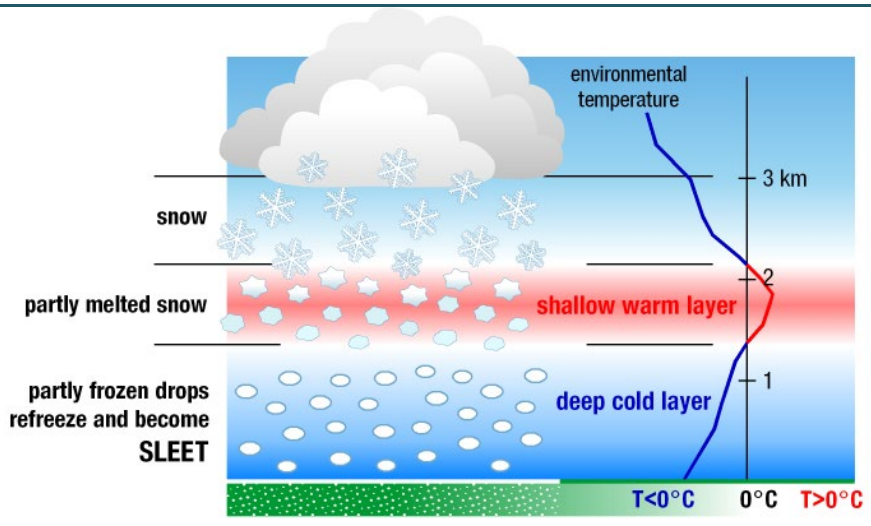
Figure 5.4.11-1. Snow Creation



Source: NOAA-NSSL 2015

Snow pellets are opaque ice particles in the atmosphere. They form as ice crystals fall through super-cooled cloud droplets, which are below freezing but remain a liquid. The cloud droplets then freeze to the crystals. Sleet is made up of drops of rain that freeze into ice as they fall through colder air layers. They are usually smaller than 0.30 inch in diameter (NSIDC 2013). Figure 5.4.11-2 depicts sleet creation.

Figure 5.4.11-2. Sleet Creation



Source: NOAA-NSSL 2015

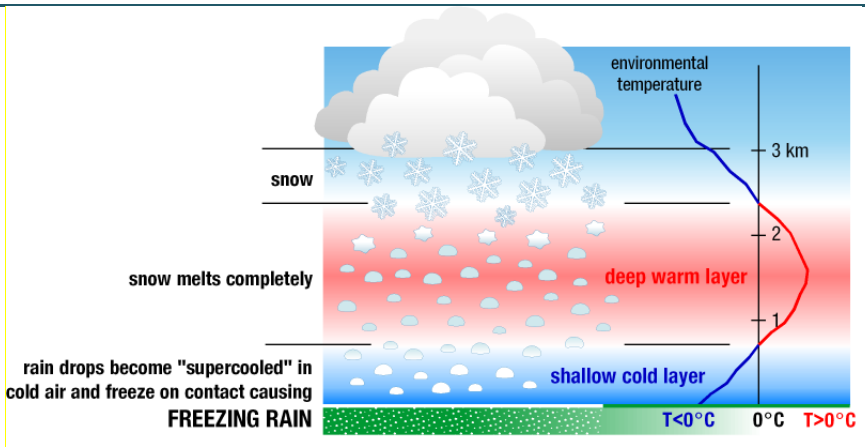
Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Ice Storms

An ice storm describes those events when damaging accumulations of ice are expected during freezing rain situations. Significant ice accumulations typically are accumulations of 0.25 inch or greater (National Weather Service [NWS] 2013). Heavy accumulations of ice can bring down trees, power lines, utility poles, and communication towers. Ice can disrupt communications and power for days. Even small accumulations of ice can be extremely dangerous to motorists and pedestrians (NWS 2008). Figure 5.4.11-3 shows the process of freezing rain creation.

Figure 5.4.11-3. Freezing Rain Creation



Source: NOAA-NSSL 2015

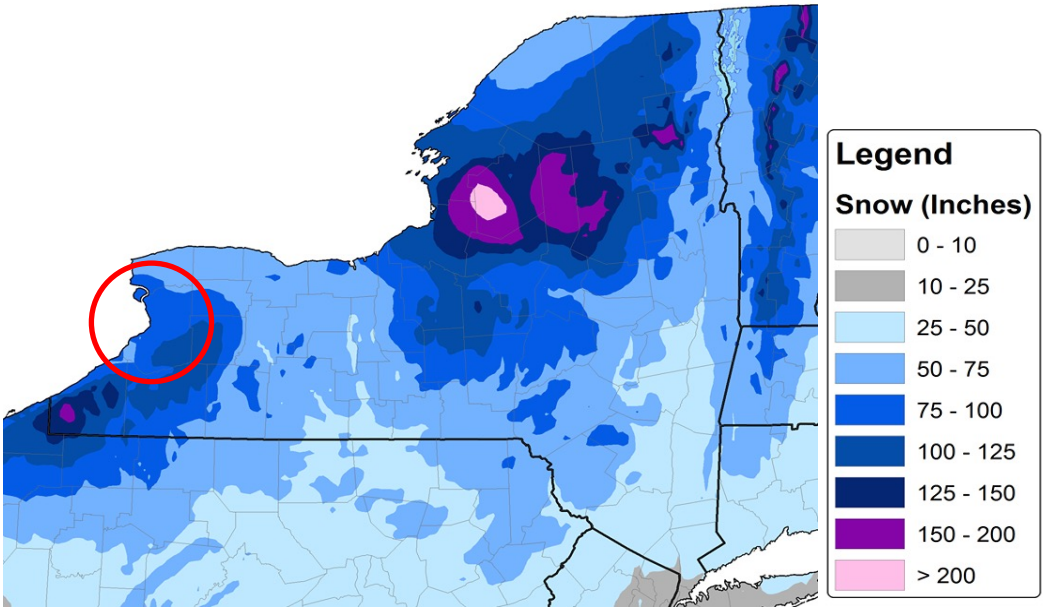
Location

Portions of northern Erie County are located within the snowbelt, a region near the Great Lakes where lake-effect snow is very common. Most of the severe winter storms in Erie County result from lake-effect snow from Lake Erie. Lake-effect snow is produced when cold winds move across Lake Erie (primarily from west–to–east, generally along the main axis of the lake) picking up water vapor and depositing it as snow on the lake's eastern (leeward) shores. This includes the entirety of Erie County. As a lake gradually freezes over, its ability to produce lake-effect precipitation decreases. Lake-effect snow tends to be most common from November to February. Towns and cities at higher elevations can expect even larger amounts of lake-effect snow. The heaviest lake-effect snows rarely occur right at the shoreline. Lake-effect snows extend further inland for events with higher wind speeds, with the most dramatic effects normally extending up to 70 miles inland. Lake-effect snowfalls tend to be most significant for higher fetches across open, unfrozen water.

Figure 5.4.11-4 provides the historical annual average snowfall in New York State through 2012. The figure shows that Erie County's average snowfall ranges from 25 to 125 inches.

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Figure 5.4.11-4. Average Snowfall in New York State, 1960–2012



Source: *Cornell University, NYSkiBlog.com*
Note: *The red circle indicates the location of Erie County.*

Extent

The magnitude or severity of a severe winter storm depends on several factors, including a region's climatological susceptibility to snowstorms, snowfall amounts, snowfall rates, wind speeds, temperatures, visibility, storm duration, topography, time of occurrence during the day and week (e.g., weekday versus weekend), and time of season.

The extent of a severe winter storm can be classified by meteorological measurements and by evaluating its societal impacts. NOAA's National Climatic Data Center (NCDC) is currently producing the Regional Snowfall Index (RSI) for significant snowstorms that impact the eastern two-thirds of the United States. The RSI ranks snowstorm impacts on a scale from 1 to 5 (Table 5.4.11-1) and is based on the spatial extent of the storm, the amount of snowfall, and the interaction of the extent and snowfall totals with population (U.S. Census Bureau 2000). The NCDC has analyzed and assigned RSI values to over 500 storms since 1900 (NOAA 2015).

Table 5.4.11-1. RSI Ranking Categories

Category	Description	RSI Value
1	Notable	1–3
2	Significant	3–6
3	Major	6–10
4	Crippling	10–18
5	Extreme	18.0+

Source: *NOAA-NCEI 2021*
Note: RSI = Regional Snowfall Index

The NWS operates a widespread network of observation systems, such as geostationary satellites, Doppler radars, and automated surface observing systems that feed into the current state-of-the-art numerical computer

models to provide a look into future weather, ranging from hours to days. The models are then analyzed by NWS meteorologists, who then write and disseminate forecasts (NWS 2013). According to NWS, the magnitude of a severe winter storm can be qualified into five main categories by event type, as listed in Figure 5.4.11-5 (NWS 2018).

Figure 5.4.11-5. Winter Storm Category Thresholds

Heavy Snowstorm	Accumulations of 4 inches or more of snow in a 6-hour period, or 6 inches of snow in a 12-hour period.
Sleet Storm	Significant accumulations of solid pellets that form from the freezing of raindrops or partially melted snowflakes causing slippery surfaces, posing a hazard to pedestrians and motorists.
Ice Storm	Significant accumulation of rain or drizzle freezing on objects (trees, power lines, roadways) as it strikes them, causing slippery surfaces and damage from sheer weight of ice accumulations.
Blizzard	Wind velocity of 35 mph or more, temperatures below freezing, considerable blowing snow with visibility frequently below one-quarter mile prevailing over an extended period.
Severe Blizzard	Wind velocity of 45 mph, temperatures of 10 °F or lower, a high density of blowing snow with visibility frequently measured in feet prevailing over an extended period.

Additionally, the NWS uses winter weather watches, warnings, and advisories, as shown in Figure 5.4.11-6, to help people anticipate what to expect in the days and hours prior to an approaching storm.

Figure 5.4.11-6. Winter Storm Warning Thresholds

Previous Occurrences and Losses

Many sources have provided historical information regarding previous occurrences and losses associated with severe winter storm events in Erie County. According to the NOAA National Centers for Environmental Information (NCEI) Storm Events Database, Erie County experienced 253 winter weather events between 1950 and 2020, including 97 heavy snow events and 97 lake-effect snow events (NOAA NCEI 2021). Table 5.4.11-2 shows these statistics.

Table 5.4.11-2. Severe Winter Events 1950–2020

Hazard Type	Number of Occurrences Between 1950 and 2020	Total Fatalities	Total Injuries	Total Property Damage ($)	Total Crop Damage ($)
Blizzard	8	-	-	$219,000	-
Heavy Snow	97	-	1	$33.39 million	-
Ice Storm	4	-	-	$1.59 million	-
Lake-Effect Snow	97	2	1	$158.93 million	-
Winter Storm	47	-	-	$960,000	-
Winter Weather	-	-	-	-	-
TOTAL	**253**	**2**	**2**	**$195.1 million**	**-**

Source: NOAA-NCEI 2021

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

FEMA Disaster Declarations

Between 1954 and 2020, Federal Emergency Management Agency (FEMA) included New York State in 22 winter storm-related major disaster (DR) or emergency (EM) declarations classified as one or a combination of the following disaster types: severe winter storm, snowstorm, snow, ice storm, winter storm, blizzard, and flooding. Generally, these disasters cover a wide region of the State; therefore, they may have impacted many counties. Erie County was included in 10 of these declarations (Table 5.4.11-3).

Table 5.4.11-3. FEMA Major Disasters and Emergency Declarations in Erie County

FEMA Declaration Number	Date(s) Of Event	Declaration Date	Incident Type	Event Title
DR-494	March 19, 1976	March 19, 1976	Severe Ice Storm	Ice storm, severe storms, and flooding
DR-527	February 5, 1977	February 5, 1977	Snow	Snowstorms
EM-3027	January 29, 1977	January 29, 1977	Snow	Snowstorms
EM-3107	March 13-17, 1993	March 17, 1993	Snow	Severe blizzard
EM-3136	January 1-15, 1999	January 15, 1999	Snow	Snow
EM-3157	November 19-21, 2000	December 4, 2000	Snow	Snow
DR-1404/EM-3170	December 24-29, 2001	March 1, 2002	Snow	Severe winter storm
EM-3268	October 12-25, 2006	October 15, 2006	Snow	Lake-effect snowstorm
DR-4204	November 17-26, 2014	December 22, 2014	Snow	Severe winter storm, snowstorm, and flooding

Source: FEMA 2021

USDA Disaster Declarations

The Secretary of Agriculture from the U.S. Department of Agriculture (USDA) is authorized to designate counties as disaster areas to make emergency loans to producers suffering losses in those counties and in counties that are contiguous to a designated county. Between 2012 and 2020, Erie County was included in three USDA declarations related to severe winter weather, mainly involving freezes.

- S3886 - 2015 Frost, Freeze, and Excessive Snow
- S3666 - 2014 Freezing
- S3672 - 2014 Freezing

The USDA crop loss data provide another indicator of the severity of previous events. Additionally, crop losses can have a significant impact on the economy by reducing produce sales and purchases. Such impacts may have long-term consequences, particularly if crop yields are low the following years as well. USDA records indicate that Erie County has experienced crop losses from severe winter storm events. Table 5.4.11-4 provides details regarding crop losses in Erie County according to USDA records.

Table 5.4.11-4. USDA Crop Losses from Severe Winter Storms in Erie County (2014–2019)

Year	Crop Type	Cause of Loss	Losses
2014	Wheat, grapes, soybeans	Freeze, cold winter, cold wet weather	$1.8 million
2015	Wheat, grapes, soybeans, corn	Freeze, cold winter, cold wet weather	$927,000
2016	Oats, grapes	Frost, cold wet weather	$447,000
2017	Corn, grapes	Cold wet weather, frost	$190,000

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Year	Crop Type	Cause of Loss	Losses
2018	Grapes	Cold winter, freeze	$1.1 million
2019	Wheat, corn, grapes, soybeans	Cold winter, cold wet weather	$2.1 million

Source: USDA 2021

Previous Events

In Erie County, severe winter snow and ice storms are considered normal and expected. Winter storms and ice storms typically occur from late October until mid-April in the planning area; peak months for these events for Erie County and its jurisdictions are generally December through March. Table 5.4.11-5 identifies known severe winter storm events that impacted Erie County between 2014 and 2020 and included events where damages exceeded $25,000. Detailed information on damages and impacts to each municipality are provided in Section 9, Jurisdictional Annexes.

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the

Table 5.4.11-5. Severe Winter Storm Events in Erie County, 2016–2020

Dates of Event	Event Type	FEMA Declaration Number	County Designated?	Event Details
1/12/2016	Lake-Effect Snow	-	-	This was the 5th lake event that impacted Erie County in 2016. In the City of Buffalo, between 3 and 6 inches fell through January 13th, with a total of 12 inches by the end of the storm. The county had approximately $25,000 in property damage from this event.
11/19/2016	Lake-Effect Snow	-	-	A strong cold front resulted in lake-effect rain mixed with wet snow developing off Lake Erie near Buffalo, changing to all snow across the higher terrain south of the city. Approximately $25,000 in damage was reported from the storm.
1/4/2017	Lake-Effect Snow	-	-	This lake-effect snow event was a long duration, high impact event; one that snarled traffic across the Buffalo Southtowns Thursday evening and ultimately produced 3 to 4 feet of snow east of Lake Erie and Lake Ontario. The county had approximately $28,000 in damages from the event.
3/13/2017	Winter Storm	-	-	Snowfall records were set at Buffalo and Rochester. Many flights in and out of Buffalo and Rochester were cancelled. The state enacted a travel ban on tractor trailers on the major interstates. The National Guard was called on to assist in snow removal in some locations. The county reported $50,000 in damages from the event.
12/11/2017	Lake-Effect Snow	-	-	A general snow across the region was enhanced by the Great Lakes before transitioning to lake-effect snow bands east and southeast of the lakes. The county reported $30,000 in damages from the event.
12/15/2017	Lake-Effect Snow	-	-	Cold air crossing the relatively warm waters of Lakes Erie and Ontario resulted in lake-effect snows. The county reported $30,000 in damages from the event.
12/24/2017	Lake-Effect Snow	-	-	Lake-effect snow developed early Christmas morning and continued continuously for about 72 hours before diminishing late in the day on Wednesday the 27th. ‖Off Lake Erie, the heaviest lake-effect snows with this event were mainly confined to the classic snow belt directly east of Lake Erie due to the predominate westerly flow. The county experienced $45,000 in damages.
12/29/2017	Lake-Effect Snow	-	-	Tea kettle bands of lake-effect snow developed offshore over Lake Erie and Lake Ontario for an extended period of time prior to moving onshore, first on Lake Erie and eventually on Lake Ontario. Off Lake Erie, the tea kettle lake-effect snow moved onshore from Ripley all the way to South Buffalo. The county reported $40,000 in damages from the event.
1/2/2018	Blizzard	-	-	This storm was a rare lake-effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. With wind

Table 5.4.11-5. Severe Winter Storm Events in Erie County, 2016–2020

Dates of Event	Event Type	FEMA Declaration Number	County Designated?	Event Details
				gusts of 40 to 50 mph northeast of Lakes Erie and Ontario. |. The county experienced $100,000 in damages.
1/12/2018	Winter Storm	-	-	A developing winter storm brought first a wintry mix of precipitation during the evening of the 12th and then heavy snow through the morning of the 13th. Once the precipitation changed to snow, the heavy snow fell at 1–2 inches an hour during the overnight hours. The county experienced $25,000 damage in the event.
3/1/2018	Winter Storm	-	-	A weak low pressure strengthened as it moved across Pennsylvania and merged with a low along the eastern coast. The storm brought a blanket of heavy, wet snow across the entire region from late afternoon on the first through the late morning through early afternoon of the second. The county experienced $70,000 in damages from the event.

Sources: *FEMA 2020; NOAA-NCEI 2020; SPC 2021*

- *Because of the large number of reported storms, included here are only those storms that caused more than $25,000 in damage*

Note: *Many sources were consulted to provide an update of previous occurrences and losses; event details and loss/impact information may vary and has been summarized in the above table. Due to the large number of winter storm events in the NOAA-NCEI archive, only winter storm events over $10K in property damages were included.*

DR *Major Disaster Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
Mph *Miles per Hour*
NCEI *National Centers for Environmental Information*
NOAA *National Oceanic and Atmospheric Administration*
N/A *Not Applicable*

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Climate Change Projections

Each region in New York State, as defined by ClimAID: The Integrated Assessment for Effective Climate Change in New York State (ClimAID), has attributes that will be affected by climate change. Erie County is part of Region 1 Western New York and Great Lakes Plains. Some of the issues in this region that are affected by climate change include the dairy and agricultural economy, milk and crop production losses projected, increased flooding in major rivers and streams, and given the county's relative location, the county will experience some of the first impacts from invasive species moving north (New York State Energy Research and Development Authority [NYSERDA] 2014).

Per Middle Range predictions, temperatures are expected to increase throughout the state, by 4.3 to 6.3 °F by the 2050s and 5.7 to 9.6 °F by the 2080s. Annual average precipitation is projected to increase from 4 percent to up to 10 percent by the 2050s, and from 4 percent to up to 13 percent by the 2080s. By the end of the century, the greatest increases in precipitation are projected to be in the northern parts of the state. Although seasonal projections are less certain than annual results, this additional precipitation will most likely occur during the winter months. However, with temperatures rising, some of the increased winter precipitation may fall as rain as opposed to snow. In Region 1, the number of days with temperature below 32°F is projected to drop from a current average of 133 days below 32 degrees to as few as 99 such days in the 2080s, reducing the likelihood of precipitation falling as snow.

New York State is already experiencing the effects of climate change during the winter season. Annual ice cover has decreased 71 percent on the Great Lakes since 1973. This decrease may lead to increased lake-effect snow in Erie County in the next two decades through greater moisture availability. By mid-century, however, lake-effect snow will generally decrease as temperatures below freezing become less frequent (NYSERDA 2014). Winter snow cover is decreasing, and spring weather is seen, on average, about one week earlier than a few years ago. Night-time temperatures are measurably warmer, even during the colder months (NYSDEC n.d.). Overall winter temperatures in New York State are almost 5 °F warmer than in 1970 (NYSDEC n.d.). NYS has seen a decrease in the number of cold winter days (below 32 °F) and can expect to see a decrease in snow cover by as much as 25 to 50 percent by the end of the next century. The lack of snow cover may jeopardize winter sport businesses offering skiing, snowmobiling, and other types of winter recreation. Natural ecosystems will be affected by the changing snow cover (Cornell University College of Agriculture and Life Sciences 2011).

Probability of Future Occurrences

Table 5.4.11-6 summarizes data regarding the probability of occurrences of severe winter storm events in Erie County based on the historic record. Heavy snow events are the most common in Erie County, followed by winter storms. The information used to calculate the probability of occurrences is based solely on NOAA-NCEI storm events database results.

Table 5.4.11-6. Probability of Future Occurrence of Severe Winter Weather Events

Hazard Type	Number of Occurrences Between 1950 and 2020	% Chance of Occurrence in Any Given Year
Blizzard	8	11.3%
Heavy Snow	97	100%
Ice Storm	4	5.6%
Lake-Effect Snow	97	100%
Winter Storm	47	66.2%
Winter Weather	0	0%
Total	**253**	**100%**

Source: NOAA-NCEI 2020

Note: Disaster occurrences include federally declared disasters since the 1950 Federal Disaster Relief Act (Public Law 81-875) and selected severe winter storm events since 1996. Due to limitations in data, not all severe winter storm events occurring between 1950 and 1996 are accounted for in the tally of occurrences. As a result, the number of hazard occurrences is underestimated.

Based on historical data from NYSERDA, it is expected that the following will occur at least once per 100 years:

- Up to 4 inches of freezing rain in the ice band near central New York State, of which between 1–2 inches of accumulated ice will occur over a 24-hour period.
- Up to 2 feet of accumulated snow in the snow band in northern and western New York State over a 48-hour period (NYSERDA 2011).

In Section 5.3 of this HMP, the identified hazards of concern for Erie County were ranked. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Committee, the probability of occurrence for severe winter storms in the county is considered 'frequent' (event has a 100-percent annual probability and may occur multiple times per year).

5.4.11.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed or vulnerable in the identified hazard area. For the severe winter storm hazard, all of Erie County has been identified as the hazard area. Therefore, all assets in the county (population, structures, critical facilities, and lifelines), as described in Section 4 (County Profile), are vulnerable to a winter storm event.

Impact on Life, Health, and Safety

The entire population of Erie County (919,355 people) is exposed to severe winter storm events (American Community Survey 2018). The homeless and elderly are considered most susceptible to this hazard. The elderly are considered susceptible to this hazard due to their increased risk of injuries and death from falls and overexertion and/or hypothermia from attempts to clear snow and ice. According to the 2019 American Community Survey (ACS) 5-Year estimate, there are 161,744 persons over 65 years old that reside in the county that are considered vulnerable to severe winter weather. In addition, severe winter storm events can reduce the ability of these populations to access emergency services.

The homeless and residents below the poverty level may not have access to housing, or their housing could be less able to withstand cold temperatures (e.g., homes with poor insulation and heating supply). Residents with low incomes might not have access to housing, or their housing can be less able to withstand cold temperatures (e.g., homes with poor insulation and heating supply). According to the 2019 American Community Survey (ACS) 5-Year estimate, there are 126,806 low-income persons that are considered vulnerable to severe winter weather. The jurisdiction with the highest concentration of population below the poverty level is the City of Buffalo (29.1-percent of total population in the Borough). Refer to Section 4 (County Profile) that displays the densities of low-income populations in Erie County.

According to the NOAA NSSL, every year, winter weather indirectly and deceptively kills hundreds of people in the U.S., primarily from automobile accidents, overexertion, and exposure (NSSL 2020). Winter storms are often accompanied by strong winds creating blizzard conditions with blinding wind-driven snow, drifting snow, extreme cold temperatures, and dangerous wind chill. They are considered deceptive killers because most deaths and other impacts or losses are indirectly related to the storm. People can die in traffic accidents on icy roads, heart attacks while shoveling snow, or of hypothermia from prolonged exposure to cold. Heavy accumulations of ice can bring down trees and power lines, disabling electric power and communications for days or weeks. Heavy snow can immobilize a region and paralyze a city, shutting down all air and rail transportation and disrupting medical and emergency services. Storms near the coast can cause coastal flooding and beach erosion

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

as well as sink ships at sea. The economic impact of winter weather each year is huge with costs for snow removal, damage, and loss of business in the millions (NOAA 2017).

Impact on General Building Stock

The entire general building stock inventory is exposed and vulnerable to the severe winter storm hazard. In general, structural impacts include damage to roofs and building frames rather than building content. Current modeling tools are not available to estimate specific losses for this hazard. As an alternate approach, this plan considers percentage damages that could result from severe winter storm conditions. This allows planners and emergency managers to select a range of potential economic impact based on an estimate of the percent of damage to the general building stock. Table 5.4.11-7. below summarizes the estimated loss based on 1, 5, and 10 percent losses. Given professional knowledge and the currently available information, the potential loss for this hazard is many times considered to be overestimated because of varying factors (building structure type, age, load distribution, building codes in place, etc.). Therefore, the following information should be used as estimates only for planning purposes with the knowledge that the associated losses for severe winter storm events vary greatly.

Table 5.4.11-7. General Building Stock Exposure and Estimated Losses from Severe Winter Storm Events

Jurisdiction	Total Replacement Cost Value (RCV)	1 Percent Exposure/Loss	5 Percent Exposure/Loss	10 Percent Exposure/Loss
Akron (V)	$866,609,574	$8,666,096	$43,330,479	$86,660,957
Alden (T)	$1,748,473,245	$17,484,732	$87,423,662	$174,847,324
Alden (V)	$602,655,574	$6,026,556	$30,132,779	$60,265,557
Amherst (T)	$27,372,255,690	$273,722,557	$1,368,612,784	$2,737,225,569
Angola (V)	$525,704,230	$5,257,042	$26,285,211	$52,570,423
Aurora (T)	$2,496,885,036	$24,968,850	$124,844,252	$249,688,504
Blasdell (V)	$638,571,953	$6,385,720	$31,928,598	$63,857,195
Boston (T)	$1,702,475,276	$17,024,753	$85,123,764	$170,247,528
Brant (T)	$657,594,060	$6,575,941	$32,879,703	$65,759,406
Buffalo (C)	$58,603,851,634	$586,038,516	$2,930,192,582	$5,860,385,163
Cheektowaga (T)	$17,530,893,277	$175,308,933	$876,544,664	$1,753,089,328
Clarence (T)	$9,866,246,863	$98,662,469	$493,312,343	$986,624,686
Colden (T)	$854,417,381	$8,544,174	$42,720,869	$85,441,738
Collins (T)	$1,189,158,504	$11,891,585	$59,457,925	$118,915,850
Concord (T)	$1,338,570,261	$13,385,703	$66,928,513	$133,857,026
Depew (V)	$3,841,823,815	$38,418,238	$192,091,191	$384,182,381
East Aurora (V)	$1,723,816,550	$17,238,166	$86,190,828	$172,381,655
Eden (T)	$2,180,455,513	$21,804,555	$109,022,776	$218,045,551
Elma (T)	$3,775,039,302	$37,750,393	$188,751,965	$377,503,930
Evans (T)	$3,335,060,692	$33,350,607	$166,753,035	$333,506,069
Farnham (V)	$87,990,422	$879,904	$4,399,521	$8,799,042
Gowanda (V)	$249,516,940	$2,495,169	$12,475,847	$24,951,694
Grand Island (T)	$4,674,517,058	$46,745,171	$233,725,853	$467,451,706
Hamburg (T)	$11,911,210,828	$119,112,108	$595,560,541	$1,191,121,083
Hamburg (V)	$2,005,172,252	$20,051,723	$100,258,613	$200,517,225
Holland (T)	$1,151,194,342	$11,511,943	$57,559,717	$115,119,434
Kenmore (V)	$2,305,529,001	$23,055,290	$115,276,450	$230,552,900
Lackawanna (C)	$4,030,622,400	$40,306,224	$201,531,120	$403,062,240
Lancaster (T)	$6,845,493,469	$68,454,935	$342,274,673	$684,549,347
Lancaster (V)	$2,217,331,122	$22,173,311	$110,866,556	$221,733,112

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Jurisdiction	Total Replacement Cost Value (RCV)	1 Percent Exposure/Loss	5 Percent Exposure/Loss	10 Percent Exposure/Loss
Marilla (T)	$1,099,846,031	$10,998,460	$54,992,302	$109,984,603
Newstead (T)	$2,181,758,974	$21,817,590	$109,087,949	$218,175,897
North Collins (T)	$889,517,676	$8,895,177	$44,475,884	$88,951,768
North Collins (V)	$383,968,909	$3,839,689	$19,198,445	$38,396,891
Orchard Park (T)	$8,174,650,530	$81,746,505	$408,732,526	$817,465,053
Orchard Park (V)	$867,347,745	$8,673,477	$43,367,387	$86,734,775
Sardinia (T)	$1,068,523,829	$10,685,238	$53,426,191	$106,852,383
Sloan (V)	$634,998,253	$6,349,983	$31,749,913	$63,499,825
Springville (V)	$1,354,905,864	$13,549,059	$67,745,293	$135,490,586
Tonawanda (C)	$3,291,492,557	$32,914,926	$164,574,628	$329,149,256
Tonawanda (T)	$14,694,684,404	$146,946,844	$734,734,220	$1,469,468,440
Wales (T)	$833,853,270	$8,338,533	$41,692,664	$83,385,327
West Seneca (T)	$9,583,482,689	$95,834,827	$479,174,134	$958,348,269
Williamsville (V)	$1,126,868,443	$11,268,684	$56,343,422	$112,686,844
Erie County Total	**$222,515,035,436**	**$2,225,150,354**	**$11,125,751,772**	**$22,251,503,544**

Source: Erie County GIS 2020; RS Means 2020
C = City; T = Town; V = Village
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

A specific area that is vulnerable to the severe winter storm hazard is the floodplain. Severe winter storms can cause flooding through blockage of streams or through snowmelt. At-risk residential infrastructures are presented in the flood hazard profile (Section 5.4.5). Generally, losses resulting from flooding associated with severe winter storms should be less than that associated with the 1 percent annual chance flood. Please refer to the Severe Storms hazard profile (Section 5.4.10) for losses resulting from wind.

Impact on Critical Facilities

Full functionality of critical facilities such as police, fire, and medical facilities is essential for response during and after a severe winter storm event. These critical facility structures are largely constructed of concrete and masonry; therefore, they should only suffer minimal structural damage from severe winter storm events. Because power interruption can occur, backup power is recommended. Infrastructure at risk for this hazard includes roadways that could be damaged due to the application of salt and intermittent freezing and warming conditions that can damage roads over time. Severe snowfall requires the clearing of roadways and alerting citizens to dangerous conditions; following the winter season, resources for road maintenance and repair are required.

Heavy snow can immobilize a region and paralyze a city, stranding commuters, stopping the flow of supplies, and disrupting emergency and medical services. Heavy accumulations of ice can bring down trees, electrical wires, telephone poles and lines, and communication towers. Communications and power can be disrupted for days while utility companies work to repair the extensive damage. Even small accumulations of ice may cause extreme hazards to motorists and pedestrians. Bridges and overpasses are particularly dangerous because they freeze before other surfaces (NSSL 2020).

Impact on Economy

The cost of snow and ice removal and repair of roads from the freeze/thaw process can drain local financial resources. Impacts on the economy also include commuter difficulties into or out of the area for work or school. The loss of power and closure of roads prevent commuters from traveling within the county. According to Erie County's 2021 Adopted Budget, the Town/Village Snow Contracts are $5.7 million. This is a 1.5 percent increase from the county's 2020 Adopted Budget.

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Impact on the Environment

Severe winter weather can have a major impact on the environment. Not only does winter weather create changes in natural processes, the residual impacts of a community's methods to maintain its infrastructure through winter weather maintenance may also have an impact on the environment. For example, an excess amount of snowfall and earlier warming periods may affect natural processes such as flow within water resources. Rain-on-snow events can also exacerbate runoff rates with warming winter weather. Consequentially, these flow rates and excess volumes of water can erode banks, tear apart habitat along the banks and coastline, and disrupt terrestrial plants and animals.

Furthermore, chemically based winter maintenance practices have their own effect on the natural environment. Melting snow and ice that carry deicing chemicals onto vegetation and into soils can contaminate the local waterways. Elevated salt levels may hinder vegetation from absorbing nutrients, slowing plant growth (UMass Extension 2020).

Future Changes That May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensure that appropriate mitigation, planning, and preparedness measures are in place. Erie County considered the following factors to examine potential conditions that can affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

Areas targeted for future growth and development have been identified across Erie County (refer to Sections 4 and 9). Any areas of growth could be potentially impacted by the severe winter storm hazard because the entire planning area is exposed and vulnerable. However, due to increased standards and codes, new development may be less vulnerable to the severe winter weather hazard compared with the aging building stock in the county.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has increased by a negligible amount between 2010 and 2019 (American Community Survey 2019). Estimated population projections provided by the Cornell Program on Applied Demographics indicate that the county's population will increase into 2040, bringing total population to approximately 945,891 persons (Cornell Program on Applied Demographics 2018). Any changes in the density of population can create issues for local residents during evacuation of a severe winter storm event. Furthermore, if the density or number of persons over 65 increases in the county, more persons will be vulnerable to severe winter weather events. Refer to Section 4 (County Profile), which includes a discussion on population trends for the County.

Climate Change

Climate is defined not simply as average temperature and precipitation but also by the type, frequency, and intensity of weather events. Both globally and at the local scale, climate change has the potential to alter the prevalence and severity of extreme events such as winter storms. While predicting changes of winter storm events under a changing climate is difficult, understanding vulnerabilities to potential changes is a critical part of estimating future climate change impacts on human health, society, and the environment (U.S. Environmental Protection Agency [EPA], 2020).

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

An increase in the frequency and severity of severe winter storms could result in an increase of snow loads on the county's building stock and infrastructure, putting each building at risk to structural damage. More frequent and severe events also will result in increased resources spent to prepare for and clean-up after an event. However, as winter temperatures continue to rise, climate projections indicate the increase in precipitation is likely to occur during the winter months as rain. Increased rain on snowpack or frozen or saturated soils can lead to increased flooding and related impacts on the county's assets.

Vulnerability Change Since the 2016 HMP

Overall, the county's exposure and vulnerability have not changed, and the entire county will continue to be exposed and vulnerable to severe winter storm events.

Identified Issues

Snow storage has been identified as an issue, particularly after very large snow events. The town would like to dedicate certain areas to snow storage instead of relying upon ad hoc storage at town parks.

Attachment: 21-Section-5.4.11-Sev-Winter-Storm-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.12 Utility Failure

The following sections provide the hazard profile (hazard description, extent, location, previous occurrences and losses, probability of future events, and climate change impacts) and vulnerability assessment for the utility failure hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.12.1 Hazard Profile

Description

Power failure is defined as any interruption or loss of electrical service caused by disruption of power transmission from accident, sabotage, natural hazards, or equipment failure (also referred to as a loss of power or power outage). A significant power failure is defined as any incident of a long duration, which would require the involvement of the local and/or state emergency management organizations to coordinate provision of food, water, heating, cooling, and shelter.

Widespread power outages can occur without warning or as a result of a natural disaster. Generally, warning times will be short in the case of technological failure, such as a fire at a sub-station, traffic accident, human error, or terrorist attack. In cases where a power failure is caused by natural hazards, greater warning time is possible. For example, high wind events (such as tornadoes and hurricanes) often cause widespread power failure, and are often forecasted before they affect a community. Additionally, severe winter weather conditions (such as ice storms, blizzards, and snowstorms) often cause power failure. These types of incidents are often preceded with warnings allowing power response crews to stage resources to prepare for power failure.

Power failures can lead to secondary hazards as well, leading to negative impacts on the health and safety of residents.

- During periods of extreme heat or extreme cold, vulnerable populations, such as the elderly and medically frail, can be affected and are susceptible to hypothermia or heat stroke. Additionally, power failure can lead to food spoilage, which can have negative impacts on public health.
- A secondary hazard from power failure is a loss of communications capability by first responders, which may in turn have negative impacts on public safety. Power outages can also lead to instances of civil disturbance, including looting.
- Power interruptions at chemical handling plants are of particular concern because of the potential for a chemical spill during restart (U.S. Environmental Protection Agency [EPA] 2001). Chemical spills can also have significant health and environmental impacts.
- Wastewater and potable water utility interruption may occur as a result of a power failure. These critical utilities are essential to community continuity and recovery and interruption of water service may have cascading economic and environmental impacts.
- Power failure may also lead to an increase in traffic accidents because of the lack of traffic control devices, such as stoplights and railroad crossing advisory signals. Power outages lasting a long duration will force law enforcement officials to man traffic control points to prevent accidents.

Location

Power failures in Erie County are usually localized and are frequently the result of a natural hazard event involving high winds or ice storms. Power failure is particularly problematic for homes that are heated with electricity. Widespread power outages during the winter months can directly impact vulnerable populations, such as the elderly and medically frail. According to the 2019 American Community Survey, 29,479 homes

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

across Erie County are heated with electricity (American Community Survey 2019). This represents 7 percent of the total homes in the county. Gas and oil are transmitted through the county primarily by National Fuel Gas Distribution Company, Tennessee Gas, and Empire Pipeline Company.

Wastewater treatment for most municipalities is provided by municipal or private treatment facilities. There are 16 municipal wastewater treatment facilities and 187 pump stations in the county. Municipal wastewater treatment services are provided by wastewater treatment plants, wastewater treatment facilities, and sewage treatment plants. Private wastewater treatment within Erie County includes septic systems and sand filters. Where municipal sewage treatment is not available, on-site septic systems are used. Soil quality in the county is variable, resulting in many parts of the county being unsuitable for on-site wastewater treatment. Undersized or unmaintained on-site septic systems can be an issue, particularly in the drinking watersheds, where exposure and runoff can impair water quality. These wastewater facilities and pump stations are displayed in Figure 4-21 in Section 4, County Profile.

Erie County is served by a variety of communications systems, including traditional land line and cellular service provided by multiple companies, Verizon Wireless and AT&T, plus Sprint, T-Mobile and others offering 3G, 4G, and 4G LTE services (Erie County 2017). Wireless Broadband internet service is provided by Transwave and two predominant wire line broadband companies Verizon and Charter Spectrum (Erie County 2017). The Erie County Broadband Feasibility Study has outlined the development of a county broadband committee, community collaboration efforts, creation and adoption of a "dig once" policy, target broadband infrastructure projects for economic development zones or Erie County Industrial Development Agency focused sites, and development of an Open Access Network (Erie County 2017) . In addition to land line, fiber optic and cellular communications systems, Erie County has an extensive radio communications network that is utilized by emergency services agencies, hospitals, law enforcement, public works, transportation, and other supporting organizations.

The most common sources of potable water within Erie County are municipal and private sources. Private sources of water include drilled wells, driven point wells, and springs. Municipal water supplies (provided by towns and cities) include community water systems, noncommunity water systems, non-transient noncommunity water systems, and water systems regulated as a condition of a "Permit to Operate" issued by the Department of Health. The Erie County Water Authority (ECWA) is responsible for ensuring compliance with treatment, reporting, and water quality standards for all public water systems (ECWA 2019). The New York State Department of Environmental Conservation (NYSDEC) Water Well Information database has begun to document potable water wells as of the year 2000, and currently reports 443 new wells drilled in the county since that date (NYSDEC 2021).

Extent

The extent and severity of a power outage depends on the cause, location, duration, and time of year. It can range from a small, localized event to a countywide power outage. Impacts from an outage can be significant to the county and its residents.

Power failures often result from damage to or electrical hazards within an electric power system. System components include power generation plants, substations, circuits, switches, transformers, power lines, and power poles. Because the varied nature of power outages can range from vehicle accidents to severe weather, utility interruptions can happen at any time.

Power failures lead to the inability to use electric-powered equipment, such as: lighting; heating, ventilation, and air conditioning (HVAC) and necessary equipment; communications equipment (telephones, computers, etc.); fire and security systems; small appliances, such as refrigerators, sterilizers, etc.; and medical equipment. These

types of failures can lead to food spoilage, loss of heating and cooling, basement flooding from sump pump failure, and loss of water from well pump failure.

Previous Occurrences and Losses

Many sources provided power outage information regarding previous occurrences and losses associated with events that caused outages throughout Erie County. With so many sources reviewed for the purpose of this HMP, loss and impact information for many events could vary depending on the source. Therefore, the accuracy of monetary figures discussed is based only on the available information identified during research for this HMP.

Between 1954 and 2020, FEMA included the State of New York in one power outage-related disaster (DR) or emergency (EM) declaration. Generally, these disasters cover a wide region of the State; therefore, they may have impacted many counties. Erie County was included in this disaster (EM-3186 Power Outage).

For this 2022 plan update, power outage events were summarized from 2015 to 2020. Table 5.4.12-1 includes power outage events that occurred between 2013 and 2020. With documentation for New York and Erie County being so extensive, not all sources have been identified or researched. Therefore, Table 5.4.12-1 may not include all events that have occurred throughout the county.

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.12-1. Power Failure Events in Erie County, 2015-2020

Date(s) of Event	Event Type	FEMA Declaration Number (if applicable)	Erie County Designated?	Description
January 4, 2015	High Wind	N/A	N/A	Both broadcast media and law enforcement reported incidences. Monetary property damage totaled $40K across the County. A low pressure tracked from western Lake Erie across far southern Ontario to Quebec and dragged a cold front across the region. Strong winds increased to near 60 mph about 2 to 3 hours after the cold front passage. The strong winds downed trees and wires across western New York. Scattered power outages resulted.
November 12, 2015	High Wind	N/A	N/A	Broadcast media reported power lines down in Erie County with $75K in property damage reported. A strong cold front crossed the region followed by a period of strong winds to the lower parts of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees.
July 25, 2016	Thunderstorm Wind Lightning	N/A	N/A	Law enforcement, County Emergency Manager, and broadcast media reported power lines down in Erie County with $49,000 in property damage. Storms first developed along a line from the east end of Lake Erie to the west end of Lake Ontario, which shifted south and east through the morning then pushing east of the region during the early afternoon. The thunderstorm winds downed trees and power lines throughout the region. Several thousand power outages were reported.
August 13, 2016	Thunderstorm Wind	N/A	N/A	Local fire departments reported power lines down in Erie County with $15K in property damage. Thunderstorms developed across the region in a moist unstable air mass. Numerous thunderstorms developed on outflow and lake breeze boundaries. Thunderstorms downed trees and wires throughout the region. Power outages were scattered throughout the region.
September 10, 2016	Thunderstorm Wind	N/A	N/A	Social media, trained spotters, and law enforcement reported power lines down in Erie County with $50K in property damage. Thunderstorms that accompanied a severe cold front produced damaging wind gusts. The winds downed trees and power lines across the region with scattered power outages reported. Several streets were reported blocked and closed by downed trees and wires.
January 4, 2017	High Wind	N/A	N/A	Broadcast media reported power lines down in Erie County with $40K in property damage. Deep cold air building across the region brought strong, gusty winds to the eastern end of Lake Erie. Winds gusted to between 50 and 60 mph. A building collapse occurred in in East Pembroke with no one inside. The strong winds downed trees and power lines. Several structures were damaged by falling trees. Power outages were reported by New York State Electric and Gas and National Grid.
April 14, 2018	Ice Storm	N/A	N/A	Law enforcement reported powerlines down in Erie County with $40K in property damage. Two rounds of mixed winter precipitation moved over the area with warm air aloft overriding a deep layer of cold air at the surface. This resulted in sleet initially that transitioned to freezing rain before temperatures eventually increased above freezing. Several areas saw nearly an inch of sleet combined with around one half of an inch of freezing rain. This resulted in thousands of power outages and substantial tree damage.

Date(s) of Event	Event Type	FEMA Declaration Number (if applicable)	Erie County Designated?	Description
October 31 – November 1, 2019	High Wind, Lakeshore Flood	YES DR-4472-NY	Yes	Official NWS Observations and river/stream gauges relayed data. Erie County had a total of $ 18,300,000 in property damage primarily from lakeshore flooding in downtown Buffalo. A deepening area of consolidated low pressure tracked across the region on Thursday evening, October 31. This system brought recorded breaking Halloween rains, damaging wind gusts, a large Lake Erie seiche. Thousands of power outages occurred across the area, and pervasive wind-related damage closed hundreds of roads and did countless tree damage across a vast swath of the area. Enough damage was done across New York to have a Presidential Disaster Declaration. Heavy rain also brought flooding concerns.

Source: *National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI) 2020; FEMA 2020*
FEMA *Federal Emergency Management Agency*
K *Thousand ($)*
M *Million ($)*
N/A *Not applicable*

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Probability of Future Occurrences

While the probability of future power failure incidents in Erie County is difficult to predict, historical records indicate that significant power failures have occurred as a result of high winds, lightning, winter weather, and technological failures. Data were not readily available on the frequency of smaller power outages across the county; however, it is reasonable to assume that power failure events of shorter duration will continue to occur in the future. In addition, future changes in climate may also impact the frequency and probability of future power failure occurrences.

Section 5.3 provides a ranking of the identified hazards of concern for Erie County. The probability of occurrence, or likelihood of the event, is one parameter used for hazard rankings. Based on historical records and input from the Planning Committee, the probability of occurrence for utility failures in the county is considered *frequent* (hazard event has a 100 percent probability of occurring and may occur multiple times a year), and the probability for major utility failures is considered *occasional* (hazard has a 10 to 100 percent annual probability of occurring), as presented in Table 5.3-1.

Climate Change Impacts

Climate change is beginning to affect both people and resources in New York State, and these impacts are projected to continue and become more significant. Impacts related to increasing temperatures and sea level rise are already evident in the state. The Integrated Assessment for Effective Climate Change in New York State (ClimAID) was undertaken to provide decision makers with information on the state's vulnerability to climate change, and to facilitate development of adaptation strategies informed by both local experience and scientific knowledge (New York State Energy Research and Development Authority [NYSERDA] 2011).

Each region in New York State, as defined by ClimAID, has attributes that will be affected by climate change. Erie County is part of Region 1, Great Lakes Plains. Some characteristics of and issues affecting this region associated with climate change include water temperature related to nuclear powerplant cooling, water availability for hydropower, and high availability of wind power (NYSERDA 2011).

Temperatures are expected to increase throughout the state by 2 ºF to 3.4 ºF by the 2020s, 4.1 °F to 6.8 °F by the 2050s, and 5.3 °F to 10.1 °F by the 2080s. The lower ends of these ranges assume lower greenhouse gas emissions scenarios, and the higher ends assume higher greenhouse gas emissions scenarios. Annual average precipitation is projected to increase from 1 to 8 percent by the 2020s, and from 3 to 12 percent by the 2050s, and from 4 to 15 percent by the 2080s. By the end of the century, the greatest increases in precipitation are projected to be in the northern parts of the state. Although seasonal projections are less certain than annual results, this additional precipitation will most likely occur during the winter months, with the possibility of slightly reduced precipitation projected for the late summer and early fall. Table 5.4.12-2 lists projected precipitation changes within the Great Lake Plains ClimAID Region (NYSERDA 2014).

Table 5.4.12-2. Projected Seasonal Precipitation Change in Region 1, 2020-2100 (% change)

Baseline (1971-2000) 37.0 inches	Low Estimate (10th Percentile)	Middle Range (25th to 75th Percentile)	High Estimate (90th Percentile)
2020s	0%	2 – 7%	8%
2050s	2%	4 – 10%	12%
2080s	1%	4 – 13%	17%
2100	-3%	4 – 19%	24%

Source: NYSERDA 2014

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Annual temperatures throughout New York State have been rising since the start of the 20th century. The state's average temperatures have increased by approximately 0.6 °F since 1970, with winter warming exceeding 1.1 °F per decade. Extreme heat events are likely to increase throughout New York State, and short-duration warm season droughts will become more common.

Climatologists predict an increase in the number and intensity of severe weather events. More storms with higher winds will increase the chance that the power infrastructure will be impacted. Extreme temperatures are predicted to increase as well. During the hot summer months, potential for power overload will escalate as demand for power increases. Additionally, climatologists predict an increase in precipitation, which may lead to more winter weather, thus causing additional power failures.

5.4.12.2 Vulnerability Assessment

To understand risk, a community must evaluate the assets that are exposed or vulnerable within the identified hazard area. For the utility failure hazard, all of Erie County has been identified as the hazard area. Therefore, all assets in the county (population, structures, critical facilities, and lifelines), as described in the County Profile, Section 4, are vulnerable to a utility failure. This section discusses the potential impact of the utility failure hazard on the county.

The entire county is vulnerable to the utility failure hazard. Loss of power can exert serious impacts on the health and welfare of residents, continuity of businesses, and ability of public safety agencies to respond to emergencies. Individuals with medical needs are vulnerable to power failures because medical equipment, such as oxygen concentrators, requires electricity to operate. Elderly residents (persons over 65 years old) are also vulnerable to the effects of power failure, as power failure could expose older residents to extreme heat or extreme cold. According to the 2019 American Community Survey 5-year Population Estimates, 169,007 persons are over 65 years old in the county (American Community Survey 2019). Further, households that rely on electricity to power in-home heating and cooling systems will be exposed to significantly colder or hotter indoor temperatures during a utility failure in the winter and summer months, respectively. Households that use utility gas for home heating will be less vulnerable.

Additionally, during power failure events, water purification systems may not function. Further, populations relying on private wells will not have access to potable water. Many power outages are caused by storm events that can lead to flooding. Without electricity, residents would be unable to pump water from their basements, potentially causing structural and content damage to their homes. Section 5.4.6, Flood, includes a more detailed discussion of the county's vulnerability to the flood hazard.

Data were collected from Erie County and the Planning Partnership. Insufficient data were available to model long-term potential impacts of a utility failure on the county. Over time, additional data will be collected to allow better analysis of this hazard. Available information and a preliminary assessment are provided below.

Impacts on Life, Health, and Safety

For the purposes of this HMP, the entire population in Erie County is considered vulnerable to utility failure events. Section 4 of this HMP, County Profile, includes a summary of population statistics for the county. Utility failures pose potential health impacts including injury and death. Other issues pertaining to power outages include food safety from lack of refrigeration and carbon monoxide poisoning from misuse of generators.

Utility failure is particularly problematic for homes that are heated with electricity. Widespread power outages during the winter months can directly impact vulnerable populations, such as the elderly and medically frail. Individuals with medical needs are vulnerable to power failures because medical equipment, such as oxygen concentrators, requires electricity to operate. The elderly population (persons over 65 years old) is also

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

vulnerable to the effects of power failure, as power failure could expose older residents to extreme heat or extreme cold. There are 169,007 persons over 65 years old in Erie County (American Community Survey 2019).

Furthermore, during power failure events, water purification systems may not function. Populations relying on private wells will not have access to potable water. Additionally, many power outage events are caused by storm events that can lead to flooding. Without electricity, residents would be unable to pump water from their basements, potentially causing structural and content damage to their homes.

Individuals powering their homes with generators are subjected to carbon monoxide poisoning if proper ventilation procedures are not followed. Improperly connected portable generators are capable of "back feeding" power lines, which may cause injury or death to utility works attempting to restore power and may damage house wiring and/or generators (Community Health Care Association of New York State 2020).

Impacts on General Building Stock

All building stock in the county is exposed to the utility interruption hazard. Section 4, County Profile, summarizes the building inventory in Erie County. Impacts sustained from utility interruption are likely to be secondary impacts. Should potable water distribution be reduced or not available, then structures could be at increased risk for structural fire since current fire suppression is dependent on accessing water from hydrants.

Impacts on Critical Facilities

All critical facilities in the county are exposed to the utility interruption hazard. It is essential that critical facilities remain operational during natural hazard events. Backup power is recommended for critical facilities and infrastructure. Loss of power can have serious impacts on the health and welfare of residents, continuity of business, and the ability of public safety agencies to respond to emergencies. Interruption of utility gas or water distribution could also reduce the effectiveness of critical facilities to operate at full capacity.

Impact on Economy

A prolonged power failure in Erie County may impact the county's economy. All roadway systems and supporting resources provide services locally, regionally, nationally, and internationally. Disruption in any of these services would mean that many workers, residents, and travelers would not be able to go where needed.

Power interruptions can cause economic impacts stemming from lost income, spoiled food and other goods, costs to the owners/operators of the utility facilities, and costs to government and community service groups. Interruption of utility gas or potable water distribution could also cause significant economic impacts such as additional costs for bringing in water tenders to maintain fire suppression capabilities; opening additional warming centers should electric and utility gas utility be interrupted to residential areas; and distribution of potable water for public consumption. Significant costs could be associated with reimbursing fire departments from other counties within New York to travel, staff, and maintain water tenders within Erie County during the duration of a water outage event.

Potential modeling of economic impacts from utility interruption would be developed by calculating interruption of service costs derived from a standard value per person per day multiplied out by the number of customers served. This would help to provide an estimate of the impact of the interrupted utility service but may not be representative of the complete economic impact of a prolonged utility interruption. For example, FEMA's benefit-cost analysis (BCA) methodology measures the loss of electrical service on a per-person-per-day-of-lost-service basis for the service area affected. The FEMA BCA Toolkit version 6.0 uses the following standard values to estimate cost of utility usage per person per day (FEMA 2020):

- Electric: $174.00
- Potable Water: $114.00

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Wastewater: $58.00

Impact on the Environment

At this time, there are no known impacts to the environment caused by utility failures.

Future Changes that May Impact Vulnerability

Understanding future changes that impact vulnerability in the county can assist in planning for future development and ensuring that appropriate mitigation, planning, and preparedness measures are in place. The county considered the following factors to examine potential conditions that may affect hazard vulnerability:

- Potential or projected development
- Projected changes in population
- Other identified conditions as relevant and appropriate, including the impacts of climate change

Projected Development

Any areas of growth could be potentially impacted by utility failures because the entire county is exposed and vulnerable. However, because of increased standards and codes, new development may be less vulnerable to utility failures compared to the aging building stock in the county. Section 4, County Profile, provides more information about the new development plans for Erie County.

Projected Changes in Population

According to the U.S. Census, the population for Erie County has decreased approximately less than 1 percent between 2010 and 2019 (U.S. Census Bureau 2021). Estimated population projections provided by the 2017 Cornell Program on Applied Demographics indicates that the county's total population will increase to approximately 945,891 residents by 2040 (Cornell University 2017). With the projected estimates, more people will reside in the county resulting in a higher reliance on electric power or more will be living/working out of properties that do not meet existing codes and are at risk of experiencing utility failure events. Section 4, County Profile, provides additional discussion on population trends.

Climate Change

Several implications for climate change are related to the power failure hazard. Providing projections of future climate change for a specific region is challenging. Shorter term projections are more closely tied to existing trends making longer term projections even more challenging. The further out a prediction reaches, the more subject to changing dynamics it becomes.

Climatologists predict an increase in the number and intensity of severe weather events. More storms with higher winds will increase the chance that the power infrastructure will be impacted. Extreme temperatures are predicted to increase as well. During the hot summer months, the potential for power overload will increase as demand for power increases. Additionally, climatologists predict an increase in precipitation, which may lead to more winter weather causing additional power failures and utility interruptions.

Changes in Vulnerability Since the 2015 HMP

Utility failures are a new hazard of concern for Erie County. Since the 2015 analysis, population statistics have been updated using the 5-Year 2015-2019 American Community Survey Population Estimates (American Community Survey 2019). Overall, this vulnerability assessment uses a more accurate and updated building inventory than that used in the 2015 HMP. This information provides more accurate exposure and potential loss estimates for Erie County.

Attachment: 22-Section-5.4.12-Util-Failure-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.13 Wildfire

This section provides a profile and vulnerability assessment of the wildfire hazard for the Erie County Hazard Mitigation Plan (HMP).

5.4.13.1 Hazard Profile

This section provides information regarding the description, extent, location, previous occurrences and losses, and the probability of future occurrences for the wildfire hazard.

Hazard Description

A wildland fire can be defined as any non-structural fire that occurs in the wildland. Three distinct types of wildland fires have been defined and include naturally occurring wildfire, human-caused wildfire, and prescribed fire. They may be highly destructive and become difficult to control. Wildfires result in the disturbance of forest and brush and destruction of real estate and personal property, and have secondary impacts on other hazards, such as flooding, by removing vegetation and disturbing watersheds.

Wildfires are commonly termed forest fires, brush fires, grass fires, wildland-urban interface (WUI) fires, range fires, or ground fires. Wildfires do not include fires naturally or purposely ignited to manage vegetation for one or more benefits (NYS Division of Homeland Security and Emergency Services [DHSES] 2014). Although destructive fires do not occur annually, the state's fire history shows a cycle of outbreaks that have caused death, property loss, forest destruction, and air pollution (NYS DHSES 2019).

Wildfire in New York State is based on the same science and environmental factors as any wildfire in the world. Fuels, weather, and topography are the primary factors that determine the natural spread and destruction caused by every wildfire. New York State, including Erie County, has large tracts of diverse forest lands, many of which are the result of wildfires.

Wildfires are grouped within three classes: surface fires, ground fires, and crown fires. Surface fires, the most common, burn along the forest floor, moving slowly and killing or damaging trees. Ground fires are usually started during excessively dry periods, and burn on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along tops of trees.

The Federal Emergency Management Agency (FEMA) defines the following four categories of wildfires that occur throughout the United States:

- Wildland fires – fueled almost exclusively by natural vegetation. They typically occur in national forests and parks, where federal agencies are responsible for fire management and suppression.
- Interface or intermix fires – urban/wildland fires in which vegetation and the built-environment provide fuel.
- Firestorms – events of such extreme intensity that effective suppression is virtually impossible. Firestorms occur during extreme weather and generally burn until conditions change or the available fuel is exhausted.
- Prescribed fires and prescribed natural burns – fires that are intentionally set or selected natural fires that are allowed to burn for beneficial purposes (FEMA 1997).

Wildfire Behavior and Fire Ecology

Potential for wildfire and its subsequent development (growth) and severity are controlled by the three factors of topography, fuel, and weather. Climate change is also considered a potential source of influence. These four factors are described below:

- Fuel
  - Lighter fuels (such as grasses, leaves, and needles) quickly expel moisture and burn rapidly, while heavier fuels (such as tree branches, logs, and trunks) take more time to warm and ignite.
  - Snags and hazard trees–especially those that are diseased, dying, or dead—are quickly engulfed and allow fires to spread quickly.
- Weather
  - Strong winds within the vicinity of the flames produce extreme fire conditions. Of particular concern are wind events that potentially persist for longer periods of time, or ones with significant wind speeds, which can sustain and quickly promote the spread of fire through movement of embers or exposure within tree crowns.
  - Spring and summer months, which can experience drought-like conditions extending beyond the normal season, also expand the average fire season. Likewise, the passage of a dry, cold front through the region can result in a sudden increase in wind speeds and a change in wind direction affecting fire spread.
  - Thunderstorm activity, which typically begins with wet storms, turns dry with little or no precipitation reaching the ground as the season progresses.
- Terrain
  - Regional and local topography influence the amount and moisture of fuel.
  - Barriers, such as highways and lakes, can affect the spread of fire.
  - Elevation and slope of landforms affect fire spread; flames move more easily uphill than downhill.
- Changes to Environment
  - Without an increase in summer precipitation (greater than any predicted by climate models), areas susceptible to future burning are very likely to increase.
  - Infestation from insects is also of concern as it may impact forest health. Potential insect populations may increase with warmer temperatures with the potential for infested stressed trees to increase the fuel load.
  - The composition of various tree species will change as species respond uniquely to a changing climate.
  - Wildfires cause both short-term and long-term losses. Short-term losses can include destruction of timber, wildlife habitat, scenic vistas, and watersheds. Long-term effects include smaller timber harvests, reduced access to affected recreational areas, and the destruction of cultural and economic resources and community infrastructure.

Extent

The extent (that is, magnitude or severity) of wildfires depends on weather and human activity. Several tools are available to estimate fire potential, extent, danger, and growth, including the following:

Wildland Fire Assessment System (WFAS) is an internet-based information system that provides a national view of weather and fire potential, including national fire danger, weather maps, and satellite-derived "greenness" maps. It was developed by the Fire Behavior unit at the Fire Sciences Laboratory in Missoula,

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Montana, and is currently supported and maintained at the National Interagency Fire Center (NIFC) in Boise, Idaho (U.S. Forest Service [USFS] n.d.).

Each day during the fire season, the WFAS produces national maps of selected fire weather and fire danger components of the National Fire Danger Rating System (NFDRS) (USFS n.d.). Fire Danger Rating levels take into account current and antecedent weather, fuel types, and both live and dead fuel moisture. This information is provided by local station managers (USFS n.d.). Table 5.4.13-1 shows the five fire danger ratings and color codes.

Table 5.4.13-1. Description of Fire Danger Ratings in New York State

Fire Danger Rating and Color Code	Description
Low (L) (Dark Green)	Fuels do not ignite readily from small firebrands; although a more intense heat source, such as lightning, may start fires in duff or punky wood. Fires in open cured grasslands may burn freely a few hours after rain, but woods fires spread slowly by creeping or smoldering, and burn in irregular fingers. There is little danger of spotting.
Moderate (M) (Light Green or Blue)	Fires can start from most accidental causes, but with the exception of lightning fires in some areas, the number of starts is generally low. Fires in open cured grasslands will burn briskly and spread rapidly on windy days. Timber fires spread slowly to moderately fast. The average fire is of moderate intensity, although heavy concentrations of fuel, especially draped fuel, may burn hot. Short-distance spotting may occur, but is not persistent. Fires are not likely to become serious and control is relatively easy.
High (H) (Yellow)	All fine dead fuels ignite readily and fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and short-distance spotting is common. High-intensity burning may develop on slopes or in concentrations of fine fuels. Fires may become serious and their control difficult unless they are attacked successfully while small.
Very High (VH) (Orange)	Fires start easily from all causes and, immediately after ignition, spread rapidly and increase quickly in intensity. Spot fires are a constant danger. Fires burning in light fuels may quickly develop high-intensity characteristics, such as long-distance spotting and fire whirlwinds when they burn into heavier fuels.
Extreme (E) (Red)	Fires start quickly, spread furiously, and burn intensely. All fires are potentially serious. Development into high-intensity burning will usually be faster and occur from smaller fires than in the very high fire danger class. Direct attack is rarely possible and may be dangerous except immediately after ignition. Fires that develop headway in heavy slash (trunks, branches, and tree tops) or in conifer stands may be unmanageable while the extreme burning condition lasts. Under these conditions, the only effective and safe control action is on the flanks until the weather changes or the fuel supply lessens.

Source: USFS n.d.

The ***Fire Potential Index (FPI)*** is derived by combining daily weather and vegetation condition information and can be used to identify the area's most susceptible to fire ignition. The combination of relative greenness and weather information identifies the moisture condition of the live and dead vegetation. The weather information also lists areas of low humidity, high temperature, and no precipitation to identify areas most susceptible to fire ignition. The FPI enables local and regional fire planners to quantitatively measure fire ignition risk (U.S. Geological Survey [USGS] 2005). FPI maps are provided on a daily basis by the USFS. The scale ranges from 0 (low) to 100 (high). The calculations used in the NFDRS are not part of the FPI, except for a 10-hour moisture content (Burgan et al. 2000).

Fuel Moisture (FM) is a tool that is used to understand the fire potential for locations across the United States. It is a measure of the amount of water in a fuel (vegetation) available to a fire, and is expressed as a percent of the dry weight of that specific fuel. When fuel moisture content is high, fires do not ignite readily, or at all, because heat energy has to be used to evaporate and drive water from the plant before it can burn. When the fuel moisture content is low, fires start easily and will spread. When the fuel moisture

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

content is less than 30 percent, that fuel is essentially considered to be dead (known as dead fuels). Dead fuels respond solely to current environmental conditions and are critical in determining fire potential (Burgan et al. 2000).

The ***Keetch-Byram Drought Index (KBDI)*** is a drought index designed for fire potential assessment. It is a number representing the net effect of evapotranspiration and precipitation in producing cumulative moisture deficiency in deep duff and upper soil layers (USFS n.d.). The index increases each day without rain and decreases when it rains. The scale ranges from 0 (no moisture deficit) to 800 (maximum drought possible). The range of the index is determined by assuming that 8 inches of moisture are in a saturated soil that is readily available to the vegetation. For different soil types, the depth of soil required to hold 8 inches of moisture varies. A prolonged drought influences fire intensity, largely because more fuel is available for combustion. The drying of organic material in the soil can lead to increased difficulty in fire suppression (USFS 2016).

The ***Haines Index***, also known as the Lower Atmosphere Stability Index, was developed for fire use. It is used to indicate the potential for wildfire growth by measuring the stability and dryness of the air over a fire. It is calculated by combining the stability and moisture content of the lower atmosphere into a number that correlates well with large fire growth. The stability term is determined by the temperature difference between two atmospheric layers; the moisture term is determined by the temperature and dew point difference. This index has been shown to be correlated with large fire growth on initiating and existing fires where surface winds do not dominate fire behavior. The Haines Index can range between 2 and 6. The drier and more unstable the lower atmosphere is, the higher the index:

- Very Low Potential (2) – moist, stable lower atmosphere
- Very Low Potential (3)
- Low Potential (4)
- Moderate Potential (5)
- High Potential (6) – dry, unstable lower atmosphere (USFS 2016)

The ***Buildup Index (BUI)*** is a number that reflects combined cumulative effects of daily drying and precipitation in fuels with a 10-day time lag constant (North Carolina Forest Service 2007).

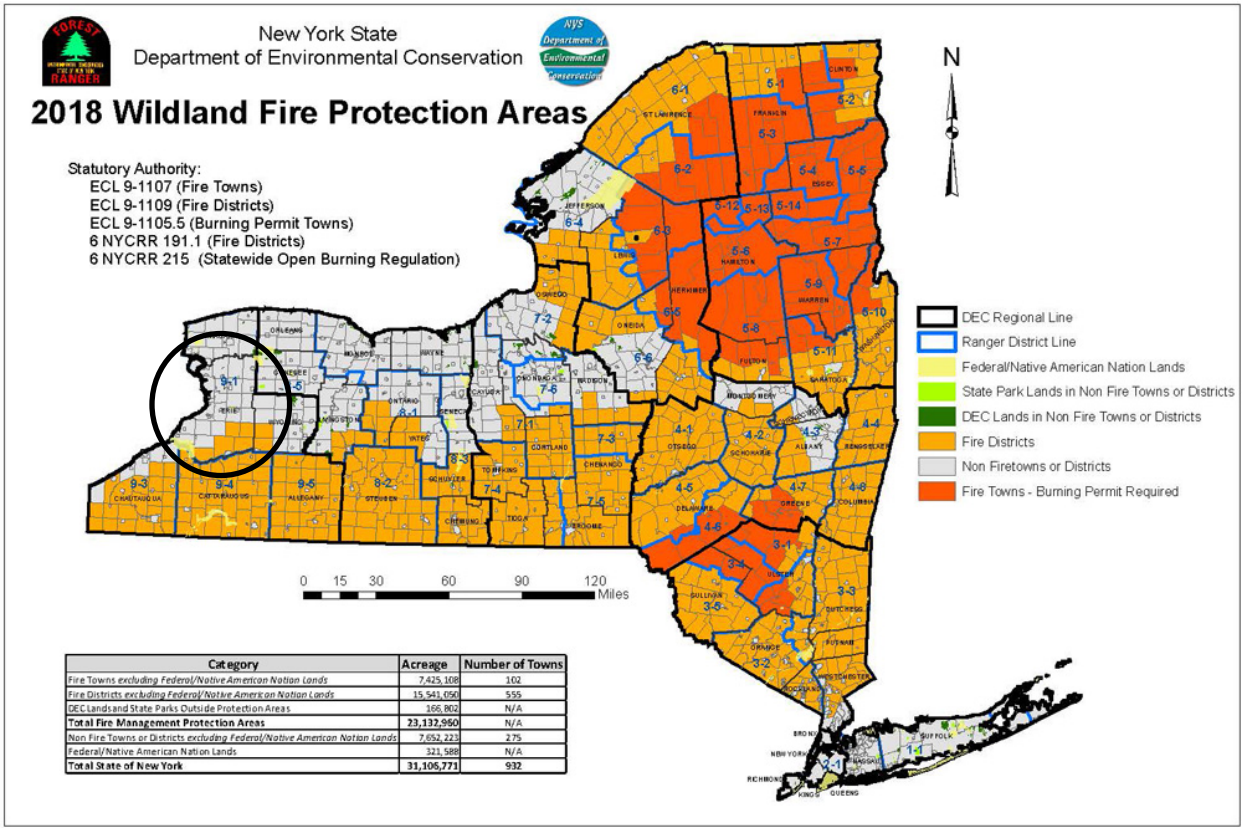
Location

According to the U.S. Fire Administration (USFA), the fire problems in the country vary from region to region. This often is a result of climate, poverty, education, demographics, and other causal factors (USFA 2013).

In New York State, the NYSDEC's Division of Forest Protection (Forest Ranger Division) is designated as the state's lead agency for wildfire mitigation. The Forest Ranger Division has a statutory requirement to provide a forest fire protection system for 657 of the 932 jurisdictions throughout New York State. It includes cities and villages and cover 23.5 million acres of land, including all state-owned land outside of the jurisdictions. Figure 5.4.13-1 displays the fire protection areas in New York State. This figure indicates that, as of 2018, a portion of Erie County is not part of the wildfire protection area highlighted in the black circle.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.13-1. Forest Ranger Division Wildfire Protection Areas



Category	Acreage	Number of Towns
Fire Towns *excluding Federal/Native American Nation Lands*	7,425,108	102
Fire Districts *excluding Federal/Native American Nation Lands*	15,541,050	555
DEC Lands and State Parks Outside Protection Areas	166,802	N/A
Total Fire Management Protection Areas	**23,132,960**	N/A
Non Fire Towns or Districts *excluding Federal/Native American Nation Lands*	7,652,223	275
Federal/Native American Nation Lands	321,588	N/A
Total State of New York	**31,106,771**	932

Source: NYSDEC 2020. The black oval indicates the location of Erie County.

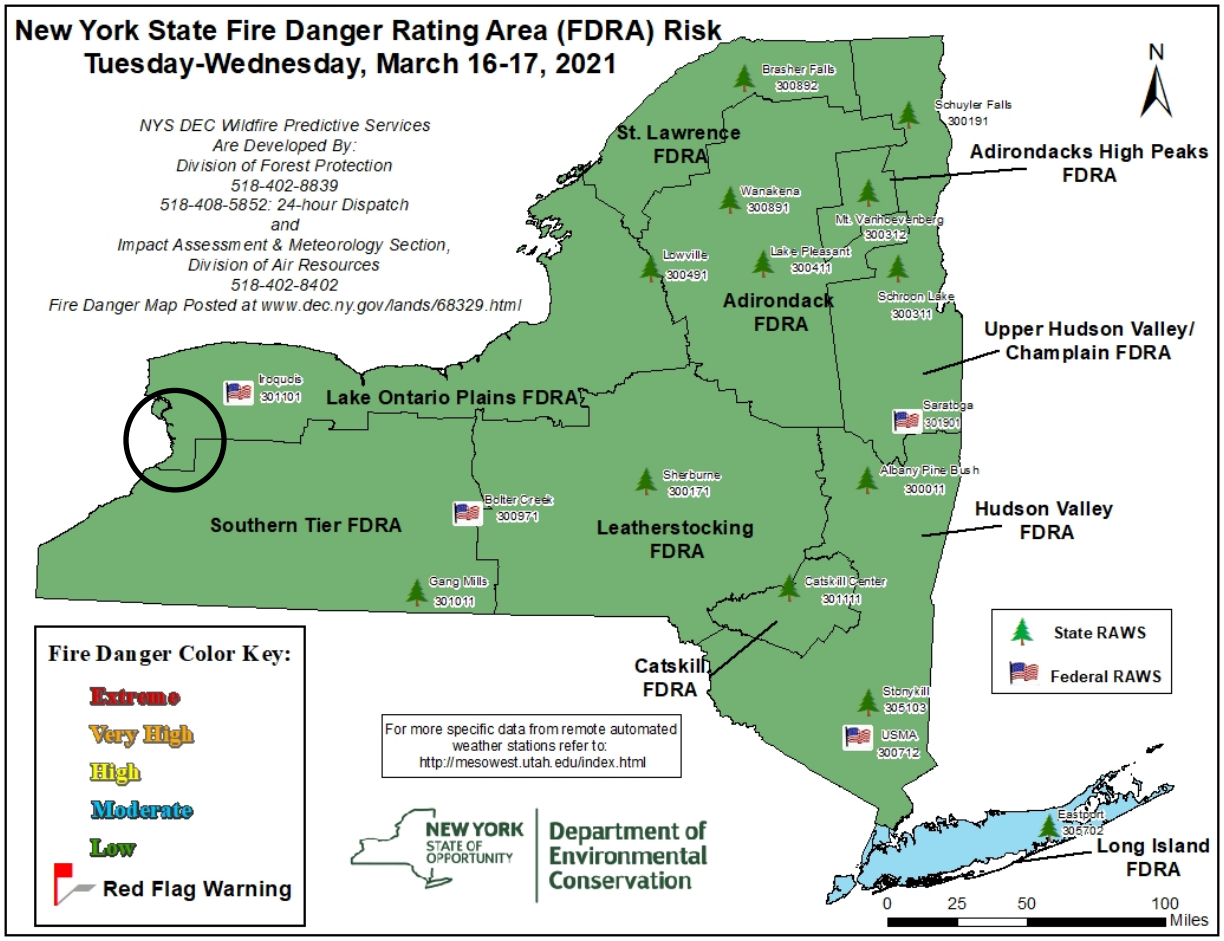
New York State is divided into 10 fire danger rating areas (FDRAs). FDRAs are defined by areas of similar vegetation, climate, and topography in conjunction with agency regional boundaries, National Weather Service (NWS) fire weather hazard areas, political boundaries, fire occurrence history, and other influences. The Forest Ranger Division has fought fires and retained records for more than 125 years. Division records for the years of 1993 to 2017 indicate that rangers suppressed 5,423 wildfires that burned a total of 52,580 acres (NYSDEC 2018). Currently, more than 1,700 fire departments respond to an average of 4,500 wildfires each year. The Forest Ranger Division responds to approximately 3 percent of all wildfires; however, Rangers help contain 33 percent of all wildfire acres (NYSDEC 2018).

Wildfires occur in Erie County. Many areas in the County, particularly those that are heavily forested or contain large tracts of brush and shrubs, are prone to fires (NYSDEC 2018). The Forest Ranger Division/Wildland Fire Protection Area for Erie County is Region 9: Western New York and southern municipalities are specifically identified as fire districts (NYSDEC 2018). The boundaries of the FDRAs do not match the Forest Ranger Division boundaries.

A fire danger rating map is updated daily on the NYSDEC website (http://www.dec.ny.gov/lands/68329.html). The map is developed by information obtained from the Division of Forest Protection and Division of Air Resources (impact assessment and meteorology section). Figure 5.4.13-2 shows the FDRAs in New York State and the current fire danger risk for each area. As indicated by the legend, fire danger can be identified by varying colors and warning areas.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.13-2. New York State Fire Danger Rating Areas



Source: NYSDEC 2021 Note: The black oval indicates the location of Erie County.

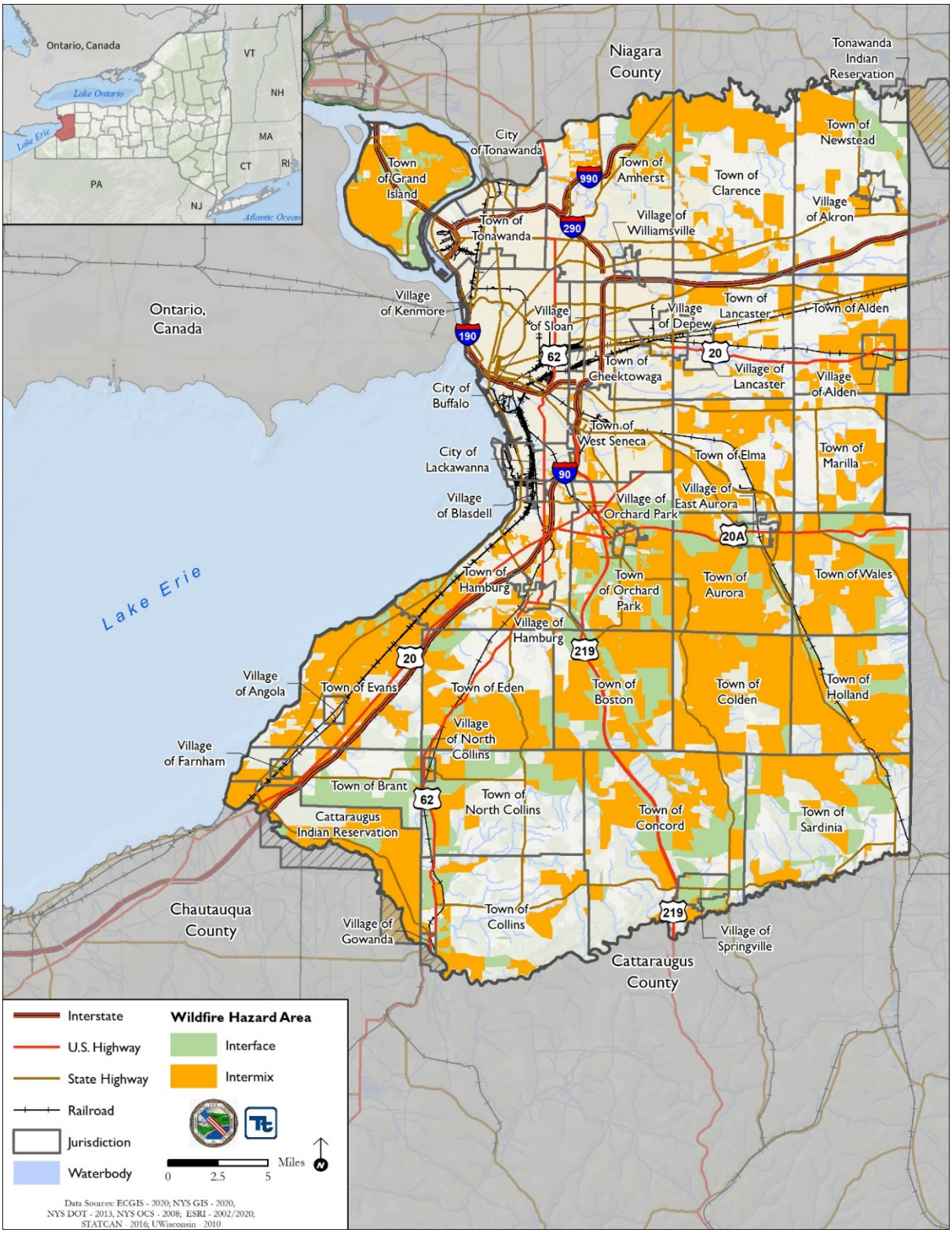
Wildland-Urban Interface in New York State/Erie County

Figure 5.4.13-3 shows the Wildland-Urban Interface divided into two categories: interface and intermix. The WUI Interface hazard area is land that stands between the undeveloped, natural land and developed, urban areas. The WUI Intermix hazard area is an area where human habitation is mixed with areas of flammable wildland vegetation. Intermix areas have more than one house per 40 acres and have more than 50-percent vegetation. Interface areas have more than one house per 40 acres, have less than 50-percent vegetation, and are within 1.5 miles of an area over 1,235 acres that is more than 75-percent vegetated (Stewart et al. 2007). The California Fire Alliance determined that 1.5 miles is the approximate maximum distance that firebrands can be carried from a wildland fire to the roof of a house. Therefore, even structures not within the forest are at risk from wildfire.

Approximately 33.2-percent of the County's land area is within the WUI Intermix hazard area, and 10.6 percent of the land area is within the WUI Interface hazard area.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.13-3. Interface/Intermix WUI Hazard Areas in Erie County



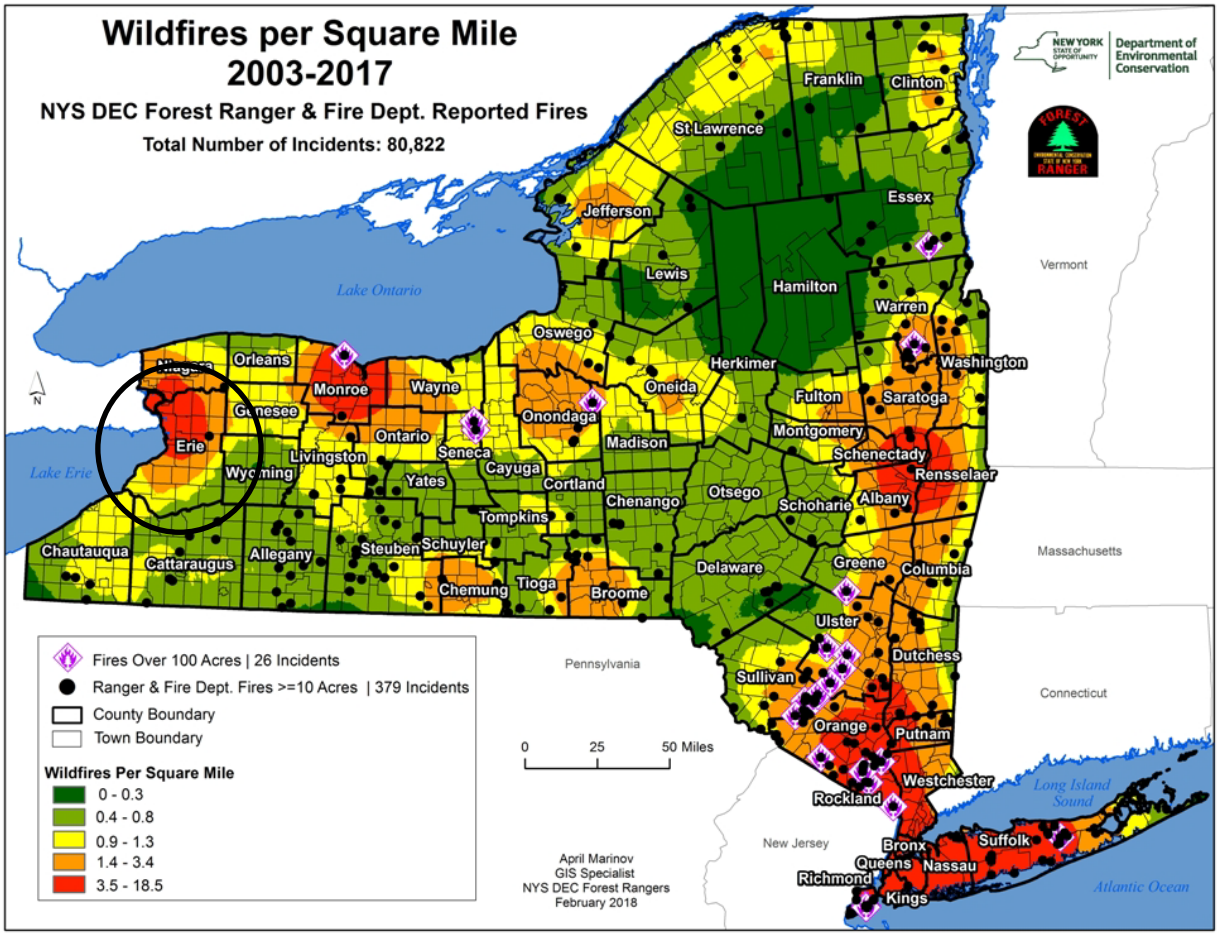
Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Previous Occurrences and Losses

Only limited historical information was found on previous occurrences and losses associated with wildfires throughout New York State and Erie County. Between 1954 and 2020, NYS was not included in any wildfire-related major disaster (DR) or emergency (EM) declarations (FEMA 2020).

Determinations of wildfire occurrences in New York State are based on two data sources: the New York State Forest Ranger Division and the New York State Office of Fire Prevention and Control (NYS OFP&C). The Forest Ranger Division wildfire occurrence data (1993 through 2017) indicates that 71 percent of wildfires in the state were human caused; the remaining 29 percent resulted from lightning. Regarding human-caused fires, debris burning accounted for 33 percent, incendiary fires accounted for 16 percent, campfires accounted for 16 percent, and smoking accounted for 6 percent (NYSDEC 2018). Figure 5.4.13-4 illustrates occurrences of wildfires in NYS between 2003 and 2017 (the most current data available). This figure reveals occurrences of 0.4 and 18.5 wildfires per square mile from 2003 to 2017 within Erie County municipalities.

Figure 5.4.13-4. Wildfire Occurrences in New York State, 2003-2017



Source: NYSDEC 2018. Note: The black circle indicates the location of Erie County.

Probability of Future Occurrences

The Forest Ranger Division wildfire occurrence data (2003 to 2018) indicates that NYS, including Erie County, is susceptible to wildfires. From March 15 through May 15, 47 percent of all fire department responses to wildfires occurred. Beginning in 2010, NYS enacted revised open burning regulations that ban brush burning

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

statewide during this time period. Forest Ranger Division data indicate that this new statewide ban resulted in 74 percent fewer wildfires caused by debris burning in upstate New York from 2010 to 2012. Forest Ranger Division and fire department historical fire occurrence data recorded after the new burn ban regulations were enacted in 2010 will serve as a benchmark for analyses of wildfire occurrence (NYS DHSES 2014).

Nationally, wildfire risk is increasing, and wildfire experts point to the following four reasons:

- The way forests were handled in the past allowed fuel in the form of fallen leaves, branches, and plant growth, to accumulate. This fuel is currently lying around the forest with potential to "feed" a wildfire.
- Increasingly hot, dry weather has occurred and will continue to occur within the United States.
- Weather patterns across the country are changing.
- More homes are built within WUI areas, meaning that homes are built closer to wildland areas where wildfires can occur (NYS DHSES 2014).

Annual wildfires likely will occur throughout Erie County. However, advanced methods of wildfire management and control and better understanding of fire ecosystems should reduce the number of devastating fires in the future (NYS DHSES 2014).

Hazards of concern identified for Erie County were ranked in Section 5.3. Probability of occurrence, or likelihood of the event, is one parameter used for ranking hazards. Based on historical records and input from the Planning Partnership, the probability of occurrence of wildfire within villages, cities, and water authorities are unlikely and could occasionally occur in some towns.

Climate Change Impacts

A gradual change in temperatures will alter the growing environment of many tree species throughout the United States and New York, reducing the growth of some trees and increasing the growth of others. Tree growth and regeneration may be affected more by extreme weather events and climatic conditions than by gradual changes in temperature or precipitation. Warmer temperatures may lead to longer dry seasons and multi-year droughts, creating triggers for wildfires, insects, and invasive species. Increased temperature and change in precipitation will also affect fuel moisture during wildfire season and the length of time wildfires can burn in a given year (U.S. Department of Agriculture [USDA] 2012).

Climate change may also increase the frequency of lightning strikes. A warmer atmosphere holds more moisture, which is one of the key items for triggering a lightning strike. Lightning strikes cause approximately half of the wildfires in the United States. If the frequency of lightning strikes increases, the potential for wildfires from these strikes also increases (Lee 2014). Wildfire incidents are predicted to increase throughout the United States because of climate change, causing at least a doubling of areas burned within the next century (USDA 2012).

Summer temperatures have been increasing across New York State and are expected to continue to rise. New York is currently the eighth fastest warming state in the country, in terms of annual average temperature. By 2050, New York is projected to see a five-fold increase in heat wave days. In the past decade, average summer temperatures have risen by 1 to 2 degrees in most areas of the state. The number of days with maximum temperatures above 95ºF in New York State has been increasing, putting New Yorkers at higher risk of heat-related illness. As a result of climate change, the frequency of extreme temperature events is expected to increase, and such events are associated with increased morbidity and mortality (NYS DHSES 2019).

Temperatures in New York State are warming, with an average rate of warming over the past century of 0.25 °F per decade. Average annual temperatures are projected to increase across New York State by 2 °F to 3.4 °F by the 2020s, 4.1 °F to 6.8 °F by the 2050s, and 5.3 °F to 10.1 °F by the 2080s. By the end of the century, the greatest warming is projected to be in the northern section of the State (NYSERDA 2014). The total number of

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

hot days in New York State is expected to increase as this century progresses. The frequency and duration of heat waves, defined as three or more consecutive days with maximum temperatures at or above 90 ˚F, are also expected to increase (Table 5.4.13-2). In contrast, extreme cold events, defined both as the number of days per year with minimum temperature at or below 32 ˚F and those at or below 0 ˚F, are expected to decrease as average temperatures rise (NYSERDA 2011).

Each region within NYS, as defined by the Integrated Assessment for Effective Climate Change in New York State (ClimAID), contains attributes that climate change will affect. Erie County is part of ClimAID Region 1: The Great Lake Plains. In ClimAID Region 1, temperatures are estimated to increase between 3.7 to 7.3 ºF by the 2050s and 4.2 to 12 ºF by the 2080s (baseline of 47.7 ºF) (NYS Energy Research and Development Authority [NYSERDA] 2014). Extreme heat events and heat waves are also projected to increase, as listed in Table 5.4.13-2 below. Prolonged heat waves are likely to generate a greater number of wildfires. Stronger winds from larger storms may lead to more fallen branches for wildfires to consume. Increases in rain and snow events prime forests for fire by supporting growth of more fuel. Drought and warmer temperatures lead to drier forest fuels (NYS DHSES 2014).

Table 5.4.13-2. Extreme Event Projections for ClimAID Region 1

Event Type (2020s)	Low Estimate (10th Percentile)	Middle Range (25th to 75th Percentile)	High Estimate (90th Percentile)
Days over 90 degrees Fahrenheit (°F) - (8 days)	12	14 to 17	19
Number of Heat Waves - (0.7 heat waves)	2	2 to 2	2
Duration of Heat Waves - (4 days)	4	4 to 4	4
Days below 32°F - (133 days)	99	103 to 111	116

Source: NYSERDA 2014

Fire potential depends on climate variability, local topography, and human intervention. Climate change can affect multiple elements of the wildfire system: fire behavior, ignitions, fire management, and vegetation fuels. Hot, dry spells create highest fire risk. With temperatures increasing in New York State, wildfire danger may intensify with warming and drying of vegetation. When climate alters fuel loads and fuel moisture, it changes the susceptibility of forests to wildfires. Climate change also may increase winds that spread fires. Faster fires are harder to contain, and thus are more likely to expand into residential neighborhoods.

Annual temperatures have been rising throughout New York State since the start of the 20th century. The state's average temperatures have increased by approximately 0.6 °F since 1970, with winter warming exceeding 1.1 °F per decade. Extreme heat events are likely to increase throughout New York State and short-duration warm season droughts will become more common.

With the increase in temperatures, heat waves will become more frequent and intense, increasing heat-related illness and death and posing new challenges to the energy system, air quality, and agriculture. Summer droughts are projected to increase, affecting water supply, agriculture, ecosystems, and energy projects (NYSERDA 2011).

As stated above, according to the temperature projections for New York State and Erie County, this area can expect warmer and drier conditions, which may increase the frequency and intensity of wildfires. Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, will increase the likelihood of wildfires (U.S. EPA 2009).

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4.13.2 Vulnerability Assessment

To understand risk, a community must evaluate what assets are exposed and vulnerable in the identified hazard area. A spatial analysis was conducted using the University of Wisconsin 2010 wildland-urban interface/intermix spatial layer. For the purposes of the assessment, an asset (population, structures, critical facilities, and lifelines) is considered exposed and potentially vulnerable to the wildfire hazard if it is located in the wildland-urban interface or wildland-urban intermix hazard areas.

Impact on Life, Health and Safety

Wildfires have the potential to impact human health and life of residents and responders, structures, infrastructure, and natural resources. The most vulnerable populations include emergency responders and those within a short distance of the interface between the built environment and the wildland environment. First responders are exposed to the dangers from the initial incident and after-effects from smoke inhalation and heat stroke. Table 5.4.13-3 summarizes the estimated population exposed to the wildfire hazard by jurisdiction.

Based on the analysis, an estimated 154,141 residents, or approximately 16.8 percent of the County's population, are located in the wildland-urban interface/intermix hazard areas. Overall, the Town of Grand Island has the greatest number of individuals located in the wildfire hazard areas (i.e., 20,697 persons).

Of the population exposed, the most vulnerable include the economically disadvantaged and the population over age 65. Erie County contains approximately 161,498 people over the age of 65 and 126,041 people below the poverty level (American Community Survey 2019). Economically disadvantaged populations are more vulnerable because they are likely to evaluate their risk and make decisions to evacuate based on net economic impacts on their families. The population over age 65 is also more vulnerable because they are more likely to seek or need medical attention that may not be available due to isolation during a wildfire event, and they may have more difficulty evacuating. Smoke and air pollution from wildfires can be a severe health hazard, especially for sensitive populations, including children, the elderly, and those with respiratory and cardiovascular diseases. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals), gases (carbon monoxide, carbon dioxide, and nitrogen oxides), and toxics (formaldehyde and benzene). Emissions from wildfires depend on the type of fuel, the moisture content of the fuel, the efficiency (or temperature) of combustion, and the weather. Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.13-3. Estimated Population Located in the Wildland-Urban Interface/Intermix Hazard Area in Erie County

Jurisdiction	American Community Survey (2015-2019) Population	Estimated Population Located in the Wildland Urban Interface/Intermix (WUI) Hazard Area					
		Wildland Interface Area		Wildland Intermix Area		WUI (Interface and Intermix)	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Akron (V)	2,871	0	0.0%	233	8.1%	233	8.1%
Alden (T)	7,418	159	2.1%	3,107	41.9%	3,266	44.0%
Alden (V)	2,577	523	20.3%	1,015	39.4%	1,537	59.6%
Amherst (T)	120,276	5,511	4.6%	8,273	6.9%	13,784	11.5%
Angola (V)	2,373	0	0.0%	405	17.1%	405	17.1%
Aurora (T)	7,599	1,717	22.6%	5,166	68.0%	6,883	90.6%
Blasdell (V)	2,645	0	0.0%	0	0.0%	0	0.0%
Boston (T)	8,042	3,816	47.5%	3,753	46.7%	7,569	94.1%
Brant (T)	1,541	620	40.2%	416	27.0%	1,036	67.2%
Buffalo (C)	256,480	0	0.0%	73	<0.1%	73	<0.1%
Cheektowaga (T)	73,129	0	0.0%	693	0.9%	693	0.9%
Clarence (T)	32,440	283	0.9%	7,493	23.1%	7,776	24.0%
Colden (T)	3,328	216	6.5%	2,845	85.5%	3,061	92.0%
Collins (T)	5,418	1,163	21.5%	1,353	25.0%	2,516	46.4%
Concord (T)	4,186	1,113	26.6%	1,937	46.3%	3,050	72.9%
Depew (V)	15,102	0	0.0%	241	1.6%	241	1.6%
East Aurora (V)	6,184	2,868	46.4%	662	10.7%	3,530	57.1%
Eden (T)	7,631	724	9.5%	2,597	34.0%	3,322	43.5%
Elma (T)	11,732	69	0.6%	5,776	49.2%	5,844	49.8%
Evans (T)	13,782	2,034	14.8%	6,670	48.4%	8,704	63.2%
Farnham (V)	459	220	47.9%	163	35.5%	383	83.4%
Gowanda (V)	1,043	848	81.2%	177	17.0%	1,025	98.2%
Grand Island (T)	21,047	11,804	56.1%	8,893	42.3%	20,697	98.3%
Hamburg (T)	45,985	3,933	8.6%	10,319	22.4%	14,252	31.0%
Hamburg (V)	9,636	0	0.0%	534	5.5%	534	5.5%
Holland (T)	3,355	546	16.3%	2,423	72.2%	2,970	88.5%
Kenmore (V)	15,132	0	0.0%	0	0.0%	0	0.0%
Lackawanna (C)	17,831	0	0.0%	208	1.2%	208	1.2%
Lancaster (T)	27,625	0	0.0%	3,238	11.7%	3,238	11.7%
Lancaster (V)	10,144	0	0.0%	103	1.0%	103	1.0%
Marilla (T)	5,378	22	0.4%	1,209	22.5%	1,231	22.9%
Newstead (T)	5,804	539	9.3%	1,164	20.1%	1,703	29.3%
North Collins (T)	2,130	628	29.5%	672	31.6%	1,300	61.0%
North Collins (V)	1,370	1,207	88.1%	163	11.9%	1,370	100.0%

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	American Community Survey (2015-2019) Population	Estimated Population Located in the Wildland Urban Interface/Intermix (WUI) Hazard Area					
		Wildland Interface Area		Wildland Intermix Area		WUI (Interface and Intermix)	
		Number of People	Percent of Total	Number of People	Percent of Total	Number of People	Percent of Total
Orchard Park (T)	26,361	9,008	34.2%	9,087	34.5%	18,094	68.6%
Orchard Park (V)	3,148	1,806	57.4%	1,337	42.5%	3,142	99.8%
Sardinia (T)	2,780	658	23.7%	1,000	36.0%	1,659	59.7%
Sloan (V)	3,562	0	0.0%	0	0.0%	0	0.0%
Springville (V)	4,298	2,958	68.8%	177	4.1%	3,135	72.9%
Tonawanda (C)	14,830	197	1.3%	0	0.0%	197	1.3%
Tonawanda (T)	57,027	0	0.0%	94	0.2%	94	0.2%
Wales (T)	3,020	981	32.5%	1,719	56.9%	2,700	89.4%
West Seneca (T)	45,344	0	0.0%	2,586	5.7%	2,586	5.7%
Williamsville (V)	5,233	0	0.0%	0	0.0%	0	0.0%
Erie County Total	**917,296**	**56,168**	**6.1%**	**97,973**	**10.7%**	**154,141**	**16.8%**

Source: American Community Survey – 2015-2019; University of Wisconsin - 2010
Notes: T = Town, V = Village, C = City, % = Percent; WUI = Wildland-Urban Interface/Intermix Hazard Area

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Impact on General Building Stock

The most vulnerable structures to wildfire events are those within the WUI Interface/Intermix hazard area. Buildings constructed of wood or vinyl siding are generally more likely to be impacted by the fire hazard than buildings constructed of brick or concrete. To estimate the buildings exposed to the wildfire hazard, the wildland-urban interface/intermix hazard areas were overlaid upon the updated building inventory at the structure level. The replacement cost value of the structures with their center in the wildland-urban interface and intermix hazard areas were totaled (refer to Table 5.4.13-4 and Table 5.4.13-5). Overall, 70,429 buildings, with a replacement cost value of $36.7 billion, are located in the wildfire hazard in Erie County.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.13-4. Building Stock Replacement Cost Value and Building Count Located in the Wildland-Urban Interface/Intermix Hazard Area in Erie County

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Located in the Wildfire Hazard Areas (WUI - Interface)				Estimated Building Stock Located in the Wildfire Hazard Areas (WUI - Intermix)			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total	Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	0	0.0%	$0	0.0%	99	7.8%	$62,661,306	7.2%
Alden (T)	3,400	$1,748,473,245	78	2.3%	$35,136,578	2.0%	1,370	40.3%	$559,194,754	32.0%
Alden (V)	1,102	$602,655,574	215	19.5%	$117,264,206	19.5%	428	38.8%	$259,004,326	43.0%
Amherst (T)	38,528	$27,372,255,690	1,702	4.4%	$848,825,368	3.1%	2,609	6.8%	$1,426,508,013	5.2%
Angola (V)	874	$525,704,230	0	0.0%	$0	0.0%	155	17.7%	$127,186,709	24.2%
Aurora (T)	4,280	$2,496,885,036	993	23.2%	$550,783,513	22.1%	2,817	65.8%	$1,512,890,557	60.6%
Blasdell (V)	1,026	$638,571,953	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Boston (T)	4,040	$1,702,475,276	1,936	47.9%	$825,789,177	48.5%	1,850	45.8%	$765,706,605	45.0%
Brant (T)	1,325	$657,594,060	534	40.3%	$280,822,035	42.7%	328	24.8%	$123,105,778	18.7%
Buffalo (C)	83,471	$58,603,851,634	0	0.0%	$0	0.0%	22	<0.1%	$6,550,279	<0.1%
Cheektowaga (T)	30,938	$17,530,893,277	0	0.0%	$0	0.0%	294	1.0%	$128,337,188	0.7%
Clarence (T)	13,660	$9,866,246,863	132	1.0%	$105,650,288	1.1%	3,167	23.2%	$2,091,318,969	21.2%
Colden (T)	2,110	$854,417,381	142	6.7%	$65,196,854	7.6%	1,778	84.3%	$699,996,520	81.9%
Collins (T)	2,521	$1,189,158,504	521	20.7%	$225,037,025	18.9%	609	24.2%	$242,185,281	20.4%
Concord (T)	3,245	$1,338,570,261	892	27.5%	$408,617,384	30.5%	1,412	43.5%	$520,178,482	38.9%
Depew (V)	6,532	$3,841,823,815	0	0.0%	$0	0.0%	98	1.5%	$29,596,329	0.8%
East Aurora (V)	2,441	$1,723,816,550	1,126	46.1%	$702,565,566	40.8%	239	9.8%	$144,097,549	8.4%
Eden (T)	4,290	$2,180,455,513	410	9.6%	$199,736,872	9.2%	1,383	32.2%	$619,095,236	28.4%
Elma (T)	6,093	$3,775,039,302	33	0.5%	$12,064,676	0.3%	2,964	48.6%	$1,674,276,455	44.4%
Evans (T)	7,952	$3,335,060,692	1,127	14.2%	$389,238,835	11.7%	3,822	48.1%	$1,891,053,709	56.7%
Farnham (V)	189	$87,990,422	89	47.1%	$37,702,302	42.8%	67	35.4%	$33,635,679	38.2%
Gowanda (V)	396	$249,516,940	319	80.6%	$205,534,209	82.4%	63	15.9%	$28,689,326	11.5%
Grand Island (T)	8,426	$4,674,517,058	4,726	56.1%	$2,401,986,736	51.4%	3,544	42.1%	$2,062,885,229	44.1%
Hamburg (T)	19,130	$11,911,210,828	1,574	8.2%	$687,898,162	5.8%	4,217	22.0%	$2,038,752,914	17.1%
Hamburg (V)	3,794	$2,005,172,252	0	0.0%	$0	0.0%	204	5.4%	$82,852,357	4.1%
Holland (T)	2,182	$1,151,194,342	386	17.7%	$237,398,995	20.6%	1,474	67.6%	$691,814,705	60.1%
Kenmore (V)	6,017	$2,305,529,001	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Lackawanna (C)	6,751	$4,030,622,400	0	0.0%	$0	0.0%	75	1.1%	$23,144,130	0.6%
Lancaster (T)	10,973	$6,845,493,469	0	0.0%	$0	0.0%	1,285	11.7%	$712,201,897	10.4%
Lancaster (V)	4,323	$2,217,331,122	0	0.0%	$0	0.0%	41	0.9%	$17,912,969	0.8%
Marilla (T)	2,956	$1,099,846,031	17	0.6%	$6,882,962	0.6%	647	21.9%	$245,663,392	22.3%
Newstead (T)	4,202	$2,181,758,974	322	7.7%	$128,207,461	5.9%	774	18.4%	$308,808,837	14.2%
North Collins (T)	1,898	$889,517,676	544	28.7%	$266,355,881	29.9%	525	27.7%	$222,673,805	25.0%
North Collins (V)	551	$383,968,909	478	86.8%	$307,172,899	80.0%	71	12.9%	$72,316,127	18.8%
Orchard Park (T)	10,748	$8,174,650,530	3,523	32.8%	$2,353,271,937	28.8%	3,622	33.7%	$2,394,810,199	29.3%
Orchard Park (V)	1,211	$867,347,745	726	60.0%	$576,497,352	66.5%	467	38.6%	$247,163,396	28.5%
Sardinia (T)	2,184	$1,068,523,829	506	23.2%	$225,921,911	21.1%	689	31.5%	$224,367,563	21.0%

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Located in the Wildfire Hazard Areas (WUI - Interface)				Estimated Building Stock Located in the Wildfire Hazard Areas (WUI - Intermix)			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total	Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Sloan (V)	1,674	$634,998,253	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Springville (V)	1,816	$1,354,905,864	1,279	70.4%	$903,610,051	66.7%	69	3.8%	$23,497,757	1.7%
Tonawanda (C)	6,452	$3,291,492,557	80	1.2%	$31,259,075	0.9%	0	0.0%	$0	0.0%
Tonawanda (T)	23,999	$14,694,684,404	0	0.0%	$0	0.0%	40	0.2%	$33,237,385	0.2%
Wales (T)	1,923	$833,853,270	649	33.7%	$311,489,082	37.4%	1,043	54.2%	$410,076,310	49.2%
West Seneca (T)	17,970	$9,583,482,689	0	0.0%	$0	0.0%	1,009	5.6%	$532,400,930	5.6%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%	0	0.0%	$0	0.0%
Erie County Total	**360,925**	**$222,515,035,436**	**25,059**	**6.9%**	**$13,447,917,391**	**6.0%**	**45,370**	**12.6%**	**$23,289,848,951**	**10.5%**

Source: Erie County GIS - 2020; University of Wisconsin - 2010
Notes: T = Town, V = Village, C = City, % = Percent, < = Less Than, WUI = Wildland-Urban Interface/Intermix, RCV = Replacement Cost Value

Table 5.4.13-5. Total Building Stock Replacement Cost Value and Building Count Located in the Wildland-Urban Interface/Intermix Hazard Area in Erie County

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Located in the Wildfire Hazard Area (WUI - Interface/Intermix)			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Akron (V)	1,275	$866,609,574	99	7.8%	$62,661,306	7.2%
Alden (T)	3,400	$1,748,473,245	1,448	42.6%	$594,331,332	34.0%
Alden (V)	1,102	$602,655,574	643	58.3%	$376,268,532	62.4%
Amherst (T)	38,528	$27,372,255,690	4,311	11.2%	$2,275,333,381	8.3%
Angola (V)	874	$525,704,230	155	17.7%	$127,186,709	24.2%
Aurora (T)	4,280	$2,496,885,036	3,810	89.0%	$2,063,674,070	82.6%
Blasdell (V)	1,026	$638,571,953	0	0.0%	$0	0.0%
Boston (T)	4,040	$1,702,475,276	3,786	93.7%	$1,591,495,781	93.5%
Brant (T)	1,325	$657,594,060	862	65.1%	$403,927,813	61.4%
Buffalo (C)	83,471	$58,603,851,634	22	<0.1%	$6,550,279	<0.1%
Cheektowaga (T)	30,938	$17,530,893,277	294	1.0%	$128,337,188	0.7%
Clarence (T)	13,660	$9,866,246,863	3,299	24.2%	$2,196,969,257	22.3%
Colden (T)	2,110	$854,417,381	1,920	91.0%	$765,193,374	89.6%
Collins (T)	2,521	$1,189,158,504	1,130	44.8%	$467,222,306	39.3%
Concord (T)	3,245	$1,338,570,261	2,304	71.0%	$928,795,866	69.4%
Depew (V)	6,532	$3,841,823,815	98	1.5%	$29,596,329	0.8%
East Aurora (V)	2,441	$1,723,816,550	1,365	55.9%	$846,663,116	49.1%
Eden (T)	4,290	$2,180,455,513	1,793	41.8%	$818,832,108	37.6%
Elma (T)	6,093	$3,775,039,302	2,997	49.2%	$1,686,341,131	44.7%
Evans (T)	7,952	$3,335,060,692	4,949	62.2%	$2,280,292,544	68.4%
Farnham (V)	189	$87,990,422	156	82.5%	$71,337,980	81.1%
Gowanda (V)	396	$249,516,940	382	96.5%	$234,223,535	93.9%
Grand Island (T)	8,426	$4,674,517,058	8,270	98.1%	$4,464,871,965	95.5%
Hamburg (T)	19,130	$11,911,210,828	5,791	30.3%	$2,726,651,076	22.9%

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Number of Buildings	Total Replacement Cost Value (RCV)	Estimated Building Stock Located in the Wildfire Hazard Area (WUI - Interface/Intermix)			
			Number of Buildings	Percent of Total	Replacement Cost Value (RCV)	Percent of Total
Hamburg (V)	3,794	$2,005,172,252	204	5.4%	$82,852,357	4.1%
Holland (T)	2,182	$1,151,194,342	1,860	85.2%	$929,213,700	80.7%
Kenmore (V)	6,017	$2,305,529,001	0	0.0%	$0	0.0%
Lackawanna (C)	6,751	$4,030,622,400	75	1.1%	$23,144,130	0.6%
Lancaster (T)	10,973	$6,845,493,469	1,285	11.7%	$712,201,897	10.4%
Lancaster (V)	4,323	$2,217,331,122	41	0.9%	$17,912,969	0.8%
Marilla (T)	2,956	$1,099,846,031	664	22.5%	$252,546,354	23.0%
Newstead (T)	4,202	$2,181,758,974	1,096	26.1%	$437,016,298	20.0%
North Collins (T)	1,898	$889,517,676	1,069	56.3%	$489,029,687	55.0%
North Collins (V)	551	$383,968,909	549	99.6%	$379,489,025	98.8%
Orchard Park (T)	10,748	$8,174,650,530	7,145	66.5%	$4,748,082,136	58.1%
Orchard Park (V)	1,211	$867,347,745	1,193	98.5%	$823,660,748	95.0%
Sardinia (T)	2,184	$1,068,523,829	1,195	54.7%	$450,289,474	42.1%
Sloan (V)	1,674	$634,998,253	0	0.0%	$0	0.0%
Springville (V)	1,816	$1,354,905,864	1,348	74.2%	$927,107,807	68.4%
Tonawanda (C)	6,452	$3,291,492,557	80	1.2%	$31,259,075	0.9%
Tonawanda (T)	23,999	$14,694,684,404	40	0.2%	$33,237,385	0.2%
Wales (T)	1,923	$833,853,270	1,692	88.0%	$721,565,392	86.5%
West Seneca (T)	17,970	$9,583,482,689	1,009	5.6%	$532,400,930	5.6%
Williamsville (V)	2,057	$1,126,868,443	0	0.0%	$0	0.0%
Erie County Total	**360,925**	**$222,515,035,436**	**70,429**	**19.5%**	**$36,737,766,342**	**16.5%**

Source: Erie County GIS - 2020; University of Wisconsin - 2010
Notes: T = Town, V = Village, C = City, % = Percent, < = Less Than, WUI = Wildland-Urban Interface/Intermix, RCV = Replacement Cost Value

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Impact on Critical Facilities and Lifelines

It is recognized that a number of critical facilities and lifelines are located in the wildfire hazard area and are also vulnerable to the threat of wildfire. The majority of the critical facilities located in the wildland-urban interface/intermix hazard areas are government facilities, and potable water and wastewater facilities. Table 5.4.13-6 and Table 5.4.13-7 summarize the number of critical facilities and lifelines within the WUI Intermix and Interface hazard areas by jurisdiction. Overall, 378 critical facilities (360 of which are considered lifelines) are located in the wildland-urban interface hazard area and 719 critical facilities (627 of which are considered lifelines) are located in the wildland-urban intermix hazard area. The Town of Wales has the greatest number of critical facilities built in the wildland-urban interface (i.e., 32 critical facilities) and the Town of Aurora has the greatest number of critical facilities built in the wildland-urban intermix hazard areas (i.e., 68 critical facilities). Critical facilities are further broken out by type within the WUI Interface and Intermix hazard areas, as summarized in Table 5.4.13-8 and Table 5.4.13-9. Lifeline types located in the wildfire hazard areas are identified in Table 5.4.13-10.

Table 5.4.13-6. Critical Facilities and Lifelines in the Wildland-Urban Interface Hazard Area in Erie County

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Wildland-Urban Interface Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	29	0	0.0%	0	0.0%
Alden (T)	76	76	3	3.9%	1	1.3%
Alden (V)	19	18	1	5.3%	1	5.6%
Amherst (T)	391	390	6	1.5%	6	1.5%
Angola (V)	20	19	0	0.0%	0	0.0%
Aurora (T)	95	95	16	16.8%	16	16.8%
Blasdell (V)	22	22	0	0.0%	0	0.0%
Boston (T)	81	80	28	34.6%	27	33.8%
Brant (T)	39	39	20	51.3%	20	51.3%
Buffalo (C)	751	750	0	0.0%	0	0.0%
Cheektowaga (T)	224	223	0	0.0%	0	0.0%
Clarence (T)	121	120	7	5.8%	7	5.8%
Colden (T)	67	67	9	13.4%	9	13.4%
Collins (T)	71	70	11	15.5%	11	15.7%
Concord (T)	84	84	31	36.9%	28	33.3%
Depew (V)	63	63	0	0.0%	0	0.0%
East Aurora (V)	42	41	17	40.5%	17	41.5%
Eden (T)	78	77	9	11.5%	9	11.7%
Elma (T)	83	82	0	0.0%	0	0.0%
Evans (T)	112	112	7	6.3%	6	5.4%
Farnham (V)	10	10	2	20.0%	2	20.0%
Gowanda (V)	7	7	6	85.7%	6	85.7%
Grand Island (T)	69	68	19	27.5%	18	26.5%
Hamburg (T)	189	189	13	6.9%	13	6.9%
Hamburg (V)	27	26	0	0.0%	0	0.0%
Holland (T)	90	90	16	17.8%	16	17.8%
Kenmore (V)	14	13	0	0.0%	0	0.0%
Lackawanna (C)	94	93	0	0.0%	0	0.0%
Lancaster (T)	109	109	0	0.0%	0	0.0%
Lancaster (V)	58	57	0	0.0%	0	0.0%
Marilla (T)	48	47	0	0.0%	0	0.0%
Newstead (T)	64	64	8	12.5%	8	12.5%
North Collins (T)	69	69	22	31.9%	22	31.9%
North Collins (V)	14	13	14	100.0%	13	100.0%
Orchard Park (T)	141	141	27	19.1%	25	17.7%

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Wildland-Urban Interface Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Orchard Park (V)	21	20	13	61.9%	13	65.0%
Sardinia (T)	78	78	14	17.9%	11	14.1%
Sloan (V)	8	8	0	0.0%	0	0.0%
Springville (V)	35	34	26	74.3%	23	67.6%
Tonawanda (C)	61	60	1	1.6%	1	1.7%
Tonawanda (T)	266	266	0	0.0%	0	0.0%
Wales (T)	82	82	32	39.0%	31	37.8%
West Seneca (T)	145	144	0	0.0%	0	0.0%
Williamsville (V)	16	16	0	0.0%	0	0.0%
Erie County Total	**4,184**	**4,161**	**378**	**9.0%**	**360**	**8.7%**

Source: Erie County GIS 2020; University of Wisconsin, 2010
Notes: T = Town, V = Village, C = City, % = Percent

Table 5.4.13-7. Critical Facilities and Lifelines in the Wildland-Urban Intermix Hazard Area in Erie County

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Wildland-Urban Intermix Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Akron (V)	30	26	1	3.3%	1	3.8%
Alden (T)	76	68	29	38.2%	25	36.8%
Alden (V)	19	17	9	47.4%	8	47.1%
Amherst (T)	391	387	15	3.8%	15	3.9%
Angola (V)	20	18	8	40.0%	8	44.4%
Aurora (T)	95	81	68	71.6%	56	69.1%
Blasdell (V)	22	22	0	0.0%	0	0.0%
Boston (T)	81	75	45	55.6%	40	53.3%
Brant (T)	39	39	8	20.5%	8	20.5%
Buffalo (C)	751	748	0	0.0%	0	0.0%
Cheektowaga (T)	224	221	2	0.9%	2	0.9%
Clarence (T)	121	115	32	26.4%	31	27.0%
Colden (T)	67	56	52	77.6%	44	78.6%
Collins (T)	71	55	12	16.9%	8	14.5%
Concord (T)	84	68	24	28.6%	19	27.9%
Depew (V)	63	63	0	0.0%	0	0.0%
East Aurora (V)	42	41	3	7.1%	3	7.3%
Eden (T)	78	72	25	32.1%	22	30.6%
Elma (T)	83	75	33	39.8%	31	41.3%
Evans (T)	112	109	52	46.4%	52	47.7%
Farnham (V)	10	10	2	20.0%	2	20.0%
Gowanda (V)	7	7	0	0.0%	0	0.0%
Grand Island (T)	69	66	27	39.1%	27	40.9%
Hamburg (T)	189	181	24	12.7%	20	11.0%
Hamburg (V)	27	23	3	11.1%	1	4.3%
Holland (T)	90	70	55	61.1%	44	62.9%
Kenmore (V)	14	13	0	0.0%	0	0.0%
Lackawanna (C)	94	93	2	2.1%	2	2.2%
Lancaster (T)	109	103	21	19.3%	18	17.5%
Lancaster (V)	58	53	0	0.0%	0	0.0%
Marilla (T)	48	37	14	29.2%	13	35.1%
Newstead (T)	64	61	12	18.8%	12	19.7%
North Collins (T)	69	56	19	27.5%	16	28.6%
North Collins (V)	14	13	0	0.0%	0	0.0%
Orchard Park (T)	141	129	43	30.5%	35	27.1%
Orchard Park (V)	21	18	3	14.3%	3	16.7%

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Jurisdiction	Total Critical Facilities Located in Jurisdiction	Total Lifelines Located in Jurisdiction	Number of Critical Facilities and Lifeline Facilities Located in the Wildland-Urban Intermix Hazard Area			
			Critical Facilities	Percent of Total Critical Facilities	Lifelines	Percent of Total Lifelines
Sardinia (T)	78	57	26	33.3%	21	36.8%
Sloan (V)	8	8	0	0.0%	0	0.0%
Springville (V)	35	32	1	2.9%	1	3.1%
Tonawanda (C)	61	60	0	0.0%	0	0.0%
Tonawanda (T)	266	265	0	0.0%	0	0.0%
Wales (T)	82	68	39	47.6%	29	42.6%
West Seneca (T)	145	140	10	6.9%	10	7.1%
Williamsville (V)	16	14	0	0.0%	0	0.0%
Erie County Total	**4,184**	**3,933**	**719**	**17.2%**	**627**	**15.9%**

Source: Erie County GIS 2020; University of Wisconsin, 2010
Notes: T = Town, V = Village, C = City, % = Percent
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 5.4.13-8. Critical Facilities by Type in the Wildland-Urban Interface Hazard Area in Erie County

Jurisdiction	Critical Facilities Located in the Wildland-Urban Interface Areas																											
	Airport	Airport Runway	Aquifer	Bridge	Communications Tower	Communications	Community Center	Dam	Electric Power Station	EMS Facility	Fire Station	Hazardous Materials	Highway Garage	Library	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Tank	Potable Water Well	Primary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alden (T)	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Alden (V)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amherst (T)	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Angola (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	0	4	1	0	0	0	0	0	0	0	1	0	0	0	1	2	1	2	2	0	0	0	0	2	0	0
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston (T)	0	0	0	10	0	1	0	1	0	0	4	1	0	0	1	0	2	0	1	4	0	1	1	1	0	0	0	0
Brant (T)	0	0	1	4	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	10	0	1	0	0	0	0	0	0
Buffalo (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheektowaga (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clarence (T)	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Colden (T)	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	0	1	1	1	0	0	0	0
Collins (T)	0	0	0	6	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0
Concord (T)	0	0	0	12	0	0	0	3	0	0	1	0	2	0	0	0	0	1	0	12	0	0	0	0	0	0	0	0
Depew (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Aurora (V)	0	0	0	2	0	1	0	1	0	0	0	2	1	0	0	0	0	0	0	0	5	0	0	0	1	4	0	0
Eden (T)	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	0
Elma (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evans (T)	0	0	0	3	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Farnham (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Gowanda (V)	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Grand Island (T)	0	0	0	3	0	1	0	0	0	0	1	6	1	1	0	0	0	1	0	1	1	0	1	0	2	0	0	0
Hamburg (T)	1	1	0	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2	0	0	0	0	5	0	0
Hamburg (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holland (T)	0	0	0	3	0	1	1	0	0	0	1	2	0	0	0	0	0	3	0	1	0	0	2	1	0	1	0	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Jurisdiction	Critical Facilities Located in the Wildland-Urban Interface Areas																										
	Airport	Airport Runway	Aquifer	Bridge	Communications Tower	Communications	Community Center	Dam	Electric Power Station	EMS Facility	Fire Station	Hazardous Materials	Highway Garage	Library	Oil Facility	Police Station	Post Office	Potable Water Facility	Potable Water Tank	Potable Water Well	Primary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station	Well
Marilla (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newstead (T)	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
North Collins (T)	0	0	0	1	0	0	0	1	0	0	1	1	0	0	2	0	1	0	0	15	0	0	0	0	0	0	0
North Collins (V)	0	0	0	1	0	1	0	0	0	1	1	2	0	1	0	1	1	0	0	0	2	0	1	2	0	0	0
Orchard Park (T)	0	0	0	12	0	1	0	2	0	0	0	2	1	0	0	0	0	1	0	3	3	0	1	0	0	1	0
Orchard Park (V)	0	0	0	1	0	0	1	0	0	0	2	0	0	0	0	1	1	0	0	0	3	1	1	2	0	0	0
Sardinia (T)	0	0	0	0	1	0	0	3	3	0	1	1	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	0	0	0	1	1	2	0	0	2	3	2	1	0	1	1	1	0	0	1	1	3	2	0	0	4
Tonawanda (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Tonawanda (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wales (T)	0	0	0	4	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	20	1	0	2	1	0	0	0
West Seneca (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**1**	**1**	**1**	**87**	**2**	**7**	**4**	**17**	**3**	**2**	**21**	**23**	**10**	**3**	**3**	**4**	**14**	**12**	**2**	**82**	**23**	**5**	**14**	**12**	**3**	**18**	**4**

Source: Erie County GIS - 2020; University of Wisconsin - 2010
Notes: T = Town, V = Village, C = City
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*
**Please note that only critical facilities exposed to the wildfire hazard area are represented in this table. Critical facility types that are found within each municipality but are not exposed to the wildfire hazard area may not be listed in the table.*

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.13-9. Critical Facilities by Type in the Wildland-Urban Intermix Hazard Area in Erie County

Jurisdiction	Critical Facilities Located in the Wildland-Urban Intermix Areas																								
	Airport Runway	Aquifer	Bridge	Communication Tower	Communications	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Materials	Highway Garage	Library	Natural Gas Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Akron (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Alden (T)	0	0	8	0	0	0	4	0	1	0	1	0	0	0	0	0	0	0	13	0	0	0	2	0	0	0
Alden (V)	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	1	0	0	0
Amherst (T)	0	0	9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1	1	0	1	0	0	0
Angola (V)	0	0	3	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aurora (T)	0	0	14	0	0	0	12	0	1	1	1	0	0	0	1	3	0	0	27	3	0	0	0	0	0	5
Blasdell (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston (T)	0	0	5	0	0	0	4	0	1	0	0	1	0	0	0	4	0	0	28	1	0	0	1	0	0	0
Brant (T)	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
Buffalo (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheektowaga (T)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Clarence (T)	2	0	8	0	1	0	1	0	1	2	0	0	1	0	1	1	0	0	6	3	0	0	3	0	1	1
Colden (T)	0	0	8	0	0	0	9	0	0	0	1	0	1	0	1	0	0	0	31	1	0	0	0	0	0	0
Collins (T)	0	0	1	1	0	0	5	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
Concord (T)	0	0	6	0	0	0	5	0	0	0	0	0	0	0	1	1	0	0	11	0	0	0	0	0	0	0
Depew (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Aurora (V)	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Eden (T)	0	0	7	0	0	0	3	0	0	1	0	0	0	0	0	3	0	0	9	0	0	0	2	0	0	0
Elma (T)	0	0	16	0	0	1	2	1	1	2	1	0	0	0	1	0	4	2	0	0	0	0	2	0	0	0
Evans (T)	0	0	13	1	1	0	0	1	4	2	1	0	0	1	2	10	0	0	4	2	0	2	2	0	1	5
Farnham (V)	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gowanda (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Island (T)	0	0	4	0	0	0	1	2	2	6	0	0	0	0	1	1	0	0	2	5	0	2	1	0	0	0
Hamburg (T)	0	0	7	0	0	0	4	0	1	0	1	0	0	0	1	2	0	0	1	1	0	0	0	0	0	6
Hamburg (V)	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Holland (T)	0	1	8	0	0	0	11	0	1	0	1	0	0	0	1	0	0	0	23	5	0	0	3	0	1	0
Kenmore (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lackawanna (C)	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancaster (T)	0	0	5	0	0	0	3	1	1	3	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4

Jurisdiction	Critical Facilities Located in the Wildland-Urban Intermix Areas																								
	Airport Runway	Aquifer	Bridge	Communication Tower	Communications	Community Center	Dam	Electric Power Station	Fire Station	Hazardous Materials	Highway Garage	Library	Natural Gas Facility	Police Station	Post Office	Potable Water Facility	Potable Water Pumping Station	Potable Water Tank	Potable Water Well	Primary Education	Secondary Education	Senior Center	Shelter	Town Hall	Wastewater Facility	Wastewater Pump Station
Lancaster (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marilla (T)	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0
Newstead (T)	0	1	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0
North Collins (T)	0	0	6	0	0	0	3	0	1	0	0	0	0	0	0	1	0	0	5	2	0	0	1	0	0	0
North Collins (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orchard Park (T)	0	0	14	0	0	1	8	2	1	3	0	0	1	0	0	0	0	5	1	4	0	0	0	0	0	3
Orchard Park (V)	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Sardinia (T)	0	0	4	1	1	0	5	0	0	1	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0
Sloan (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Springville (V)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonawanda (T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wales (T)	0	0	7	0	0	0	10	0	1	0	0	0	0	0	1	0	0	0	20	0	0	0	0	0	0	0
West Seneca (T)	0	0	3	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Williamsville (V)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erie County Total	**2**	**3**	**176**	**3**	**4**	**3**	**95**	**10**	**22**	**24**	**10**	**1**	**3**	**1**	**12**	**28**	**4**	**7**	**215**	**31**	**1**	**7**	**22**	**1**	**3**	**31**

Source: Erie County GIS - 2020; University of Wisconsin - 2010
Notes: T = Town, V = Village, C = City
** Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update.*
**Please note that only critical facilities exposed to the wildfire hazard area are represented in this table. Critical facility types that are found within each municipality but are not exposed to the wildfire hazard area may not be listed in the table.*

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 5.4.13-10. Lifelines Located in the Wildfire Hazard Areas

FEMA Lifeline Category	Total Number of Lifelines	Estimated Lifeline Located in the Wildfire Hazard Areas		
		Wildland-Urban Interface Area	Wildland-Urban Intermix Area	WUI (Interface and Intermix)
		Number of Lifelines	Number of Lifelines	Number of Lifelines
Communications	59	9	7	16
Energy	176	7	14	19
Food, Water, and Shelter	951	137	314	561
Hazardous Materials	398	23	24	47
Health and Medical	144	11	10	21
Safety and Security	1,047	84	80	162
Transportation	1,158	89	178	267
Erie County Total	**3,933**	**360**	**627**	**1,093**

Source: Erie County GIS - 2020; FEMA – 2020; University of Wisconsin – 2010
* Note: Cattaraugus Tribal Territory and Tonawanda Tribal Territory were not included in the above totals, as the two tribes did not participate in this HMP update

Impact on Economy

Wildfire events can have major economic impacts on a community from the initial loss of structures and the subsequent loss of revenue from destroyed businesses and decreases in tourism. Wildfires can cost thousands of taxpayer dollars to suppress and control and can involve hundreds of operating hours on fire apparatus and thousands of volunteer man hours from the volunteer firefighters. There are also many direct and indirect costs to local businesses that provide employees with time off to volunteer to fight these fires.

Impact on the Environment

According to the USGS, post-fire runoff polluted with debris and contaminants can be extremely harmful to ecosystem and aquatic life (USGS 2018). Studies show that urban fires in particular are more harmful to the environment compared to forest fires (USGS 2018). The age and density of infrastructure within Erie County can exacerbate consequences of fires on the environment because of the increased amount of chemicals and contaminants that would be released from burning infrastructure. These chemicals, such as iron lead, and zinc, may leach into the storm water, contaminate nearby streams, and impair aquatic life.

Cascading Impacts on Other Hazards

Wildfires result in the uncontrolled destruction of forests, brush, field crops, grasslands, real estate, and personal property, and have secondary impacts on other hazards such as flooding, by removing vegetation and destroying watersheds. Additionally, wildfires can increase because of rising temperatures and increased droughts. More information about extreme temperature and flood hazards of concern is provided in Section 5.4.5 and Section 5.4.6, respectively.

Future Changes That May Impact Vulnerability

Understanding future changes that affect vulnerability in the County can assist in planning for future development and ensure establishment of appropriate mitigation, planning, and preparedness measures. Changes in the natural environment and built environment and how they interact can also provide insight about ways to plan for the future.

Projected Development

As discussed in Section 4, areas targeted for future growth and development have been identified across the County. Any areas of growth located in the wildland-urban interface/intermix hazard areas could be at risk.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 5.4.13-3 provides a countywide map of the wildland-urban interface/intermix hazard area and, additionally, the maps in each jurisdictional annex include new development project areas and their proximity to the wildland-urban interface/intermix hazard areas.

Projected Changes in Population

According to the U.S. Census Bureau, the population in Erie County has remained stable between 2010 and 2019 (917,173 persons in 2010 and 917,296 persons in 2019). Estimated population projections provided by the 2017 Cornell Program on Applied Demographics indicates that the County's population will decrease into 2040 to approximately 769,396 persons (Cornell Program on Applied Demographics 2017). The population that remains in the County is vulnerable to wildfires. Refer to Section 4 (County Profile) for additional discussion on population trends.

Climate Change

According to the USDA Forest Service, climate change will likely alter the atmospheric patterns that affect fire weather. Changes in fire patterns will, in turn, impact carbon cycling, forest structure, and species composition (EPA 2020). Climate change associated with warmer temperatures, changes in rainfall, and increased periods of drought may create an atmospheric and fuel environment that is more conductive to large, severe fires (USDA 2013). Under a changing climate, wildfires exceeding 50,000 acres have increased over the past 30 years (USDA 2013). Understanding the climate/fire/vegetation interactions is essential for addressing issues associated with climate change that include:

- Effects on regional circulation and other atmospheric patterns that affect fire weather
- Effects of changing fire regimes on the carbon cycle, forest structure, and species composition, and
- Complications from land use change, invasive species, and an increasing WUI.

As discussed earlier, average temperatures are anticipated to increase in New York; therefore, the suitability of habitats for specific types of trees will potentially change, altering the fire regime and resulting in more frequent fire events and changes in intensity. Prolonged and more frequent heat waves have the potential to increase the likelihood of a wildfire. The increased potential combined with stronger winds may make it harder to contain fires and thus will increase the County's vulnerability to this hazard.

Change of Vulnerability Since the 2015 HMP

For this hazard mitigation plan update, the 2010 Wildland-Urban Interface/Intermix data from the University of Wisconsin was referenced to determine areas within Erie County that are vulnerable to wildfires. Population statistics have been updated using the 5-Year 2015-2019 American Community Survey Population Estimates. The building stock inventory was updated using data from Erie County. Further, the building stock inventory replacement cost values were updated using RS Means 2020 values, providing an overall update to the assets assessed in this risk assessment. Additionally, the critical facility inventory list was updated by Erie County.

Attachment: 23-Section-5.4.13-Wildfire-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SECTION 6. MITIGATION STRATEGIES

This section presents mitigation strategies for Erie County to reduce potential exposure and losses identified as concerns in the Risk Assessment portion of this plan. The Steering Committee reviewed the Risk Assessment to identify and develop these mitigation actions, which are presented herein.

This section includes:

1. Background and Past Mitigation Accomplishments
2. General Planning Approach
3. Review and Update of Mitigation Goals and Objectives
4. Capability Assessment
5. Mitigation Strategy Development

Hazard mitigation reduces the potential impacts of, and costs associated with, emergency and disaster-related events. Mitigation actions address a range of impacts, including impacts on the population, property, the economy, and the environment.

Mitigation actions can include activities such as revisions to land-use planning, training and education, and structural and nonstructural safety measures.

6.1 BACKGROUND AND PAST MITIGATION ACCOMPLISHMENTS

In accordance with the requirements of the Disaster Mitigation Act of 2000 (refer to Section 1 [Introduction] for more detail on DMA 2000), a discussion regarding past mitigation activities and an overview of past efforts is provided as a foundation for understanding the mitigation goals, objectives, and activities outlined in this plan update. The county, through previous and ongoing hazard mitigation activities, has demonstrated that it is proactive in protecting its physical assets and citizens against losses from natural hazards. Examples of previous and ongoing actions and projects include the following:

- The county facilitated the development of the original Erie County Multi-Jurisdictional Hazard Mitigation Plan. The current planning process represents the regulatory five-year plan update process, which includes participation of 46 jurisdictions in the county, along with key county and regional stakeholders.
- All municipalities participating in this HMP update participate in the National Flood Insurance Program (NFIP), which requires the adoption of FEMA floodplain mapping and certain minimum standards for building within the floodplain.
- Reports, plans, and studies relating to or including information on natural hazards or natural hazard policies affecting Erie County have been reviewed and incorporated into this plan update as appropriate, as discussed in Section 3 (Planning Process) and References.

6.2 GENERAL MITIGATION PLANNING APPROACH

The overall approach used to update the county and local hazard mitigation strategies is based on FEMA and New York State (NYS) regulations and guidance regarding local mitigation plan development, including:

- DMA 2000 regulations, specifically 44 CFR 201.6 (local mitigation planning).
- FEMA *Local Mitigation Planning Handbook*, March 2013.
- FEMA *Local Mitigation Plan Review Guide*, October 1, 2011.
- FEMA *Integrating Hazard Mitigation into Local Planning*, March 1, 2013.
- FEMA *Plan Integration: Linking Local Planning Efforts*, July 2015.
- FEMA *Mitigation Planning How-To Guide #3, Identifying Mitigation Actions and Implementing Strategies* (FEMA 386-3), April 2003.
- FEMA *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards*, January 2013.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- NYS DHSES *New York State Hazard Mitigation Planning Standards*, 2017.
- NYS DHSES *New York State Hazard Mitigation Planning Standards Guide*, 2017.

The mitigation strategy update approach includes the following steps that are further detailed in later subsections of this section:

- Section 6.3 - Review and update mitigation goals and objectives.
- Section 6.4 - Identify mitigation capabilities and evaluate their capacity and effectiveness to mitigate and manage hazard risk.
- Section 6.5 - Prepare an implementation strategy, including:
  - Identification of progress on previous county and local mitigation strategies;
  - Development of updated county and local mitigation strategies; and
  - Prioritization projects and initiatives in the updated mitigation strategy.

6.3 REVIEW AND UPDATE OF MITIGATION GOALS AND OBJECTIVES

This section documents the efforts to develop hazard mitigation goals and objectives established to reduce or avoid long-term vulnerabilities to the identified hazards.

6.3.1 Goals and Objectives

FEMA defines ***Goals*** as general guidelines that explain what should be achieved. Goals are usually broad, long-term, policy statements, and represent a global vision.

FEMA defines ***Objectives*** as strategies or implementation steps to attain mitigation goals. Unlike goals, objectives are specific and measurable, where feasible.

FEMA defines ***Mitigation Actions*** as specific actions that help to achieve the mitigation goals and objectives.

According to CFR 201.6(c)(3)(i): "The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards." The mitigation goals were developed based on the risk assessment results, discussions, research, and input from the committee, existing authorities, policies, programs, resources, stakeholders, and the public. The Steering Committee reviewed the 2015 goals and objectives and made revisions for the 2022 update based on the risk assessment results, discussions, research, and input from among the committee, existing authorities, policies, programs, resources, stakeholders, and the public. For the purposes of this plan, goals and objectives are defined as follows:

Goals are general guidelines that explain what is to be achieved. They are usually broad, long-term, policy-type statements and represent global visions. Goals help define the benefits that the plan is trying to achieve. The success of the plan, once implemented, should be measured by the degree to which its goals have been met (that is, by the actual benefits in terms of hazard mitigation).

Objectives are short-term aims that form a strategy or course of action to meet a goal. Unlike goals, objectives are stand-alone measurements of the effectiveness of a mitigation action. The objectives also are used to help establish priorities.

During the 2022 plan update process, the Steering Committee reviewed the goals and objectives established in the 2015 HMP. These goals and objectives were reviewed in consideration of the hazard events and losses since the 2015 plan, the updated hazard profiles and vulnerability assessment, the goals and objectives established in the New York State 2019 HMP, Erie County, and local risk management plans as well as direct input on how the county and municipalities need to move forward to best manage their hazard risk. Amendments include additions/edits to goals and/or objectives to express the Planning Partnership's interests in integrating this plan

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

with other planning mechanisms/programs and to support mitigation through the protection and preservation of natural systems, including particular reference to certain goals and objectives in the NYS 2019 HMP update, as identified in the table below.

As a result of this review process, the goals and objectives for the 2022 update were updated to those presented in Table 6-1.

Table 6-1. Erie County Hazard Mitigation Plan Goals and Objectives

Goals	Objectives
Goal 1: Protect life, property, and critical infrastructure from hazard impacts.	Objective 1.1: Retrofit critical facilities and community assets to protect against hazard impacts.
	Objective 1.2: Work with residents and business owners to make their structures more hazard resistant.
	Objective 1.3: Enhance stormwater management infrastructure.
	Objective 1.4: Ensure that critical facilities can continue to function during and after hazard impacts.
	Objective 1.5: Acquire, retrofit, or relocate structures from hazard-prone areas.
	Objective 1.6: Encourage residents and business owners to insure their property against hazard impacts, including through flood insurance through the National Flood Insurance Program (NFIP).
Goal 2: Reduce the risk of hazards on life, property, and the environment.	Objective 2.1: Develop and/or update local regulations based on current information and best practices to help prevent hazard impacts.
	Objective 2.2: Maintain natural waterways and drainage systems to reduce the impacts of hazards.
Goal 3: Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.	Objective 3.1: Ensure that local officials attend current training on regulatory issues, best practices, and resources available to address hazards.
	Objective 3.2: Educate individuals throughout the County on the hazards they face and what property protection measures they can take to lessen the impact of hazards.

6.4 CAPABILITY ASSESSMENT

According to FEMA's *Mitigation Planning How-To Guide #3*, a capability assessment is an inventory of a community's missions, programs, and policies and an analysis of its capacity to carry them out. This assessment is an integral part of the planning process. The assessment process enables identification, review, and analysis of current local and state programs, policies, regulations, funding, and practices that could either facilitate or hinder mitigation.

During the original planning process, the county and participating jurisdictions identified and assessed their capabilities in the areas of existing programs, policies, and technical documents. By completing this assessment, each jurisdiction learned how or whether they would be able to implement certain mitigation actions by determining the following:

- Limitations that may exist on undertaking actions;
- The range of local and/or state administrative, programmatic, regulatory, financial, and technical resources available to assist in implementing their mitigation actions;
- Actions deemed infeasible as they are currently outside the scope of capabilities;
- Types of mitigation actions that may be technically, legally (regulatory), administratively, politically, or fiscally challenging or infeasible;
- Opportunities to enhance local capabilities to support long-term mitigation and risk reduction.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

During the plan update process, all participating jurisdictions were tasked with developing or updating their capability assessment, paying particular attention to evaluating the effectiveness of these capabilities in supporting hazard mitigation and identifying opportunities to enhance local capabilities.

County and municipal capabilities in the Planning and Regulatory, Administrative and Technical, and Fiscal arenas may be found in the Capability Assessment section of each jurisdictional annex in Section 9 - Annexes. Within each annex, participating jurisdictions identified how they have integrated hazard risk management into their existing planning, regulatory, and operational/administrative framework ("integration capabilities") and how they intend to promote this integration ("integration actions"). A further summary of these continued efforts to develop and promote a comprehensive and holistic approach to hazard risk management and mitigation is presented in Section 7 – Plan Maintenance.

The Erie County Department of Homeland Security and Emergency Services staff provided leadership for the Erie County HMP Update planning effort. In addition, the county staff on the Steering Committee provided continuous support for the implementation of mitigation projects and mitigation educational outreach and serves as a resource to the county and municipalities.

A summary of the various federal, state, county, and local planning and regulatory, administrative and technical, and fiscal programs available to promote and support mitigation and risk reduction in Erie County are presented below.

6.4.1 Planning and Regulatory Capabilities - County and Local

Municipal Land Use Planning and Regulatory Authority

The county and municipalities have various land use planning mechanisms that can be leveraged to mitigate flooding and support natural hazard risk reduction. Specific county and local planning and regulatory capabilities are identified in their jurisdictional annexes in Section 9 – Annexes. These include but are not limited to: comprehensive plans, flood damage prevention ordinances, local codes and regulations, stormwater regulations, and municipal level plans. A list of plans review is provided in Section 3 (Planning Process) and summarized in Appendix I (Plan Review Matrix).

Section 239 of New York State General Municipal Law (GML) requires the referral of certain local planning actions to the Erie County Planning Board for the examination of possible intermunicipal impacts. The Erie County Planning Board operates under New York State General Municipal Law §239 l and m to advise local boards on the potential intermunicipal or countywide impact of local land use decisions. The Planning Board uses the Erie County Comprehensive Plan to direct recommendations on municipal land use referrals and to review proposed county capital improvement projects.

Staff at Erie County's Department of Environment and Planning manage numerous planning programs that improve the quality of life in Erie County. These programs plan for or implement development projects that are consistent with the Framework for Regional Growth, the County's adopted comprehensive plan. These programs include;

- Office of Agriculture
- Arts & Culture
- Capital Improvements Program
- Environmental Review
- Erie County Parks Master Plan
- Erie-Niagara Regional Framework
- Fisheries Advisory Board

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Local Government Training
- Local Planning Assistance
- Land Development & Economic Development Planning Studies
  - Agribusiness Park Feasibility Study
  - Buffalo Niagara Convention Center
  - Business Park Report
- Brownfield & Urban Redevelopment
- Municipal Referrals
  - ZR1 form (referral form)
  - Online Submission - BETA phase
- Waterfront Planning

Emergency and Evacuation Plans

The Erie County Department of Homeland Security and Emergency Services is designated to coordinate all emergency management activities in the county, including planning, response, and management. The department works collaboratively with many other agencies and organizations, which enables the county to better protect life and property during disasters and emergencies. This Department maintains the Erie County Comprehensive Emergency Management Plan (CEMP), which is a comprehensive approach to emergency management. The CEMP is an all-hazards plan that outlines how the county will efficiently and effectively manage emergencies and disaster situations. The CEMP includes an evacuation annex that provides guidance for vehicle movements and evacuations throughout the entire county.

Local Waterfront Revitalization Program

The Waterfront Revitalization of Coastal Areas and Inland Waterways Act offers local governments the opportunity to participate in the State's Coastal Management Program (CMP) on a voluntary basis by preparing and adopting a Local Waterfront Revitalization Program (LWRP), providing more detailed implementation of the State's CMP through use of such existing broad powers as zoning and site plan review (New York State Division of Planning 2018).

When an LWRP is approved by the New York State Secretary of State, State agency actions are required to be consistent with the approved LWRP to the maximum extent practicable. When the federal government concurs with the incorporation of an LWRP into the CMP, federal agency actions must be consistent with the approved addition to the CMP. Title 19 of NYCRR Part 600, 601, 602, and 603 provide the rules and regulations that implement each of the provisions of the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, including but not limited to the required content of an LWRP, the processes of review and approval of an LWRP, and LWRP amendments (New York State Division of Planning 2018).

A LWRP consists of a planning document prepared by a community and the program established to implement the plan. An LWRP may be comprehensive and address all issues that affect a community's entire waterfront, or it may address the most critical issues facing a significant portion of its waterfront. An approved LWRP reflects community consensus and provides a clear direction for appropriate future development. It establishes a long-term partnership among local government, community-based organizations, and the State. Also, funding to advance preparation, refinement, or implementation of Local Waterfront Revitalization Programs is available under Title 11 of the New York State Environmental Protection Fund Local Waterfront Revitalization Program (EPF LWRP), among other sources (New York State Division of Planning 2018).

Any village, town, or city located along the State's coast or designated inland waterway can prepare a new or amend an existing Local Waterfront Revitalization Program. Municipalities are encouraged to address local

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

revitalization issues in a broader context, aligned with regional economic development strategies and regional resource protection and management programs (New York State Division of Planning 2018).

Several communities have adopted Local Waterfront Revitalization Plans, including the Town of Brant, Town of Grand Island, Town of Evans, Town of Hamburg, Town and City of Tonawanda, the City of Buffalo and the City of Lackawanna.

Comprehensive Master Plans

Comprehensive planning is a term used in the United States by land use planners to describe a process that determines community goals and aspirations in terms of community development. The outcome of comprehensive planning is the "Comprehensive Plan" or "Master Plan," which dictates public policy in terms of transportation, utilities, land use, recreation, and housing. Towns are authorized to develop and adopt a comprehensive plan by New York State Town Law Section 272-a.; villages can do the same per Section 7-722 of the Village Law. State statutes require that all land use laws in a municipality be consistent with a comprehensive plan.

6.4.2 Planning and Regulatory Capabilities – State and Federal

National Flood Insurance Program (NFIP)

The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968 (FEMA's 2002 National Flood Insurance Program (NFIP): Program Description). The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Please refer to the Flood Hazard Profile in Section 5.4.6 (Flood) for information on legislation related to reforms to the NFIP.

There are three components to the NFIP: flood insurance, floodplain management and flood hazard mapping. Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities. Community participation in the NFIP is voluntary. Flood insurance is designed to provide an alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Flood damage in the U.S. is reduced by nearly $1 billion each year through communities implementing sound floodplain management requirements and property owners purchasing flood insurance. Additionally, buildings constructed in compliance with NFIP building standards suffer approximately 80% less damage annually than those not built in compliance (FEMA, 2008).

All municipalities in Erie County actively participate in the NFIP. As of 2020, there were 1,923 NFIP policies in Erie County. There have been 1,597 claims made, totaling over $10 million for damages to structures and contents. There are 400 NFIP Repetitive Loss (RL) properties in the county. Information on specific locations of Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties was not made available from FEMA for this plan update, so the county is unable to provide a breakdown of the RL properties by occupancy. Further details on the county's flood vulnerability may be found in the flood hazard profile in Section 5.4.6 - Flood.

Municipal compliance with the NFIP is described in each of the jurisdictional annex in Section 9 (Jurisdictional Annexes). The county's municipalities have been compliant with the NFIP. To enhance their flood damage prevention programs and enhance compliance with the NFIP in the future, several municipalities propose actions in their mitigation strategies to ensure that their floodplain administrators complete training on floodplain management and the NFIP. In addition, Erie County's mitigation strategy (see Section 9.1) includes an action

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

to encourage and empower municipalities to participate in FEMA's Community Rating System. Additional information on the NFIP program and its implementation throughout the county may be found in the flood hazard profile (Section 5.4.6 - Flood).

The state and municipalities within it may adopt higher regulatory standards when implementing the provisions of the NFIP. Specifically identified are the following:

Freeboard: By law, NYS requires Base Flood Elevation plus 2 feet (BFE+2) for all construction. When there is a base flood elevation available, the lowest floor, including any basement, must be at or above the base flood elevation (plus two feet beginning in 2007). Elevation may be by means of properly compacted fill, a solid slab foundation, or a "crawl space" foundation, which contains permanent openings to let flood waters in and out. Non-residential structures may be flood-proofed in lieu of elevation. Where a local floodplain administrator has information to estimate a base flood elevation, such as historic flood records or a hydraulic study, that elevation must be used. If the development consists of more than 5 acres or more than 50 lots, the permit applicant must develop a base flood elevation and build accordingly (NYDEC 2018). Communities may go beyond this requirement, providing for additional freeboard. In most New York communities, new structures must have the lowest floor 3 feet or more above the highest adjacent grade.

Cumulative Substantial Improvements/Damages: The NFIP allows improvements valued at up to 50% of the building's pre-improvement value to be permitted without meeting the flood protection requirements. Over the years, a community may issue a succession of permits for different repairs or improvement to the same structures. This can greatly increase the overall flood damage potential for structures within a community. The community may wish to deem "substantial improvement" cumulatively so that once a threshold of improvement within a certain length of time is reached, the structure is considered to be substantially improved and must meet flood protection requirements.

NFIP Community Rating System (CRS)

As an additional component of the NFIP, the CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance (FEMA, 2012).

As of August 5, 2021, there are two communities within Erie County that participate in the CRS program, the Town of Amherst and the City of Lackawanna.

U.S. Army Corps of Engineers

Under Section 404(e) of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) can issue general permits to authorize activities that have only minimal individual and cumulative adverse environmental effects. A nationwide permit (NWP) is a general permit that authorizes activities across the country unless a district or division commander revokes the nationwide permit in a state or other geographic region. There are 54 nationwide permits, and they authorize a wide variety of activities, including linear transportation projects, bank stabilization activities, residential development, commercial and industrial developments, aids to navigation and certain maintenance activities (USACE 2017). Details on each NWP can be found here: https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/6711.

There are three types of USACE permits: standard, nationwide (described above), and regional. Standard permits are individual permits that involve full public interest review of an individual permit application and includes the issuance of a public notice for any project that does not meet the terms and conditions of an NWP or a Letter

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

of Permission (LOP). Regional general permits are for small, specialized projects. In New York State, there are six regional general permit categories (see https://www.lrb.usace.army.mil/Missions/Regulatory/New-York-Permit-Information/) (USACE Buffalo District 2019).

New York State Floodplain Management

There are two departments that have statutory authorities and programs that affect floodplain management at the local jurisdiction level in New York State: the NYSDEC and the Department of State's Division of Code Enforcement and Administration (DCEA).

The NYSDEC is charged with conserving, improving, and protecting the state's natural resources and environment, and preventing, abating, and controlling water, land, and air pollution. Programs that have bearing on floodplain management are managed by the Bureau of Flood Protection and Dam Safety, which cooperates with federal, state, regional, and local partners to protect lives and property from floods, coastal erosion, and dam failures. These objectives are accomplished through floodplain management and both structural and nonstructural means.

The Dam Safety Section is responsible for "reviewing repairs and modifications to dams and assuring [sic] that dam owners operate and maintain dams in a safe condition through inspections, technical reviews, enforcement, and emergency planning." The Flood Control Projects Section is responsible for reducing flood risk to life and property through construction, operation, and maintenance of flood control facilities.

The Floodplain Management Section is responsible for reducing flood risk to life and property through management of activities, such as development in flood hazard areas, and for reviewing and developing revised flood maps. The Section serves as the NFIP State Coordinating Agency and, in this capacity, is the liaison between FEMA and New York communities that elect to participate in the NFIP. The Section provides a wide range of technical assistance.

Stormwater Management Planning

When proper controls are not in place, research studies show a clear link between urbanization and increased flooding and pollutant export. The goal of stormwater management is to ensure that the quantity and quality of stormwater runoff from a site that is undergoing construction or development should not be substantially altered from its pre-development conditions (NYSDEC 2015).

According to the federal law commonly known as Stormwater Phase II, permits are required for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and those additionally designated by the New York State Department of Environmental Conservation (NYSDEC). Owners or operators of such MS4s must be authorized in accordance with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems. The permit requires development of a Stormwater Management Program (SWMP).

6.4.3 Administrative and Technical Capabilities - County and Local

This subsection provides a summary of capabilities to support hazard mitigation for local jurisdictions, some of whom sat on the Steering Committee and others who provide a resource for support and information to communities. Specific local capabilities (e.g., police, fire, EMS, highway and public works departments, etc.) are provided in Section 9 (Jurisdictional Annexes).

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Erie County Department of Homeland Security and Emergency Services

The Erie County Department of Homeland Security and Emergency Services is responsible for all emergency planning, response, and management within the county. The county's Emergency Manager is the Deputy Commissioner of Preparedness and Homeland Security The Department creates and maintains county emergency plans, including the CEMP, and reviews and files municipal emergency plans; additionally, the office leads the county emergency operations and assists all towns, cities, and villages with emergency planning and coordination. The county offers Fire Service Training, Emergency Medical Service Training, and American Heart Association CPR/ AED/ First Aid Training.

The Department of Homeland Security & Emergency Services works closely with the entire emergency services and public safety community in Erie County, serving the public and first responders alike. The Department maintains a countywide radio system consisting of over 3,000 mobile and portable radios, 14 base stations and several radio towers. Fire Safety, Emergency Medical Services, and Homeland Security/Emergency Management/Disaster Preparedness are divisions of the Department of Homeland Security & Emergency Services.

Staff within the Department are trained in the principles of National Incident Management Systems (NIMS) and Incident Command System (ICS), allowing them to serve as the primary support for the Erie County Emergency Operations Center (EOC). Staff also works with NYS DHSES, FEMA, and county agencies such as fire departments and Emergency Medical Services providers.

The Department led and helped to organize the update of this Hazard Mitigation Plan and was also an active participant in the Steering Committee.

Erie County Department of Environment and Planning

Staff at Erie County's Department of Environment and Planning manage numerous planning programs that improve the quality of life in Erie County. These programs plan for or implement development projects that are consistent with the Framework for Regional Growth, the County's adopted comprehensive plan. The Department was an active participant in the Steering Committee and provided important hazard specific input during meetings and via municipal worksheets.

The Department These programs include:

- Office of Agriculture
- Arts & Culture
- Capital Improvements Program
- Environmental Review
- Erie County Parks Master Plan
- Erie-Niagara Regional Framework
- Fisheries Advisory Board
- Local Government Training
- Local Planning Assistance
- Land Development & Economic Development Planning Studies
- Brownfield & Urban Redevelopment
- Municipal Referrals
- Other Reports
- Waterfront Planning

For more information about the County's Planning activities please visit Planning and Development | Environment & Planning (erie.gov)

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Erie County Department of Health

The Department of Health protects the welfare of the present and future generations of Erie County residents through the conservation of soil, water, air, plant and animal resources by delivery of sound, science-based, locally-directed, technical and educational assistance.

Erie County Soil and Water Conservation District

It is the mission of the Erie County Soil and Water District to protect and promote the health, safety and general welfare of the present and future generations of Erie County residents through the conservation of soil, water, air, plant and animal resources by delivery of sound, science-based, locally-directed, technical and educational assistance. Mark Gaston was an active member of the Steering Committee and provided important information about SWCD's mitigation efforts.

The Erie County Soil and Water Conservation District (ECSWCD) is a subdivision of the local government established under New York State law. The ECSWCD's purpose is to carry out a program for the conservation, use, and development of soil, water, and related resources. The ECSWCD coordinates and implements resource management programs at a local level and facilitates cooperation between local, state, and federal agencies. The ECSWCD works with landowners, land managers, local government agencies, and other local interests to address issues related to soil and water, including:

- Agricultural Environmental Management (AEM)
- Streambank Stabilization
- Education
- Fish Stocking - The District offers an annual sale and distribution of largemouth bass, fathead minnows and trout for the stocking of rural ponds.
- Pond Design - The District offers a pond planning service, for a fee, for Erie County residents that would like to construct a pond for wildlife, recreational and fire protection uses.
- Conservation Products - The District has a variety of conservation-related products for sale, to help promote wildlife habitat enhancement and learning, including:
    - Blue Bird Nest Boxes
    - Bat Houses
    - Wood Duck Houses
    - Field ID Guides
- Stormwater Management
- Technical Assistance and Services
- Agricultural Conservation Assistance
- Conservation Assistance to Municipalities
- Agricultural Assessment Program
- Watershed Planning

Erie County Health Department – Division of Environmental Health

The Erie County Health Department works to protect and improve the health of county residents. Representatives of ECDOH actively participated as a member of the Steering Committee. There are many services provided by the department including:

- Animal & Pet Health
- Vermin Control
- Health Services/Dental

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Community Health Fairs
- Community Wellness
- COVID-19 Coronavirus
- Disease Intervention Services
- Early Intervention
- Emergency Medical Services (EMS)
- Environmental Health
- Epidemiology & Disease Control
- Food Safety & Security
- Healthy Neighborhoods Program (HNP)
- Heart Health
- Lead Poisoning Prevention
- Lyme Disease & Ticks
- Maternal and Child Health
- Medical Examiner's Office
- Mental Health
- Rabies, Disease & Vector Control Program
- Rabies Information
- Substance Use
- WNY Stress Reduction Program

Erie County Legislature

The Legislature serves as the governing body of the county. The purpose of the Legislature is to exercise the powers and discharge any duties of local government and the administration of public affairs that can be imposed or conferred upon it by law. It is composed of eight legislative districts and operates under a committee system. The committees include:

- Community Enrichment
- Government Affairs
- Economic Development
- Health and Human Services
- Energy and Environment
- Minority and Women Business
- Finance Management
- Public Safety
- Small Business

Erie County Department of Public Works

The mission of the Department of Public Works is to provide safe, functional roadways and bridges for the traveling public and accurate testing of scales and measuring devices. The department also provides leadership and management in the design, construction, maintenance and management of county-owned facilities. The department is divided into four divisions: Buildings and Grounds, Highways, Weights and Measures, and Fleet. Public Works staff from the Sewer Division and the Highway Division were active participants of the Steering Committee and provided very valuable information that was incorporated into the Hazard Mitigation Update. A list of currently active projects is available here; https://www2.erie.gov/dpw/index.php?q=project-list&order=title&sort=asc

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Highway Division

The Division of Highways is responsible for the engineering and inspection of over a thousand miles of roadways, making ours the largest transportation design team in Western New York. The Division of Highways is also responsible for snow and ice control of county roads.

6.4.4 Administrative and Technical Capabilities - State and Federal

New York State Division of Homeland Security and Emergency Services (NYS DHSES)

For more than 50 years, NYS DHSES (formerly New York State Office of Emergency Management) and its predecessor agencies have been responsible for coordinating the activities of all State agencies to protect New York's communities, the State's economic well-being, and the environment from natural and man-made disasters and emergencies. NYS DHSES routinely assists local governments, voluntary organizations, and private industry through a variety of emergency management programs, including hazard identification, loss prevention, planning, training, operational response to emergencies, technical support, and disaster recovery assistance.

NYS DHSES administers the FEMA mitigation grant programs in the state and supports local mitigation planning in addition to developing and routinely updating the State Hazard Mitigation Plan. NYS DHSES prepared the current State Hazard Mitigation Plan working with input from other State agencies, authorities, and organizations. It was approved by FEMA in 2018, and it keeps New York eligible for recovery assistance in Public Assistance (Categories A through G) and Hazard Mitigation assistance in each of the Unified Hazard Mitigation Assistance Program's five grant programs. The 2019 New York State HMP was used as guidance in completing the Erie County HMP Update. The State HMP can be found here: https://mitigateny.availabs.org/.

For the purpose of this HMP, representatives from NY DHSES completed stakeholder surveys, provided technical assistance and data, and attended planning partnership meetings. NYS DHSES also presented about state requirements for hazard mitigation plans at the June 2021 Mitigation Action Workshop.

New York State Department of Environmental Conservation (NYSDEC) – Region 9 – Central New York

NYSDEC – Region 9 is located in western New York and includes Allegany, Erie, Chautauqua, Erie, Niagara, and Wyoming counties. The main Department of Environmental Conservation (DEC) office is located in Buffalo with a sub-office in Allegany. DEC staff have two main areas of responsibility: natural resource management and environmental quality protection. As part of natural resource management, staff oversee state fish and wildlife resources as well as state forests (NYSDEC Region 9 2019).

New York State Department of Environmental Conservation (NYSDEC) – Division of Water - Bureau of Flood Protection and Dam Safety

Within the NYSDEC – Division of Water, the Bureau of Flood Protection and Dam Safety (https://www.dec.ny.gov/lands/4991.html) cooperates with federal, state, regional, and local partners to protect lives and property from floods, coastal erosion and dam failures through floodplain management and both structural and nonstructural means; and provides support for information technology needs in the division. The bureau consists of the following sections:

- Coastal Management: Works to reduce coastal erosion and storm damage to protect lives, natural resources, and properties through structural and nonstructural means.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Dam Safety: Is responsible for reviewing repairs and modifications to dams and assuring that dam owners operate and maintain dams in a safe condition through inspections, technical reviews, enforcement, and emergency planning.
- Flood Control Projects: Is responsible for reducing flood risk to life and property through construction, operation, and maintenance of flood control facilities.
- Floodplain Management: Is responsible for reducing flood risk to life and property through proper management of activities including, development in flood hazard areas and review and development of revised flood maps (NYSDEC Bureau of Flood Protection and Dam Safety 2019).

The NYSDEC's Mission is "To conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being."

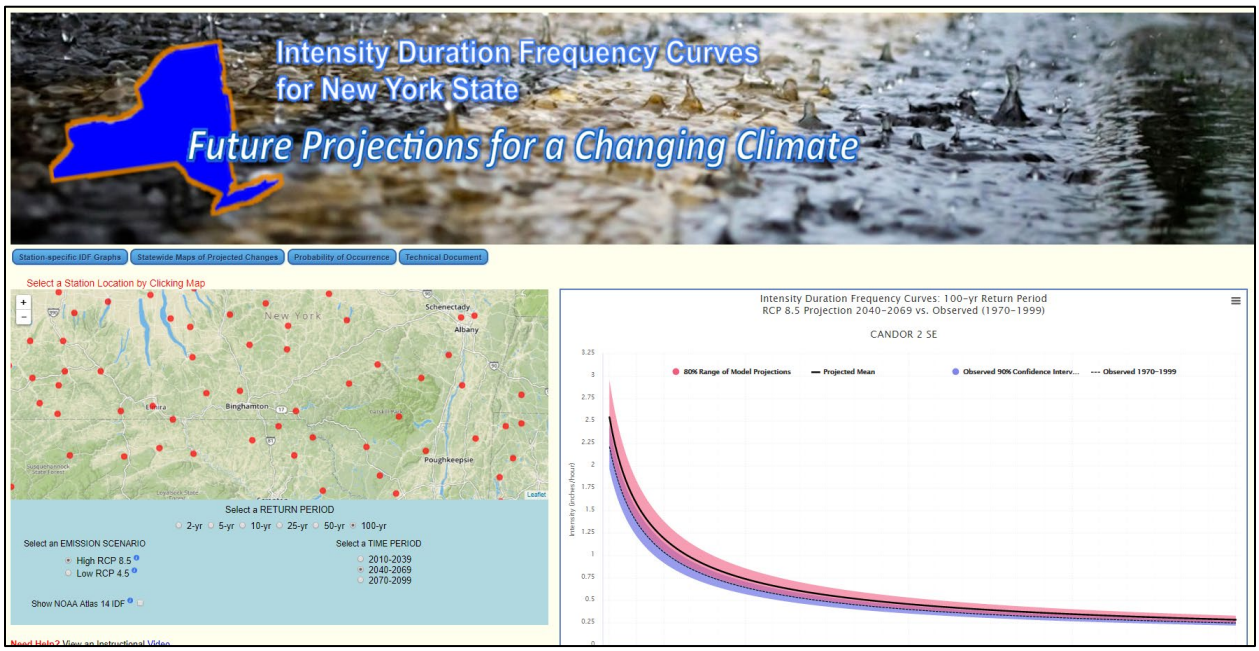
DEC's goal is to achieve this mission through the simultaneous pursuit of environmental quality, public health, economic prosperity and social well-being, including environmental justice and the empowerment of individuals to participate in environmental decisions that affect their lives.

Northeast Regional Climate Center

The Northeast Regional Climate Center (NRCC) partnered with the New York State Energy Research and Development Authority (NYSERDA) to compare various methods of downscaling global climate model (GCM) output and create extreme precipitation projections for New York State. These projections will ultimately be incorporated into climate change adaptation planning. In 2009 alone, 175 total flooding events in New York State led to $32.82 million in property damage. The state is also still recovering from the $42 billion toll of Superstorm Sandy. Climate change is resulting in an increase in the frequency of heavy rainfall events. To help New York State communities plan for effects of climate change, new graphics are now available showing the increased likelihood of heavy precipitation events. These graphs, called Intensity Duration Frequency (IDF) curves, show anticipated increases of storm events from 2- to 100-year intervals and are projected into the future as far as 2099. These products are designed for use by municipal officials, researchers, planners, highway departments, and other decision-makers who need to take storm events into account. These IDF curves display how precipitation events are being affected by New York State's rapidly changing climate (NRCC 2015). Figure 6-1 displays the screenshot of the website.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

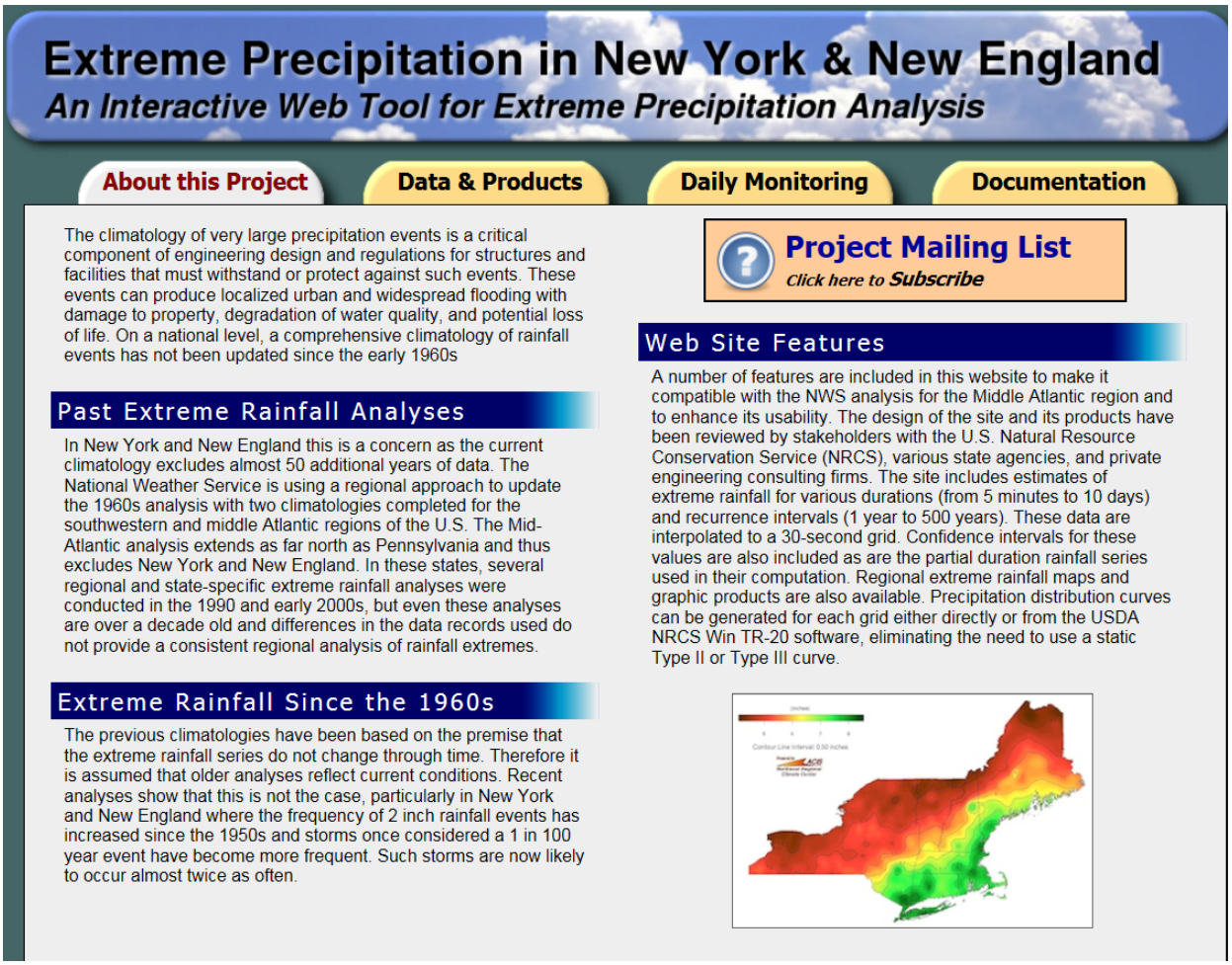
Figure 6-1. Screenshot of the IDF Curves for New York State



NRCC also maintains the Extreme Precipitation in New York & New England website, an interactive tool for extreme precipitation analysis. The site includes estimates of extreme rainfall for various durations (5 minutes to 10 days) and recurrence intervals (1 year to 500 years). These data are interpolated to a 30-second grid. Confidence intervals for these values are included as are the partial duration rainfall series used in their computation. Regional extreme rainfall maps and graphic products are available. Precipitation distribution curves can be generated for each grid either directly or from the USDA NRCS Win TR-20 software, eliminating the need to use a static Type II or Type III curve (NRCC 2018). This tool can be used by municipalities to assist them in the design and feasibility assessment of future projects and allow them to see the future intensity and frequency of rain events. Figure 6-2 shows a screenshot of the website.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Figure 6-2. Screenshot of the Extreme Precipitation in New York & New England website



Department of State's Division of Code Enforcement and Administration (DCEA)

Technical Bulletins for the 2010 Codes of New York State

The DCEA publishes technical bulletins for its building codes. TB-1004 came into effect in October 2017 and addressed Flood Venting in Foundations and Enclosures in Flood Areas. The bulletin clarifies definitions and requirements with regard to Residential and Building Construction (19NYCRR 1220 and 1221). Bulletins also address requirements for critical facilities such as fire stations, requirements for fire extinguishers, and other hazards.

Forms and Publications

The DCEA posts several model reporting forms and related publications on its web page. The Building Permit Application requests the applicant to indicate whether the site is or is not in a floodplain and advises checking with town clerks or NYSDEC. The General Residential Code Plan Review form includes a reminder to "add 2' freeboard." Sample Flood Hazard Area Review Forms, including plan review checklists and inspection checklists for Zone A and Zone V, are based on the forms in Reducing Flood Losses through the International Code Series published by International Code Council and FEMA (2008).

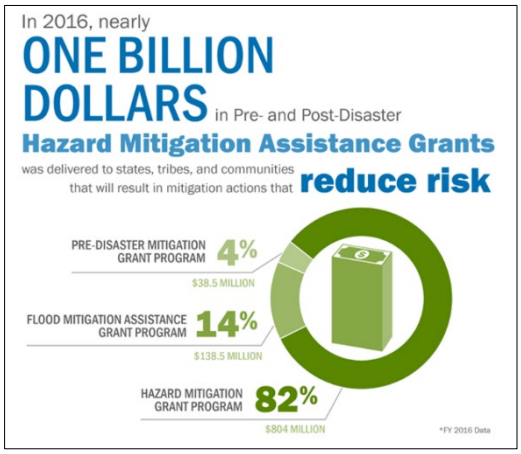
Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

6.4.5 Fiscal Capabilities – County and Local

Municipal Fiscal Capabilities

Erie County and individual municipalities are (legally, not necessarily practically) able to fund mitigation projects though existing local budgets, local appropriations (including referendums and bonding), and a variety of federal and state loan and grant programs. Many municipalities noted throughout the planning process that they are faced with increasing fiscal constraints, including decreasing revenues, budget constraints, and tax caps. In an effort to overcome these fiscal challenges, municipalities have continued to leverage the sharing of resources and combining available funding with grants and other sources and note that plans and intermunicipal cooperation are beneficial in obtaining grants.

6.4.6 Fiscal Capabilities – State and Federal



Source: FEMA, 2018

The *NYS Capabilities* section of the 2019 New York State Hazard Mitigation Plan features a section on mitigation-related funding administered by state agencies that eligible jurisdictions can use to find mitigation actions. A list of funding opportunities can be accessed here: https://mitigateny.availabs.org/strategies/funding

As noted on the FEMA hazard mitigation assistance website (https://www.fema.gov/hazard-mitigation-assistance), FEMA administers five programs that provide funding for eligible mitigation planning and projects that reduces disaster losses and protect life and property from future disaster damages. The programs are the Hazard Mitigation Grant Program (HMGP), and the HMGP Post Fire Grant, the Flood Mitigation Assistance (FMA) Program, the Pre-Disaster Mitigation (PDM) Program, and the new Building Resilient Infrastructure & Communities (BRIC) Program.

HMGP assists in implementing long-term hazard mitigation planning and projects following a Presidential major disaster declaration. PDM provides funds for hazard mitigation planning and projects on an annual basis. FMA provides funds for planning and projects to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP) on an annual basis. BRIC supports jurisdictions in hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program will replace the existing Pre-Disaster Mitigation (PDM) program. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency (FEMA 2020).

HMGP funding is generally 15% of the total amount of Federal assistance provided to a State, Territory, or federally-recognized tribe following a major disaster declaration. PDM and FMA funding depends on the amount congress appropriates each year for those programs. BRIC is funded by a 6% ($500 million) set-aside from federal post-disaster grant funding.

Individual homeowners and business owners may not apply directly to FEMA. Eligible local governments may apply on their behalf (FEMA 2020).

Table 6-2 provides an overview of program funding eligibility and cost share.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Table 6-2. FEMA HMA Grant Cost Share Requirements

Programs	Cost Share (Percent of Federal / Non-Federal Share)
HMGP	75 / 25
FMA – insured properties and planning grants	75 / 25
FMA – repetitive loss property(2)	90 / 10
FMA – severe repetitive loss property(2)	100 / 0
BRIC	75 / 25
BRIC – subrecipient is small and impoverished community	90 / 10

Source: FEMA HMA Guidance 2015; Regulations.gov; FEMA 2020

(1) Subapplicants should consult their State Hazard Mitigation Officer (SHMO) for the amount of percentage of HMGP subrecipient management cost funding their State has determined to be passed through subrecipients.

(2) To be eligible for an increased federal cost share, a FEMA-approved state or tribal (standard or enhanced) mitigation plan that addressed repetitive loss properties must be in effect at the time of award, and the property is being submitted for consideration must be a repetitive loss property.

Federal Hazard Mitigation Funding Opportunities

Federal mitigation grant funding is available to all communities with a current hazard mitigation plan (this plan); however, most of these grants require a "local share" in the range of 10-25% of the total grant amount. Details about this program and a further description of these opportunities can be found at: https://www.fema.gov/hazard-mitigation-assistance. The FEMA mitigation grant programs are described below.

Hazard Mitigation Grant Program (HMGP)

The HMGP is a post-disaster mitigation program. It is made available to states by FEMA after each Federal disaster declaration. The HMGP can provide up to 75% funding for hazard mitigation measures. The HMGP can be used to fund cost-effective projects that will protect public or private property in an area covered by a federal disaster declaration or that will reduce the likely damage from future disasters. Examples of projects include acquisition and demolition of structures in hazard-prone areas, flood-proofing or elevation to reduce future damage, minor structural improvements and development of state or local standards. Projects must fit into an overall mitigation strategy for the area identified as part of a local planning effort. All applicants must have a FEMA-approved Hazard Mitigation Plan (this plan).

Applicants who are eligible for the HMGP are state and local governments, certain nonprofit organizations or institutions that perform essential government services, and Indian tribes and authorized tribal organizations. Individuals or homeowners cannot apply directly for the HMGP; a local government must apply on their behalf. Applications are submitted to NYS DHSES and placed in rank order for available funding and submitted to FEMA for final approval. Eligible projects not selected for funding are placed in an inactive status and may be considered as additional HMGP funding becomes available. For additional information regarding HMGP, please refer to: https://www.fema.gov/hazard-mitigation-grant-program

Flood Mitigation Assistance (FMA) Program

The FMA program combines the previous Repetitive Flood Claims and Severe Repetitive Loss Grants into one grant program. The FMA provides funding to assist states and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the NFIP. The FMA is funded annually; no federal disaster declaration is required. Only NFIP insured homes and businesses are eligible for mitigation in this program. Funding for FMA is very limited and, as with the HMGP, individuals cannot apply directly for the program. Applications must come from local governments

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

or other eligible organizations. The federal cost share for an FMA project is at least 75%. At most, 25% of the total eligible costs must be provided by a non-federal source. Of this 25%, no more than half can be provided as in-kind contributions from third parties. At minimum, a FEMA-approved local flood mitigation plan is required before a project can be approved. The FMA funds are distributed from FEMA to the state. The NYS DHSES serves as the grantee and program administrator for the FMA program.

For additional information regarding the FMA program, please refer to: https://www.fema.gov/flood-mitigation-assistance-grant-program

Building Resilient Infrastructure and Communities (BRIC) Program

Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program.

The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

For additional information regarding the BRIC program, please refer to:
https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities

Rehabilitation of High Hazard Potential Dams (HHPD) Program

The Rehabilitation of High Hazard Potential Dams (HHPD) grant program provides technical, planning, design, and construction assistance for eligible rehabilitation activities that reduce dam risk and increase community preparedness.

The HHPD Grant Program will provide assistance for technical, planning, design and construction activities toward:

- Repair
- Removal
- Structural/nonstructural rehabilitation of eligible high hazard potential dams

For additional information regarding the HHPD program, please refer to: https://www.fema.gov/emergency-managers/risk-management/dam-safety/grants/resources.

Extraordinary Circumstances

For BRIC and FMA project subawards, the (FEMA) Region may apply extraordinary circumstances when justification is provided and with concurrence from FEMA Headquarters (Risk Reduction and Risk Analysis Divisions) prior to granting an exception. If this exception is granted, a local mitigation plan must be approved by FEMA within 12 months of the award of the project subaward to that community.

For HMGP, BRIC, and FMA, extraordinary circumstances exist when a determination is made by the Applicant and FEMA that the proposed project is consistent with the priorities and strategies identified in the State (Standard or Enhanced) Mitigation Plan and that the jurisdiction meets at least one of the criteria below. If the jurisdiction does not meet at least one of these criteria, the Region must coordinate with FEMA Headquarters (Risk Reduction and Risk Analysis Divisions) for HMGP; however, for BRIC and FMA the Region must coordinate and seek concurrence prior to granting an exception:

- The jurisdiction meets the small, impoverished community criteria (see Part VIII, B.2).
- The jurisdiction has been determined to have had insufficient capacity due to lack of available funding, staffing, or other necessary expertise to satisfy the mitigation planning requirement prior to the current disaster or application deadline.
- The jurisdiction has been determined to have been at low risk from hazards because of low frequency of occurrence or minimal damage from previous occurrences as a result of sparse development.
- The jurisdiction experienced significant disruption from a declared disaster or another event that impacts its ability to complete the mitigation planning process prior to award or final approval of a project award.
- The jurisdiction does not have a mitigation plan for reasons beyond the control of the State, federally-recognized tribe, or local community, such as Disaster Relief Fund restrictions that delay FEMA from granting a subaward prior to the expiration of the local or Tribal Mitigation Plan.

For HMGP, BRIC, and FMA, the Applicant must provide written justification that identifies the specific criteria or circumstance listed above, explains why there is no longer an impediment to satisfying the mitigation planning requirement and identifies the specific actions or circumstances that eliminated the deficiency.

When an HMGP project funding is awarded under extraordinary circumstances, the Recipient shall acknowledge in writing to the Regional Administrator that a plan will be completed within 12 months of the subaward. The Recipient must provide a work plan for completing the local or Tribal Mitigation Plan, including milestones and a timetable, to ensure that the jurisdiction will complete the plan in the required time. This requirement shall be incorporated into the award (both the planning and project subaward agreements if a planning subaward is also awarded).

Federal and State Disaster and Recovery Assistance Programs

Following a disaster, various types of assistance may be made available by local, state, and federal governments. The types and levels of disaster assistance depend on the severity of the damage and the declarations that result from the disaster event. Among the general types of assistance that may be provided should the President of the United States declare the event a major disaster includes the following:

Individual Assistance (IA)

IA provides help for homeowners, renters, businesses, and some nonprofit entities after disasters occur. This program is largely funded by the U.S. Small Business Administration. For homeowners and renters, those who suffered uninsured or underinsured losses may be eligible for a Home Disaster Loan to repair or replace damaged real estate or personal property. Renters are eligible for loans to cover personal property losses. Individuals may borrow up to $200,000 to repair or replace real estate, $40,000 to cover losses to personal property, and an additional 20% for mitigation. For businesses, loans may be made to repair or replace disaster damages to property owned by the business, including real estate, machinery and equipment, inventory, and supplies. Businesses of any size are eligible. Nonprofit organizations such as charities, churches, private universities, etc. are also eligible. An Economic Injury Disaster Loan provides necessary working capital until normal operations resume after a physical disaster. These loans are restricted, by law, to small businesses only. For additional information regarding IA, please refer to: https://www.fema.gov/individual-disaster-assistance

Public Assistance (PA)

PA provides cost reimbursement aid to local governments (state, county, local, municipal authorities and school districts) and certain nonprofit agencies that were involved in disaster response and recovery programs or that suffered loss or damage to facilities or property used to deliver government-like services. This program is largely

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

funded by FEMA with both local and state matching contributions required. For additional information regarding PA, please refer to: https://www.fema.gov/public-assistance-local-state-tribal-and-non-profit

Small Business Administration (SBA) Loans

SBA provides low-interest disaster loans to homeowners, renters, business of all sizes, and most private nonprofit organizations. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.

Homeowners may apply for up to $200,000 to replace or repair their primary residence. Renters and homeowners may borrow up to $40,000 to replace or repair personal property (such as clothing, furniture, cars, and appliances) damaged or destroyed in a disaster. Physical disaster loans of up to $2 million are available to qualified businesses or most private nonprofit organizations. For additional information regarding SBA loans, please refer to: https://www.sba.gov/managing-business/running-business/emergency-preparedness/disaster-assistance

Social Services Block Grant Program (SSBG)

To address the needs of critical health and human service providers and the populations they serve, the State of New York will receive a total of $235.4 million in federal Superstorm Sandy SSBG funding. The state will distribute $200,034,600 through a public and transparent solicitation for proposals and allocate $35.4 million in State Priority Projects, using the SSBG funding. Sandy SSBG resources are dedicated to covering necessary expenses resulting from Superstorm Sandy, including social, health, and mental health services for individuals, and for repair, renovation, and rebuilding of health care facilities, mental hygiene facilities, child care facilities, and other social services facilities. Additional information regarding the SSBG program is available on the website: https://www.acf.hhs.gov/ocs/programs/ssbg.

Department of Homeland Security Grant Program (HSGP)

The Homeland Security Grant Program (HSGP) plays an important role in the implementation of the National Preparedness System by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation. The program supports efforts to build and sustain core capabilities across the Prevention, Protection, Mitigation, Response, and Recovery mission areas. This includes two priorities: building and sustaining law enforcement terrorism prevention capabilities and maturation and enhancement of state and major urban area fusion centers. HSGP is composed of three interconnected grant programs including the State Homeland Security Program (SHSP), Urban Areas Security Initiative (UASI), and the Operation Stonegarden (OPSG). Together, these grant programs fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration. For additional information regarding HSGP, please refer to: https://www.fema.gov/grants/preparedness/homeland-security

Community Development Block Grants (CDBG)

CDBG are federal funds intended to provide low and moderate-income households with viable communities, including decent housing, as suitable living environment, and expanded economic opportunities. Eligible activities include community facilities and improvements, roads and infrastructure, housing rehabilitation and preservation, development activities, public services, economic development, planning, and administration. Public improvements may include flood and drainage improvements. In limited instances, and during the times of "urgent need" (e.g., post-disaster) as defined by the CDBG National Objectives, CDBG funding may be used to acquire a property located in a floodplain that was severely damaged by a recent flood, demolish a structure severely damaged by an earthquake, or repair a public facility severely damaged by a hazard event. For additional information regarding CDBG, please refer to: https://www.hudexchange.info/programs/cdbg-entitlement/

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

U.S. Economic Development Administration

The U.S. Economic Development Administration (USEDA) is an agency of the U.S. Department of Commerce that supports regional economic development in communities around the country. It provides funding to support comprehensive planning and makes strategic investments that foster employment creation and attract private investment in economically distressed areas of the United States. Through its Public Works Program, USEDA invests in key public infrastructure, such as in traditional public works projects, including water and sewer systems improvements, expansion of port and harbor facilities, brownfields, multitenant manufacturing and other facilities, business and industrial parks, business incubator facilities, redevelopment technology-based facilities, telecommunications and development facilities. Through its Economic Adjustment Program, USEDA administers its Revolving Loan Fund (RLF) Program, which supplies small businesses and entrepreneurs with the gap financing needed to start or expand their business, in areas that have experienced or are under threat of serious structural damage to the underlying economic base. Please refer to the USEDA website (https://www.eda.gov/) for additional information.

Federal Highway Administration - Emergency Relief (FHWA-ER)

The FHWA- ER is a grant program that may be used for repair or reconstruction of Federal-aid highways and roads on Federal lands which have suffered serious damage as a result of a disaster. NYS is serving as the liaison between local municipalities and FHWA. $30 million in funding was released in October−November of 2012 for emergency repair work conducted in the first 180 days following Hurricane Sandy. Another $220 million in additional funding became available February 2013. For information regarding the FHWA-ER Program, please refer to: https://www.fhwa.dot.gov/programadmin/erelief.cfm

Federal Transit Administration - Emergency Relief (FTA-ER)

The FTA-ER is a grant program that funds capital projects to protect, repair, reconstruct, or replace equipment and facilities of public transportation systems. Administered by the Federal Transit Authority at the U.S. Department of Transportation and directly allocated to metropolitan transit authorities (MTA) and port authorities, this transportation-specific fund was created as an alternative to FEMA PA. Currently, a total of $5.2 billion has been allocated to NYS-related entities. For information regarding the FTA-ER Program, please refer to: https://www.transit.dot.gov/funding/grant-programs/emergency-relief-program/emergency-relief-program

State Hazard Mitigation Funding Opportunities

Empire State Development

Empire State Development offers a wide range of financing, grants and incentives to promote business and employment growth, and real estate development throughout the State. Several programs address infrastructure construction associated with project development, acquisition, and demolition associated with project development and brownfield remediation and redevelopment. For additional information regarding Empire State Development, please refer to: https://esd.ny.gov/

Local Waterfront Revitalization Program

The Waterfront Revitalization of Coastal Areas and Inland Waterways Act offers local governments the opportunity to participate in the State's Coastal Management Program (CMP) (pdf) on a voluntary basis by preparing and adopting a LWRP, providing more detailed implementation of the State's CMP through use of such existing broad powers as zoning and site plan review. When an LWRP is approved by the New York State Secretary of State, State agency actions are required to be consistent with the approved LWRP to the maximum

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

extent practicable. When the federal government concurs with the incorporation of an LWRP into the CMP, federal agency actions must be consistent with the approved addition to the CMP.

An approved LWRP reflects community consensus and provides a clear direction for appropriate future development. It establishes a long-term partnership among local government, community-based organizations, and the State. Also, funding to advance preparation, refinement, or implementation of Local Waterfront Revitalization Programs is available under Title 11 of the New York State EPF LWRP, among other sources.

In addition, State permitting, funding, and direct actions must be consistent, to the maximum extent practicable, with an approved LWRP. Within the federally defined coastal area, federal agency activities are also required to be consistent with an approved LWRP. This "consistency" provision is a strong tool that helps ensure all government levels work in unison to build a stronger economy and a healthier environment.

New York State Department of Transportation (NYSDOT)

Scour Critical/Flood Prone Bridge Program

The Scour Critical/Flood Prone Bridge Program is an initiative developed to harden New York State's at-risk bridges to withstand extreme weather events. In the past three years, the State has suffered nine presidentially declared disasters due to extreme weather, many involving severe flooding (NYSDOT 2015).

For this initiative, 105 scour critical/flood prone bridges (https://www.dot.ny.gov/main/business-center/cbow/repository/CBOW_list_2015.pdf) throughout New York State were identified as most at-risk from repeated flooding and are located in the Capital District, Long Island, Mid-Hudson, Mohawk Valley, North Country, Finger Lakes, Central/Western and Southern Tier regions. The locations encompass 78 communities within 30 counties across the State (NYSDOT 2015).

All of the bridges included in this program were built to the codes and standards of their time and remain safe and open for everyday traffic. However, due to a variety of natural severe weather events and the increasing frequency of major storms and floods, they are vulnerable to scour, and flooding caused by the intensity and velocity of water from extreme natural events. Bridge scour erodes and carries away foundation materials such as sand and rocks from around and beneath bridge abutments, piers, foundations and embankments (NYSDOT 2015).

This program encompasses a variety of bridge improvement work, including upgrading concrete bridge abutments and/or piers by adding steel or concrete pile foundations, increasing the size of waterway openings to meet 100-year flood projections and reducing or eliminating the number of bridge piers in the water to prevent debris and ice jams that can flood surrounding areas. Completion of the program will ensure continual access to critical facilities and essential personnel during emergency events. Adverse impacts to travel throughout the State will be greatly reduced during severe weather events as well (NYSDOT 2015).

Through HMGP, this program aims to increase the State's resiliency and mitigate the risks of loss and damage associated with future disasters. The total cost of the program, including all 105 bridges across the state, is $518 million. It will be paid for with a mix of funding from FEMA and the U.S. Department of Housing and Urban Development. No state funding will be required (NYSDOT 2015).

Emergency Watershed Protection Program

The purpose of the Emergency Watershed Protection Program (EWP) was established by Congress to respond to emergencies created by natural disasters. The EWP Program is designed to help people and conserve natural resources by relieving imminent hazards to life and property caused by floods, fires, drought, windstorms, and other natural occurrences. The U.S. Department of Agriculture's Natural Resources Conservation Service

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

(NRCS) administers the EWP Program; EWP-Recovery, and EWP–Floodplain Easement (FPE). For additional information regarding the EWP, please refer to:
https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/

EWP - Recovery

The EWP Program is a recovery effort program aimed at relieving imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences. Public and private landowners are eligible for assistance but must be represented by a project sponsor that must be a legal subdivision of the State, such as a city, county, township or conservation district, and Native American Tribes or Tribal governments. NRCS may pay up to 75 percent of the construction cost of emergency measures. The remaining 25 percent must come from local sources and can be in the form of cash or in-kind services.

EWP work is not limited to any one set of measures. It is designed for installation of recovery measures to safeguard lives and property as a result of a natural disaster. NRCS completes a Damage Survey Report (DSR) which provides a case-by-case investigation of the work necessary to repair or protect a site.

Watershed impairments that the EWP Program addresses are debris-clogged stream channels, undermined and unstable streambanks, jeopardized water control structures and public infrastructures, wind-borne debris removal, and damaged upland sites stripped of protective vegetation by fire or drought.

EWP - Floodplain Easement (FPE)

Privately-owned lands or lands owned by local and state governments may be eligible for participation in EWP-FPE. To be eligible, lands must meet one of the following criteria:

- Lands that have been damaged by flooding at least once within the previous calendar year or have been subject to flood damage at least twice within the previous 10 years
- Other lands within the floodplain are eligible, provided the lands would contribute to the restoration of the flood storage and flow, provide for control of erosion, or that would improve the practical management of the floodplain easement
- Lands that would be inundated or adversely impacted as a result of a dam breach

EWP-FPE easements are restored to the extent practicable to the natural environment and may include both structural and nonstructural practices to restore the flood storage and flow, erosion control, and improve the practical management of the easement.

Structures, including buildings, within the floodplain easement must be demolished and removed or relocated outside the 100-year floodplain or dam breach inundation area.

New York State Department of Environmental Conservation Climate Smart Communities (CSC) Program

The CSC program is jointly sponsored by the following six New York State agencies: DEC; Energy Research and Development Authority; Public Service Commission; Department of State; NYSDOT; and the Department of Health. The program encourages municipalities to minimize the risks of climate change and reduce long-term costs through actions which reduce greenhouse gas emissions and adapt to a changing climate. The program offers free technical support on energy and climate and guidance tailored to New York State communities. As of April 2020, more than 303 communities, representing 8.7 million New Yorkers in every region of the state, have committed to acting on climate through New York State's Climate Smart Communities program.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Benefits of participating in the program include saving taxpayer dollars, improving operations and infrastructure, increasing energy independence and security, demonstrating leadership, and positioning for economic growth. Registered Climate Smart Communities receive notification of state and federal assistance that they can leverage to help adopt low-carbon technologies and of programs and support for efficiency improvements and energy conservation. Further, those communities receive an advantage in accessing some state assistance programs, can call on the help of other local governments that already have adopted climate smart practices and policies, and receive statewide recognition for their climate-smart accomplishments. Key elements of the Climate Smart Communities program are described below.

For additional information regarding the CSC program, please refer to: https://climatesmart.ny.gov/

Climate Smart Communities Pledge

Any city, town, village, or county in New York can join the program by adopting the Climate Smart Communities Pledge. To become a registered Climate Smart Community, the municipality's governing body must adopt a resolution that includes all 10 elements of the Pledge and inform DEC of the passage of the resolution. The required 10 elements of the Pledge are as follows:

- Pledge to be a Climate Smart Community.
- Set goals, inventory emissions, plan for climate action.
- Decrease community energy use.
- Increase community use of renewable energy.
- Realize benefits of recycling and other climate smart solid waste management practices.
- Reduce greenhouse gas emissions through use of climate smart land use tools.
- Enhance community resilience and prepare for the effects of climate change.
- Support development of a green innovation economy.
- Inform and inspire the public.
- Commit to an evolving process of climate action.

At the time of this plan update, 8 communities in Erie County have registered to take the Climate Smart Communities Pledge.

Climate Smart Communities Certification (CSC) Program

The Climate Smart Communities Certification (CSC) program enables high-performing registered communities to achieve recognition for their leadership. Designed around the existing ten pledge elements, the certification program recognizes communities achieving any on over 130 total possible actions through a rating system leading to four levels of award: Certified, Bronze, Silver, and Gold. Recertification of completed actions is required every five years. Details of the program and the specific documentation required for each action are described in the CSC Certification Manual at https://climatesmart.ny.gov/actions-certification/actions/

At the time of this plan update, two communities have achieved certification: City of Buffalo and Erie County.

Climate Smart Communities Grant Program

In 2019 DEC announced an expansion of the Environmental Protection Fund to support communities ready to reduce greenhouse gas emissions and prepare for the effects of climate change. Climate Smart Community Implementation grants support mitigation and adaptation projects and range from $100,000 to $2 million. Competitive grants have typically ranged from $25,000 to $100,000 will also provide support for local governments to become certified Climate Smart Communities. All counties, cities, towns, and villages of the

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

State of New York are eligible to receive funding. The CSC Grant Program will provide 50/50 matching grants for eligible projects in the following categories.

Funding is available for implementation projects that advance a variety of climate adaptation and mitigation actions, including the following:

- Construction of natural resiliency measures
- Relocation or retrofit of climate-vulnerable facilities
- Conservation or restoration of riparian areas and tidal marsh migration area
- Reduction of flood risk
- Clean transportation
- Reduction or recycling of food waste

Funding is also available for **certification projects** that advance several specific actions aligned with Climate Smart Communities Certification requirements:

- Right-sizing of government fleets
- Developing natural resource inventories
- Conducting vulnerability assessments
- Developing climate adaptation strategies
- Updating hazard mitigation plans to address changing conditions and reduce climate vulnerability

In scoring grant applications, increasing points are awarded to communities who have already taken the CSC pledge and to those that have achieved certification status. All grant recipients must take the Climate Smart Communities Pledge within the term of their grant contract. For climate mitigation projects, grant recipients must provide a report of estimates of emissions reduction. Certification actions must adhere to the requirements and standards described in the Climate Smart Communities Certification Manual that is available on the website: http://www.dec.ny.gov/energy/96511.html. For implementation projects involving property (construction, improvements, restoration, rehabilitation), grant recipients that do not have ownership of the property must obtain a climate change mitigation easement.

The Climate Smart Communities Toolkit was developed to educate New York communities on recommended practices that will help to reduce greenhouse gas emissions and adapt to the effects of climate change, specifically in the areas of land-use, transportation policy, green buildings, infrastructure investment, green infrastructure, housing policy, adaptation, and resilience. The Climate Smart Communities Guide to Local Action contains overviews of possible community actions, how-to's and case studies to help communities implement the CSC pledge. The Climate Smart Communities Land Use Toolkit allows New York communities to find recommended practices that will help to reduce greenhouse gas emissions in the areas of land use, transportation policy, green building, infrastructure investment, green infrastructure, and housing policy.

New York State Department of Environmental Conservation (NYSDEC)

Water Quality Improvement Project (WQIP) Program

The WQIP program is a competitive reimbursement grant program that funds projects that directly address documented water quality impairments. The competitive, statewide grant program is open to local governments and not-for-profit corporations. Grant recipients may receive up to 75 percent of the project costs for high priority wastewater treatment improvement, non-agricultural nonpoint source abatement and control, land acquisition for source water protection, aquatic habitat restoration, and municipal separate storm sewer system projects; up

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

to 50% for salt storage projects; and up to 40% for general wastewater infrastructure improvement projects. Eligible activities include:

- Wastewater treatment improvement
- Non-agricultural nonpoint source abatement and control
- Land acquisition for source water protection
- Salt storage
- Aquatic habitat restoration
- Municipal separate storm sewer systems (MS4)

Details regarding this program are available here: https://www.dec.ny.gov/pubs/4774.html.

New York State DEC/Environmental Facilities Corporation (EFC) Wastewater Infrastructure Engineering Planning Grant (EPG)

The New York State DEC, in conjunction with the New York State EFC, will offer grants to municipalities to help pay for the initial planning of eligible Clean Water State Revolving Fund (CWSRF) water quality projects.

The Wastewater Infrastructure Engineering Planning Grant will assist municipalities with the engineering and planning costs of CWSRF-eligible water quality projects. Municipalities with a Median Household Income (MHI) of $65,000 or less in Regional Economic Development Council (REDC) regions of Capital District, Southern Tier, North Country, Mohawk Valley, Central NY, Finger Lakes, or Western NY OR with a Median Household Income of $85,000 or less in REDC regions of Long Island, New York City or Mid-Hudson are eligible to apply. Grants with a 20 percent required local match will be provided to finance activities, including engineering and/or consultant fees for engineering and planning services for the production of an engineering report.

The goal of the EPG program is to advance water quality projects to construction, so successful applicants can use the engineering report funded by the grant to seek financing through the CWSRF program, WQIP program, or other funding entities to further pursue the identified solution. Funding priorities go to projects that are:

- Required by an executed Order on Consent; or
- Required by a draft or final SPDES permit; or
- Upgrading or replacing an existing wastewater system; or
- Constructing a wastewater treatment and/or collection system for an area with failing onsite septic systems; or
- Identified in a Total Maximum Daily Load (TMDL) Implementation Plan.

Details regarding this program can be found here: https://www.dec.ny.gov/pubs/81196.html.

New York State Department of Transportations

BRIDGE NY

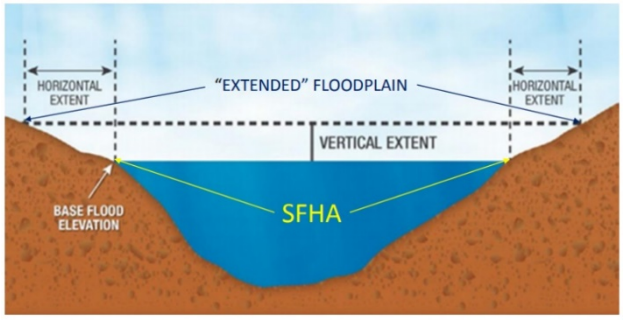
The BRIDGE NY program, administered by the NYSDOT, is open to all municipal owners of bridges and culverts. Projects will be awarded through a competitive process and will support all phases of project development. Projects selected for funding under the BRIDGE NY Initiative will be evaluated based on the resiliency of the structure, including such factors as hydraulic vulnerability and structural resiliency; the significance and importance of the bridge including traffic volumes, detour considerations, number and types of

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

businesses served and impacts on commerce; and the current bridge and culvert structural conditions. Information regarding the program can be found here: https://www.dot.ny.gov/BRIDGENY

Community Risk and Resiliency Act (CRRA)

On September 22, 2015, Governor Andrew Cuomo signed bill A06558/S06617-B, the CRRA. The purpose of the bill is to ensure that certain state monies, facility-siting regulations, and permits include consideration of the effects of climate risk and extreme weather events. The bill's provisions will apply to all applications and permits no later than January 1, 2017. CRRA includes five major provisions:



- Official Sea-Level Rise Projections - CRRA requires the DEC to adopt science-based sea-level rise projections into regulation.
- Consideration of Sea-Level Rise, Storm Surge and Flooding - CRRA requires applicants for permits or funding in a number of specified programs to demonstrate that future physical climate risk due to sea-level rise, storm surge, and flooding have been considered, and that DEC consider incorporating these factors into certain facility-siting regulations.
- Smart-Growth Public Infrastructure Policy Act Criteria - CRRA adds mitigation of risk due to sea-level rise, storm surge, and flooding to the list of smart-growth criteria to be considered by state public infrastructure agencies.
- Guidance on Natural Resiliency Measures - CRRA requires DEC, in consultation with the Department of State (DOS), to develop guidance on the use of natural resources and natural processes to enhance community resiliency.
- Model Local Laws Concerning Climate Risk - CRRA requires DOS, in cooperation with DEC, to develop model local laws that include consideration of future risk due to sea-level rise, storm surge and/or flooding. These model local laws must be based on available data predicting the likelihood of extreme weather events, including hazard risk analysis (NYSDEC 2018).

CRRA requires NYSDEC, in consultation with DOS, to prepare guidance on implementation of the statute. To meet its obligation to develop guidance for the implementation of CRRA, DEC is proposing a new document, State Flood Risk Management Guidance (SFRMG). The SFRMG is intended to inform state agencies as they develop program-specific guidance to require that applicants demonstrate consideration of sea-level rise, storm surge, and flooding, as permitted by program-authorizing statutes and operating regulations. The SFRMG incorporates possible future conditions, including the greater risks of coastal flooding presented by sea-level rise and enhanced storm surge and inland flooding expected to result from increasingly frequent extreme precipitation events (NYSDEC 2018).

For additional details on the CRRA, please refer to: https://www.dec.ny.gov/energy/102559.html

6.4.7 Potential Mitigation Funding Sources

While it is important to recognize the mitigation strategies for each jurisdiction to help achieve the mitigation goals and objectives of the (HMP, it is also important to provide sources for funding to implement these strategies. The table below provides a list of programs, descriptions, and links for those seeking funding sources. This table is not intended to be a comprehensive list, but rather a starting point to help identify potential sources of funding for the identified mitigation strategies.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 6-3. Mitigation Funding Sources

Program	Description	Lead Agency	Website
Federal			
Hazard Mitigation Assistance (HMA)	Grants to provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages – includes FMA, HMGP, BRIC.	FEMA	https://www.fema.gov/hazard-mitigation-assistance
Flood Mitigation Assistance (FMA)	Program grants to States and communities for pre-disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program.	FEMA	https://www.fema.gov/flood-mitigation-assistance-grant-program
Hazard Mitigation Grant Program (HMGP)	Grants to States and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration.	FEMA	https://www.fema.gov/hazard-mitigation-grant-program
Building Resilient Infrastructure and Communities (BRIC)	Grants to States local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the Pre-Disaster Mitigation (PDM) program.	FEMA	https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
Public Assistance: Hazard Mitigation Funding Under Section 406	Hazard mitigation discretionary funding available under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act following a Presidentially declared disaster.	FEMA	https://www.fema.gov/news-release/2017/05/03/4309/fema-hazard-mitigation-grants-404-and-406
Assistance to Firefighters Grant Program	The primary goal of the Assistance to Firefighters Grants (AFG) is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments, nonaffiliated Emergency Medical Services organizations, and State Fire Training Academies. This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operations efficiencies, foster interoperability, and support community resilience.	FEMA	https://www.fema.gov/welcome-assistance-firefighters-grant-program
Disaster Housing Program	Emergency assistance for housing, including minor repair of home to establish livable conditions, mortgage and rental assistance.	HUD	https://www.hud.gov/program_offices/public_indian_housing/publications/dhap
HOME Investment Partnerships Program	Grants to local and state government and consortia for permanent and transitional housing, (including financial support for property acquisition and rehabilitation for low income persons).	HUD	https://www.hud.gov/program_offices/comm_planning/affordablehousing/programs/home/
HUD Disaster Recovery Assistance	Grants to fund gaps in available recovery assistance after disasters (including mitigation).	HUD	https://www.hud.gov/info/disasterresources
Section 108 Loan Guarantee	Enables states and local governments participating in the Community Development Block Grant (CDBG) program to obtain federally guaranteed loans for disaster-distressed areas.	HUD	https://www.hudexchange.info/programs/section-108/

Program	Description	Lead Agency	Website
Smart-Growth Implementation Assistance (SGIA) program	The SGIA program focuses on complex or cutting-edge issues, such as stormwater management, code revision, transit-oriented development, affordable housing, infill development, corridor planning, green building, and climate change. Applicants can submit proposals under 4 categories: community resilience to disasters, job creation, the role of manufactured homes in sustainable neighborhood design or medical and social service facilities siting.	EPA	https://www.epa.gov/smartgrowth
Partners for Fish and Wildlife	Financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats.	U.S. Fish and Wildlife Service	https://www.fws.gov/partners/
FHWA Emergency Relief Program	Fund for the repair or reconstruction of Federal-aid highways that have suffered serious damage as a result of (1) natural disasters or (2) catastrophic failures from an external cause.	U.S. Department of Transportation (DOT)	https://www.fhwa.dot.gov/programadmin/erelief.cfm
Better Utilizing Investments to Leverage Development (BUILD)	Investing in critical road, rail, transit and port projects across the nation	U.S. DOT	https://www.transportation.gov/BUILDgrants/about
Community Facilities Direct Loan & Grant Program	This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial, or business undertakings.	USDA	https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program
Emergency Loan Program	USDA's Farm Service Agency (FSA) provides emergency loans to help producers recover from production and physical losses due to drought, flooding, other natural disasters or quarantine.	USDA	https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index
Emergency Watershed Protection (EWP) Program	Provide assistance to relieve imminent hazards to life and property caused by floods, fires, drought, windstorms, and other natural occurrences.	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/
Financial Assistance	Financial assistance to help plan and implement conservation practices that address natural resource concerns or opportunities to help save energy, improve soil, water, plant, air, animal and related resources on agricultural lands and non-industrial private forest land.	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/
Regional Conservation Partnership Program (RCPP)	The RCPP promotes coordination of NRCS conservation activities with partners that offer value-added contributions to expand our collective ability to address on-farm, watershed, and regional natural resource concerns. Through RCPP, NRCS seeks to co-invest with partners to implement projects that demonstrate innovative solutions to conservation challenges and provide measurable improvements and outcomes tied to the resource concerns they seek to address.	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/
Emergency Management Performance Grants (EMPG) Program	Assist local, tribal, territorial, and state governments in enhancing and sustaining all-hazards emergency management capabilities.	U.S. DHS	https://www.fema.gov/emergency-management-performance-grant-program

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Program	Description	Lead Agency	Website
Land & Water Conservation Fund	Matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities (as well as funding for shared federal land acquisition and conservation strategies).	National Park Service	https://www.nps.gov/subjects/lwcf/index.htm
Coastal Watersheds Grant Program	Restore America's Estuaries, in close coordination with and financial support from EPA, administers the National Estuary Program (NEP) Coastal Watersheds Grant Program. This grant program funds projects within the geographic areas shown here and supports the following Congressionally-set priorities: •Loss of key habitats resulting in significant impacts on fisheries and water quality such as seagrass, mangroves, tidal and freshwater wetlands, forested wetlands, kelp beds, shellfish beds, and coral reefs; •Recurring harmful algae blooms; •Unusual or unexplained marine mammal mortalities; •Proliferation or invasion of species that limit recreational uses, threaten wastewater systems, or cause other ecosystem damage; •Flooding and coastal erosion that may be related to sea-level rise, changing precipitation, or salt marsh, seagrass, or wetland degradation or loss; •Impacts of nutrients and warmer water temperatures on aquatic life and coastal ecosystems, including low dissolved oxygen conditions in estuarine waters; and •Contaminants of emerging concern found in coastal and estuarine waters such as pharmaceuticals, personal care products, and microplastics.	National Estuary Program	https://estuaries.org/initiatives/watershedgrants/
Rehabilitation of High Hazard Potential Dams Grant Program	The main objective of the HHPD grant program is to provide technical, planning, design, and construction assistance in the form of grants to non-federal sponsors for rehabilitation of eligible high hazard potential dams.	FEMA	https://www.fema.gov/emergency-managers/risk-management/dam-safety/grants/resources
State			
Local Government Records Management Improvement Fund (LGRMIF) Disaster Recovery Grants	Grants for disaster recovery projects related to damage caused by a sudden, unexpected event involving fire, water, man-made or natural phenomena where a timely response is necessary to prevent the irretrievable loss of vital or archival records, or to ensure reasonable, timely access to vital records.	New York State Archives / New York State Education Department	http://www.archives.nysed.gov/grants/grants_lgrmif.shtml
The New York State Emergency Services Revolving Loan	Repair of firefighting apparatus, ambulances, or rescue vehicles; Renovation, rehabilitation, or repair of facilities that house firefighting equipment, ambulances, rescue vehicles, and related equipment.	NYS DHSES	http://www.dhses.ny.gov/ofpc/services/loan/
Environmental Protection Fund (EPF)	Matching grants for the acquisition, planning, development, and improvement of parks, historic properties.	New York State Parks, Recreation & Historic Preservation (NYSOPRHP)	https://www.dec.ny.gov/about/92815.html

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Program	Description	Lead Agency	Website
Recreational Trails (RTP)	Program Matching grants for the acquisition, development, rehabilitation and maintenance of trails and trail-related projects.	NYSOPRHP	https://parks.ny.gov/grants/recreational-trails/default.aspx
Environmental Protection & Improvement Grants	Competitive grants for environmental protection and improvement; available for municipalities, community organizations, not-for-profit organizations and others.	New York State Department of Environmental Conservation	https://www.dec.ny.gov/about/92815.html
Volunteer Fire Assistance Grants	The grant is a 50/50 matching funds program. Its purpose is to make funds available to rural fire companies for the purchase of wildland firefighting equipment such as portable backpack pumps, Nomex protective clothing, hand tools, hard hats, hose, portable radios and dry hydrants.	NYSDEC	https://www.dec.ny.gov/regulations/2364.html
Clean Water Act Section 604(b) Water Quality Planning Grants	Provide funding to implement regional comprehensive water quality management planning activities as described in Section 604(b) of the federal Clean Water Act. 604(b) funds are to be used for water quality management planning activities, including tasks to determine the nature, extent and causes of point and nonpoint source water pollution problems, and to develop plans to resolve these problems.	NYSDEC	https://www.dec.ny.gov/lands/53122.html
Water Quality Improvement Project (WQIP) Program	The WQIP program is a competitive, reimbursement grant program that funds projects that directly address documented water quality impairments. Applications are typically available each spring through the Consolidated Funding Application.	NYSDEC	https://www.dec.ny.gov/pubs/4774.html
New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG)	The New York State Department of Environmental Conservation (DEC), in conjunction with the New York State Environmental Facilities Corporation (EFC), will offer grants to municipalities to help pay for the initial planning of eligible Clean Water State Revolving Fund (CWSRF) water quality projects. The ultimate goal of the EPG program is to advance water quality projects to construction, so successful applicants can use the engineering report funded by the grant to seek financing through the CWSRF program, Water Quality Improvement Project program, or other funding entities to further pursue the identified solution.	NYSDEC	https://www.dec.ny.gov/pubs/81196.html
Climate Smart Communities Grant Program	The CSC Grant program was established in 2016 to provide 50/50 matching grants to cities, towns, villages, and counties (or boroughs of New York City) of the State of New York for eligible climate adaptation and mitigation projects.	NYSDEC	https://www.dec.ny.gov/energy/109181.html
BRIDGE NY	The state is making funding available for local governments to rehabilitate and replace bridges and culverts statewide.	NYS DOT	https://www.dot.ny.gov/BRIDGENY

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022

6.5 MITIGATION STRATEGY DEVELOPMENT AND UPDATE

6.5.1 Update of Municipal Mitigation Strategies

To evaluate progress on local mitigation actions, each jurisdiction was provided with a Mitigation Action Plan Review Worksheet, pre-populated with those actions identified for their jurisdiction in the prior (2015) plan. For each action, municipalities were asked to indicate the status of each action ("No Progress/Unknown," "In Progress/Not Yet Complete," "Continuous," "Completed," "Discontinued") and provide review comments on each. Municipalities were requested to quantify the extent of progress and provide reasons for the level of progress or why actions were discontinued. Each jurisdictional annex provides a table identifying their prior mitigation strategy, the status of those actions and initiatives, and their disposition within their updated strategy.

Local mitigation actions identified as "Complete" and actions identified as "Discontinued" have been removed from the updated strategies. Those local actions that municipalities identified as "No Progress/Unknown" or "In Progress/Not Yet Complete," as well as certain actions/initiatives identified as "Continuous," have been carried forward in their local updated mitigation strategies. Actions considered ongoing capabilities were marked as "Discontinued" and included in the plan as ongoing capabilities. Municipalities were asked to provide further details on these projects to help better define the projects, identify benefits and costs, and improve implementation.

At the Kick-Off and during subsequent local level planning meetings, all participating municipalities were further surveyed to identify mitigation activities completed, ongoing, and potential/proposed. As new additional potential mitigation actions, projects or initiatives became evident during the plan update process, including as part of the risk assessment update and as identified through the public and stakeholder outreach process (see Section 3 – Planning Process), communities were made aware of these either through direct communication (local meetings, email, phone) or via their draft municipal annexes.

To help support the selection of an appropriate, risk-based mitigation strategy, each annex provided a summary of hazard vulnerabilities identified during the plan update process, either directly by municipal representatives or through review of available county and local plans and reports, and through the hazard profiling and vulnerability assessment process.

Beginning in November 2020, members of the Steering Committee and contract consultants worked directly with each jurisdiction (phone, email, local support meetings) to assist with the development and update of their annex and include mitigation strategies, focusing on identifying well-defined, implementable projects with a careful consideration of benefits (risk reduction, losses avoided), costs, and possible funding sources (including mitigation grant programs).

Concerted efforts were made to ensure that municipalities develop updated mitigation strategies that included activities and initiatives covering the range of mitigation action types described in recent FEMA planning guidance (FEMA "Local Mitigation Planning Handbook" March 2013), specifically:

- Local Plans and Regulations – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project – These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct man-made structures to reduce the impact of hazards.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Natural Systems Protection – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- Education and Awareness Programs – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as the National Flood Insurance Program and Community Rating System, StormReady (NOAA), and Firewise (NFPA) Communities.

A series of mitigation strategy workshops were conducted the week of June 9, 2021, for all participating jurisdictions to support the development of focused problem statements based on the impacts of natural hazards in the county and their communities. These problem statements are intended to provide a detailed description of the problem area, including its impacts to the municipality/jurisdiction; past damages; loss of service; etc. An effort was made to include the street address of the property/project location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing conditions (topography, terrain, hydrology) of the site. These problem statements form a bridge between the hazard risk assessment, which quantifies impacts to each community with the development of actionable mitigation strategies. In total, two workshops were held for Erie County's municipalities.

A strong effort has been made to better focus local mitigation strategies to clearly defined, readily implementable projects and initiatives that meet the definition or characteristics of mitigation. Broadly defined mitigation objectives have been eliminated from the updated strategy unless accompanied by discrete actions, projects or initiatives.

Certain continuous or ongoing strategies that represent programs that are, or since prior and existing plans have become, fully integrated into the normal operational and administrative framework of the community have been identified within the Capabilities section of each annex and removed from the updated mitigation strategy.

At least two mitigation projects per jurisdiction have been documented with an Action Worksheet, as per the New York State Hazard Mitigation Planning Standards Guide.

As discussed within the hazard profiles in Section 5.4 (Risk Assessment), the long-term effects of climate change are anticipated to exacerbate the impacts of weather-related hazards, including flood, severe storm, severe winter storm, and wildfire. By way of addressing these climate change-sensitive hazards within their local mitigation strategies and integration actions, communities are working to evaluate and recognize these long-term implications and potential impacts, and to incorporate in planning and capital improvement updates.

Municipalities included mitigation actions to address vulnerable critical facilities. These actions have been proposed in consideration of protection against 500-year events or worst-case scenarios. It is recognized, however, that in the case of projects being funded through Federal mitigation programs, the level of protection may be influenced by cost-effectiveness as determined through a formal benefit-cost analysis. In the case of "self-funded" projects, municipal discretion must be recognized. Further, it must be recognized that the county and municipalities have limited authority over privately-owned critical facility owners with regard to mitigation at any level of protection.

6.5.2 Update of County Mitigation Strategy

The update of the County-level mitigation strategies included a review of progress on the actions/initiatives identified in the 2015 HMP using a process similar to that used to review municipal mitigation strategy progress. The County, through their various department representatives, was provided with a Mitigation Action Plan Review Worksheet identifying all county-level actions and initiatives from the 2015 plan. The County reviewed

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

each action and provided progress. For each action, relevant county representatives were asked to indicate the status of each action (*No Progress/Unknown*, *In Progress/Not Yet Complete*, *Ongoing*, *Completed*, or *Discontinued*), and provide review comments on each.

Projects/initiatives identified as "*Complete*", as well as those actions identified as *Discontinued*, have been removed from this plan update. Those actions the County has identified as *No Progress/Unknown*, *In Progress/Not Yet Complete,* or *Ongoing* have been carried forward in the County's updated mitigation strategy. Actions considered ongoing capabilities were marked as *Discontinued* and included in the plan as ongoing capabilities.

Throughout the course of the plan update process, additional regional and county-level mitigation actions were identified by the following processes:

- Review of the results and findings of the updated risk assessment.
- Review of available regional and county plans reports and studies.;
- Direct input from county departments and other county and regional agencies, including:
    - Erie County Department of Environment and Planning
    - Erie County Department of Homeland Security and Emergency Services
    - Erie County Department of Health
    - Erie County Soil and Water Conservation District
    - Erie County Department of Public Works
    - Erie County Water Authority
- Input received through the public and stakeholder outreach process.

As discussed within the hazard profiles in Section 5.4 (Risk Assessment), the long-term effects of climate change are anticipated to exacerbate the impacts of weather-related hazards including drought, flood, severe storm, and severe winter storm. The County has included mitigation actions and initiatives, including continuing and long-term planning and emergency management support, to address these long-term implications and potential impacts.

Various county departments and agencies included mitigation actions to address vulnerable critical facilities. These actions were proposed in consideration of protection against 0.2% annual chance (500-year) events, or worst-case scenarios.

It is recognized, however, that in the case of projects being funded through federal mitigation programs, the level of protection can be influenced by cost-effectiveness, as determined through a formal benefit-cost analysis. In the case of "self-funded" projects, local government authority can affect the ability to implement. Further, the County has limited authority over privately-owned critical facility owners regarding mitigation at any level of protection.

6.5.3 Mitigation Best Practices

Catalogs of hazard mitigation best practices were developed that present a broad range of alternatives to be considered for use in Erie County, in compliance with 44 CFR Section 201.6(c)(3)(ii). One catalog was developed for each hazard of concern evaluated in this plan. The catalogs present alternatives that are categorized in two ways:

- By whom would have responsibility for implementation:
    - Individuals – personal scale
    - Businesses – corporate scale

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

  - Government – government scale
- By what the alternatives would do:
  - Manipulate the hazard
  - Reduce exposure to the hazard
  - Reduce vulnerability to the hazard
  - Build local capacity to respond to or be prepared for the hazard

The alternatives presented include actions that will mitigate current risk from hazards and actions that will help reduce risk from changes in the impacts of these hazards resulting from climate change. Hazard mitigation actions recommended in this plan were selected from among the alternatives presented in the catalogs. The catalogs provide a baseline of mitigation alternatives that are backed by a planning process, are consistent with the established goals and objectives, and are within the capabilities of the planning partners to implement. Some of these actions may not be feasible based on the selection criteria identified for this plan. The purpose of the catalogs was to provide a list of what could be considered to reduce risk from natural hazards within the planning area. Actions in the catalog that are not included for the partnership's action plan were not selected for one or more of the following reasons:

- The action is not feasible
- The action is already being implemented
- There is an apparently more cost-effective alternative
- The action does not have public or political support.

6.5.4 Mitigation Strategy Evaluation and Prioritization

Section 201.c.3.iii of 44 CFR requires how the identified mitigation strategies will be prioritized, implemented, and administered by the local jurisdictions. For this plan update, each mitigation strategy was prioritized using a modified STAPLEE (Social, Technical, Administrative, Political, Legal, Economic, and Environmental) mitigation action evaluation methodology based on a set of evaluation criteria suited to the purposes of hazard mitigation strategy evaluation. This method provides a systematic approach that considers the opportunities and constraints of implementing a particular mitigation action.

The Steering Committee applied an action evaluation and prioritization methodology, which includes an expanded set of 14 criteria to include the consideration of cost-effectiveness, availability of funding, anticipated timeline, and if the action addresses multiple hazards. The 14 evaluation/prioritization criteria used in the 2022 update process are:

1. Life Safety – How effective will the action be at protecting lives and preventing injuries?
2. Property Protection – How significant will the action be at eliminating or reducing damage to structures and infrastructure?
3. Cost-Effectiveness – Are the costs to implement the project or initiative commensurate with the benefits achieved?
4. Technical – Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.
5. Political – Is there overall public support for the mitigation action? Is there the political will to support it?
6. Legal – Does the municipality have the authority to implement the action?
7. Fiscal – Can the project be funded under existing program budgets (i.e., is this initiative currently budgeted for)? Or would it require a new budget authorization or funding from another source such as grants?

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

8. Environmental – What are the potential environmental impacts of the action? Will it comply with environmental regulations?
9. Social – Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?
10. Administrative – Does the jurisdiction have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?
11. Multi-hazard – Does the action reduce the risk to multiple hazards?
12. Timeline – Can the action be completed in less than 5 years (within our planning horizon)?
13. Local Champion – Is there a strong advocate for the action or project among the jurisdiction's staff, governing body, or committees that will support the action's implementation?
14. Other Local Objectives – Does the action advance other local objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of other plans and programs?

Participating jurisdictions were asked to use these criteria to assist them in evaluating and prioritizing mitigation actions identified in the 2022 update. Specifically, for each mitigation action, the jurisdictions were asked to assign a numeric rank (-1, 0, or 1) for each of the 14 evaluation criteria, defined as follows:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

Further, jurisdictions were asked to provide a brief summary of the rationale behind the numeric rankings assigned, as applicable. The numerical results were totaled and then used by each jurisdiction to help prioritize the action or strategy as *low*, *medium*, or *high*. Actions that had a numerical value between 1 and 5 were categorized as *low*; actions with numerical values between 6 and 9 were categorized as *medium*; and actions with numerical values between 10 and 14 were categorized as *high*. While this provided a consistent, systematic methodology to support the evaluation and prioritization of mitigation actions, jurisdictions may have additional considerations that could influence their overall prioritization of mitigation actions.

It is noted that jurisdictions may be carrying forward mitigation actions and initiatives from prior mitigation strategies that were prioritized using a different, but not inherently contrary, approach. Mitigation actions in the prior (2015) Erie County HMP were "qualitatively evaluated against the mitigation goals and objectives and other evaluation criteria. They were then prioritized into three categories: high, medium, and low." At their discretion, jurisdictions carrying forward prior initiatives were encouraged to re-evaluate their priority, particularly if conditions that would affect the prioritization criteria had changed.

For the plan update there has been an effort to develop more clearly defined and action-oriented mitigation strategies. These local strategies include projects and initiatives that are seen by the community as the most effective approaches to advance their local mitigation goals and objectives within their capabilities. In addition, each municipality was asked to develop problem statements. With active support from NYS DHSES planning staff, municipalities were able to develop action-oriented and achievable mitigation strategies.

As such, many of the initiatives in the updated mitigation strategy were ranked as *high* or *medium* priority, as reflective of the community's clear intent to implement them, available resources not-withstanding. In general, initiatives that would have had *low* priority rankings were appropriately screened out during the local action evaluation process.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

6.5.5 Benefit/Cost Review

Section 201.6.c.3iii of 44CFR requires the prioritization of the action plan to emphasize the extent to which benefits are maximized according to a cost/benefit review of the proposed projects and their associated costs. Stated otherwise, cost-effectiveness is one of the criteria that must be applied during the evaluation and prioritization of all actions comprising the overall mitigation strategy.

The benefit/cost review applied for the evaluation and prioritization of projects and initiatives in this plan update process was qualitative; that is, it does not include the level of detail required by FEMA for project grant eligibility under the Hazard Mitigation Assistance (HMA) grant programs. For all actions identified in the local strategies, jurisdictions have identified both the costs and benefits associated with project, action, or initiative.

Costs presented include the total project estimation. This can include administrative, construction (engineering, design, and permitting), and maintenance costs.

Benefits are the savings from losses avoided attributed to project implementation. These can include life safety, structure and infrastructure damages, loss of service or function, and economic and environmental damage and losses.

When possible, jurisdictions were asked to identify the actual or estimated dollar costs and associated benefits. Often numerical costs and/or benefits were not identified and may be impossible to quantify. In this case, jurisdictions were asked to evaluate project cost-effectiveness using *high*, *medium*, and *low* ratings. Where estimates of costs and benefits were available, the ratings were defined as the following:

Low < = $10,000 Medium = $10,000 to $100,000 High > = $100,000

Where quantitative estimates of costs and/or benefits were not available, qualitative ratings using the following definitions were used:

Table 6-4 Qualitative Cost and Benefit Ratings

Costs	
High	Existing funding levels are not adequate to cover the costs of the proposed project, and implementation would require an increase in revenue through an alternative source (e.g., bonds, grants, and fee increases).
Medium	The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Low	The project could be funded under the existing budget. The project is part of or can be part of an existing, ongoing program.
Benefits	
High	Project will have an immediate impact on the reduction of risk exposure to life and property.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property or will provide an immediate reduction in the risk exposure to property.
Low	Long-term benefits of the project are difficult to quantify in the short-term.

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-effective.

For some of the Erie County initiatives identified, the Planning Partnership may seek financial assistance under FEMA's HMA programs. These programs require detailed benefit/cost analysis as part of the application process. These analyses will be performed when funding applications are prepared, using the FEMA BCA model process. The Planning Partnership is committed to implementing mitigation strategies with benefits that exceed costs. For projects not seeking financial assistance from grant programs that require this sort of analysis, the

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Planning Partnership reserves the right to define benefits according to parameters that meet its needs and the goals and objectives of this plan.

Attachment: 24-Section-6-Mitigation-Strategy-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

SECTION 7. PLAN MAINTENANCE PROCEDURES

This section details the formal process that will ensure that the Hazard Mitigation Plan (HMP) remains an active and relevant document and that the Planning Partnership maintains its eligibility for applicable funding sources. The plan maintenance process includes a schedule for monitoring and evaluating the plan annually and producing an updated plan every 5 years. In addition, this section describes how public participation will be integrated throughout the plan maintenance and implementation process. It explains how the mitigation strategies outlined in this plan update will be incorporated into existing planning mechanisms and programs, such as comprehensive land use planning processes, capital improvement planning, and building code enforcement and implementation. The plan's format allows sections to be reviewed and updated when new data become available, resulting in a plan that will remain current and relevant.

The plan maintenance matrix shown in Table 7-1 provides a synopsis of responsibilities for plan monitoring, integration, evaluation, and update, which are discussed in further detail in the sections below.

Table 7-1. Plan Maintenance Matrix

Task	Approach	Timeline	Lead Responsibility	Support Responsibility
Monitoring	Outreach to planning partners to recommend update of mitigation strategies and progress toward implementation of project and identification of new projects and to provide updated information on funding opportunities.	Each June or after the occurrence of a presidentially declared disaster	Jurisdictional points of contact identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)	Jurisdictional implementation lead identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)
Integration	In order for integration of mitigation principles action to become an organic part of the ongoing county and municipal activities, the county will incorporate the distribution of the safe growth worksheet (see 7.1.2 below) for annual review and update by all participating jurisdictions.	June each year with interim email reminders to address integration in county and municipal activities	HMP Coordinator and jurisdictional points of contact identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)	HMP Coordinator
Evaluation	Review the status of previous actions, as submitted by the monitoring task lead, and assess the effectiveness of the plan; compile and finalize update of mitigation strategy.	Updated progress report completed by September 30 of each year	Jurisdictional points of contact identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)	Alternate jurisdictional points of contact
Update	Reconvene the planning partners, at a minimum, every 5 years to guide a comprehensive update to review and revise the plan.	Every 5 years or upon major update to Comprehensive Plan or after the occurrence of a major disaster	Erie County HMP Coordinator	Jurisdictional points of contacts identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

7.1 MONITORING, EVALUATING, AND UPDATING THE PLAN

The procedures for monitoring, evaluating, and updating the plan are provided below.

The HMP Coordinator is assigned to manage the maintenance and update of the plan during its performance period. The HMP Coordinator will convene the Planning Partnership and be the prime point of contact for questions regarding the plan and its implementation and will also coordinate the incorporation of additional information into the plan.

The HMP Coordinator will manage the monitoring, evaluation, and updating responsibilities identified in this section. As of the date of this plan, primary and secondary mitigation planning representatives (points of contact) are identified in each jurisdictional annex in Section 9 (Jurisdictional Annexes).

It will be the responsibility of each jurisdiction and its representatives to inform the HMP Coordinator of any changes in representation.

Currently, the Erie County HMP Coordinator is designated as:

Gregory Butcher, Deputy Commissioner
Erie County Department of Homeland Security and Emergency Services
45 Elm Street
Buffalo, NY 14203
716-858-6578
Email: gregory.butcher@erie.gov

7.1.1 Monitoring

The Planning Partnership will be responsible for monitoring progress on and evaluating the effectiveness of the plan and documenting annual progress. Each year, beginning one year after plan development, Erie County and local Planning Partnership representatives will collect and process information from the departments, agencies, and organizations involved in implementing mitigation projects or activities identified in their jurisdictional annexes (Section 9) of this plan, by contacting persons responsible for initiating and/or overseeing the mitigation projects.

In the first year of the performance period, this will be accomplished by utilizing an online performance progress reporting system (the BATool^{SM}), which will enable municipal and county representatives to directly access mitigation initiatives to easily update the status of each project, document successes or obstacles to implementation, and add or delete projects to maintain mitigation project implementation. It is anticipated that all participating partners will be prompted by the tool to update progress on a quarterly basis, providing an incentive for participants to refresh their mitigation strategies and to continue implementation of projects. It is expected that this reporting system will support the submittal of an increased number of project grant fund applications due to the functionality of the system, which facilitates the sorting and prioritization of projects.

In addition to progress on the implementation of mitigation actions, including efforts to obtain outside funding and obstacles or impediments to implementation of actions, the information that Planning Partnership representatives shall be expected to document, as needed and appropriate, includes:

- Any grant applications filed on behalf of any of the participating jurisdictions
- Hazard events and losses occurring in their jurisdiction
- Additional mitigation actions believed to be appropriate and feasible
- Public and stakeholder input.

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Plan monitoring for years 2 through 4 of the plan performance period will be similarly addressed via the BATool[SM] or manually.

7.1.2 Integration of the HMP into Municipal Planning Mechanisms

Hazard mitigation is sustained action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. Integrating hazard mitigation into a community's existing plans, policies, codes, and programs leads to development patterns that reduce risk from known hazards or to redevelopment that reduces risk from known hazards. The Erie County Planning Partnership was tasked with identifying how hazard mitigation is integrated into existing planning mechanisms. Section 9 (Jurisdictional Annexes) describes how this is done for each participating municipality. During this process, many municipalities recognized the importance and benefits of incorporating hazard mitigation into future municipal planning and regulatory processes.

The Planning Partnership representatives will incorporate mitigation planning as an integral component of daily government operations. Planning Partnership representatives will work with local government officials to integrate the newly adopted hazard mitigation goals and actions into the general operations of government and partner organizations. Further, the sample adoption resolution (Section 2 – Plan Adoption) includes a resolution item stating the intent of the local governing body to incorporate mitigation planning as an integral component of government and partner operations. By doing so, the Planning Partnership anticipates that:

1. Hazard mitigation planning will be formally recognized as an integral part of overall planning and emergency management efforts.
2. The HMP, Comprehensive Plans, Emergency Management Plans, and other relevant planning mechanisms will become mutually supportive documents that work in concert to meet the goals and needs of county residents.

During the HMP annual review process, each participating municipality will be asked to document how they are utilizing and incorporating the Erie County HMP into their day-to-day operations and planning and regulatory processes. Each municipality will also identify additional policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions and include these findings and recommendations in the Annual HMP Progress Report. The following checklist was adapted from FEMA's Local Mitigation Handbook (2013), Appendix A, Worksheet 4.2. This checklist will help a community analyze how hazard mitigation is integrated into local plans, ordinances, regulations, ordinances, and policies. By completing the checklist, it will help municipalities identify areas that currently integrate hazard mitigation and where to make improvements and reduce vulnerability to future development.

Table 7-2. Safe Growth Check List

Planning Mechanisms	Do You Do This? Yes	No	Notes: How is it being done or how will this be utilized in the future?
Operating, Municipal, and Capital Improvement Program Budgets			
• When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals.			
• Annually, during adoption process, the municipality will review mitigation actions when allocating funding.			
• Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?			

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Planning Mechanisms	Do You Do This? Yes	No	Notes: How is it being done or how will this be utilized in the future?
• Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?			
• Do budgets provide funding for hazard mitigation projects identified in the HMP?			
Human Resource Manual			
• Do any job descriptions specifically include identifying and/or implementing mitigation projects/actions or other efforts to reduce natural hazard risk?			
Building and Zoning Ordinances			
• Prior to zoning changes or development permitting, the municipality will review the HMP and other hazard analyses to ensure consistent and compatible land use.			
• Does the zoning ordinance discourage development or redevelopment within natural areas, including wetlands, floodways, and floodplains?			
• Does the ordinance contain natural overlay zones that set conditions			
• Does the ordinance require developers to take additional actions to mitigate natural hazard risk?			
• Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?			
• Does the ordinance prohibit development within or filling of wetlands, floodways, and floodplains?			
Subdivision Regulations			
• Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?			
• Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources?			
• Do the regulations allow density transfers where hazard areas exist?			
Comprehensive Plan			
• Are the goals and policies of the plan related to those of the HMP?			
• Does the future land use map clearly identify natural hazard areas?			
• Do the land use policies discourage development or redevelopment with natural hazard areas?			
• Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?			
Land Use			
• Does the future land use map clearly identify natural hazard areas?			
• Do the land use policies discourage development or redevelopment with natural hazard areas?			
• Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?			

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Planning Mechanisms	Do You Do This? Yes	No	Notes: How is it being done or how will this be utilized in the future?
Transportation Plan			
• Does the transportation plan limit access to hazard areas?			
• Is transportation policy used to guide growth to safe locations?			
• Are transportation systems designed to function under disaster conditions (e.g., evacuation)?			
Environmental Management			
• Are environmental systems that protect development from hazards identified and mapped?			
• Do environmental policies maintain and restore protective ecosystems?			
• Do environmental policies provide incentives to development located outside protective ecosystems?			
Grant Applications			
• Data and maps will be used as supporting documentation in grant applications.			
Municipal Ordinances			
• When updating municipal ordinances, hazard mitigation will be a priority			
Economic Development			
• Local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.			
Public Education and Outreach			
• Does the municipality have any public outreach mechanisms/ programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?			

7.1.3 Evaluating

Evaluation of the mitigation plan is an assessment of whether the planning process and actions have been effective, if the HMP goals are being achieved, and whether changes are needed. The HMP Coordinator will consult with the Planning Partnership members to evaluate the effectiveness of the plan implementation and to reflect changes that could affect mitigation priorities or available funding.

The status of the HMP will be discussed and documented at an annual plan review meeting of the Planning Partnership to be held either in person or via teleconference approximately 1 year from the date of local adoption of this update and successively thereafter. At least 2 weeks before the annual plan review meeting, the Erie County HMP Coordinator will advise Planning Partnership members of the meeting date, agenda, and expectations of the members.

The Erie County HMP Coordinator will be responsible for calling participants and coordinating the annual plan review meeting and soliciting input regarding progress toward meeting plan goals and objectives. These evaluations will assess whether:

- Goals and objectives address current and expected conditions
- The nature or magnitude of the risks has changed
- Current resources are appropriate for implementing the HMP and if different or additional resources are now available

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Actions were cost effective
- Schedules and budgets are feasible
- Implementation problems are present, such as technical, political, legal, or coordination issues with other agencies
- Outcomes have occurred as expected
- Changes in county, city, town, or village resources impacted plan implementation (e.g., funding, personnel, and equipment)
- New agencies/departments/staff are included, involving other local governments as defined under 44 CFR 201.6.

Specifically, the Planning Partnership will review the mitigation goals, objectives, and activities using performance-based indicators, including:

- New agencies/departments
- Project completion
- Underspending/overspending
- Achievement of the goals and objectives
- Resource allocation
- Timeframes
- Budgets
- Lead/support agency commitment
- Resources
- Feasibility

Finally, the Planning Partnership will evaluate how other programs and policies have conflicted or augmented planned or implemented measures and will identify policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions ("Implementation of Mitigation Plan through Existing Programs" subsection later in this section discusses this process). Other programs and policies can include those that address:

- Economic development
- Environmental preservation
- Historic preservation
- Redevelopment
- Health and/or safety
- Recreation
- Land use/zoning
- Public education and outreach
- Transportation

The Planning Partnership should refer to the evaluation forms, Worksheets #2 and #4 in the FEMA 386-4 guidance document, to assist in the evaluation process (see Appendix G – Plan Review Tools). Further, the Planning Partnership should refer to any process and plan review deliverables developed by the county or participating jurisdictions as a part of the plan review processes established for prior or existing local HMPs within the county.

The Erie County HMP Coordinator will be responsible for preparing an Annual HMP Progress Report for each year of the performance period, based on the information provided by the Planning Partnership and municipal

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

points of contact, and other information as appropriate and relevant. These annual reports will provide data for the 5-year update of this HMP and will assist in pinpointing any implementation challenges. By monitoring the implementation of the HMP, the Planning Partnership will be able to assess which projects are completed, which are no longer feasible, and which projects should require additional funding.

Following any major disasters, the HMP will be evaluated and revised to determine if the recommended actions remain relevant and appropriate. The risk assessment will also be revisited to see if any changes are necessary based on the pattern of disaster damage or if data listed in the Section 5.4 (Hazard Profiles) of this plan has been collected to facilitate the risk assessment. This is an opportunity to increase the community's disaster resistance and build a better and stronger community.

7.1.4 Updating

44 CFR 201.6.d.3 requires that local hazard mitigation plans be reviewed, revised as appropriate, and resubmitted for approval to remain eligible for benefits awarded under DMA 2000. It is the intent of the Erie County HMP Planning Partnership to update this plan on a 5-year cycle from the date of initial plan adoption.

To facilitate the update process, the Erie County HMP Coordinator, with support of the Planning Partnership, will use the second annual Planning Partnership meeting to develop and commence the implementation of a detailed plan update program. Prior to the 5-year update, the Erie County HMP Coordinator will invite representatives from the New York State Division of Homeland Security and Emergency Services (NYS DHSES) to provide guidance on plan update procedures. At a minimum, this will establish who will be responsible for managing and completing the plan update effort, items that need to be included in the updated plan, and a detailed timeline with milestones to ensure that the update is completed according to regulatory requirements.

At this meeting, the project team will determine what resources will be needed to complete the update and seek to secure these resources.

Following each 5-year update of the HMP, the updated plan will be distributed for public comment. After all comments are addressed, the HMP will be revised and distributed to all planning partners.

7.1.5 Grant Monitoring and Coordination

Erie County intends to be a resource to the Planning Partnership in the support of project grant writing and development. The degree of this support will depend on the level of assistance requested by the partnership during openings for grant applications. As part of grant monitoring and coordination, Erie County intends to provide the following:

- Notification to planning partners about impending grant opportunities
- A current list of eligible, jurisdiction-specific projects for funding pursuit consideration
- Notification about mitigation priorities for the fiscal year to assist the planning partners in the selection of appropriate projects.

7.2 IMPLEMENTATION OF MITIGATION PLAN THROUGH EXISTING PROGRAMS

Effective mitigation is achieved when hazard awareness and risk management approaches and strategies become an integral part of public activities and decision-making. Within the county, there are many existing plans and programs that support hazard risk management, and thus it is critical that this HMP integrate and coordinate with and complement those existing plans and programs.

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The Capability Assessment section of Section 6 (Mitigation Strategy) provides a summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, county, and local) that support hazard mitigation within the county. Within each jurisdictional annex in Section 9 (Jurisdictional Annexes), the county and each participating jurisdiction identified how they have integrated hazard risk management into their existing planning, regulatory, and operational/administrative framework ("existing integration") and how they intend to promote this integration ("opportunities for future integration").

It is the intention of Planning Partnership representatives to incorporate mitigation planning as an integral component of daily government operations. Planning Partnership representatives will work with local government officials to integrate the newly adopted hazard mitigation goals and actions into the general operations of government and partner organizations. Further, the sample adoption resolution (Section 2 – Plan Adoption) includes a resolution item stating the intent of the local governing body to incorporate mitigation planning as an integral component of government and partner operations. By doing so, the Planning Partnership anticipates that:

1) Hazard mitigation planning will be formally recognized as an integral part of overall emergency management efforts.
2) The HMP, Comprehensive Plans, Emergency Management Plans and other relevant planning mechanisms will become mutually supportive documents that work in concert to meet the goals and needs of county residents.

Other planning processes and programs to be coordinated with the recommendations of the HMP include the following:

- Emergency response plans
- Training and exercise of emergency response plans
- Debris management plans
- Recovery plans
- Capital improvement programs
- Municipal codes
- Community design guidelines
- Water-efficient landscape design guidelines
- Stormwater management programs
- Water system vulnerability assessments
- Community wildfire protection plans
- Comprehensive flood hazard management plans
- Resiliency plans
- Community Development Block Grant-Disaster Recovery action plans
- Public information/improved public participation
- Educational programs
- Continued interagency coordination

During the annual plan evaluation process, the HMP Coordinator and Planning Partnership will strive to identify additional policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions and include these findings and recommendations in the Annual HMP Progress Reporting.

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

7.3 CONTINUED PUBLIC INVOLVEMENT

Erie County and participating jurisdictions are committed to the continued involvement of the public in the hazard mitigation process. This HMP update will continue to be posted on line at the following link: https://www2.erie.gov/disaster/index.php?q=multi-hazard-mitigation-plan In addition, public outreach and dissemination of the HMP will include:

- Links to the plan on municipal websites of each jurisdiction with capability
- Continued utilization of existing social media outlets (Facebook, Twitter) to inform the public of natural hazard events, such as floods and severe storms; the public can be educated via the jurisdictional websites on how these applications can be used in an emergency situation
- Promotion of articles or workshops on hazards to educate the public and keep them aware of the dangers of hazards

The Erie County HMP Coordinator will be responsible for receiving, tracking, and filing public comments regarding this HMP. The public will have an opportunity to comment on the plan via the hazard mitigation website at any time. The Erie County HMP Coordinator will ensure that:

- Public and stakeholder comments and input on the plan, and hazard mitigation in general, are collected, recorded, and addressed as appropriate.
- The Erie County HMP website is maintained and updated as appropriate.
- Copies of the latest approved plan are available for review at appropriate county facilities, along with instructions to facilitate public input and comment on the plan.
- Public notices, including media releases, are made (as appropriate) to inform the public of the availability of the plan, particularly during plan update cycles.

Attachment: 25-Section-7-Plan-Maintenance-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

REFERENCES

Belvederesi et al. 2018. Statistical analysis of environmental consequences of hazardous liquid pipeline accidents. Online address: https://linkinghub.elsevier.com/retrieve/pii/S2405844018356020

Britannica. 2020. Erie County, New York. Accessed 2020. https://www.britannica.com/place/Erie-county-New-York.

Britannica. 2011. "Hail." < https://www.britannica.com/science/hail-meteorology >

Centers for Disease Control and Prevention (CDC). Social Vulnerability Index. Accessed 2021. https://svi.cdc.gov/map.html

Centers for Disease Control. 2020. "You Can Control Mold." Accessed 2021. Online address: https://www.cdc.gov/mold/control_mold.htm.

City of Buffalo. 2006. The Queen City Comprehensive Plan.

City of Lackawanna. 2020. Accessed 2020. http://lackawannany.gov/

Community Health Care Association of New York State (CHC NYS). 2020. "Hurricane Sandy Recovery: Generator Safety." On-Line Address: http://chcanys.org/index.php_src=gendocs&ref=GeneratorSafety&category=EmergencyPages.html

Cornell University Program on Applied Demographics. 2018. "Erie County Profile 2017". Online access https://pad.human.cornell.edu/profiles/Cattaraugus.pdf

Dinicola, K. 2009. U.S. Geological Survey (USGS). The "100-Year Flood." 2009. On-Line Address: http://pubs.usgs.gov/fs/FS-229-96/.

Disaster Preparedness Portal. 2017. "Saffir-Simpson Hurricane Wind Scale." Online address: http://disasterpreparednesscourse.com/disaster-hazards/cyclones-tropical/saffir-simpson-hurricane-wind-scale/

Environmental Literacy Council. "Deicing" Accessed 2021. https://enviroliteracy.org/environment-society/transportation/deicing/

Erie County Water Authority. 2020. "Mission". Accessed 2020. https://my.ecwa.org/MissionPage.

Erie County Water Authority. 2020. "Performance Metrics". Accessed 2020. https://my.ecwa.org/pdf/About/Mission/Authority_Performance_Measures_and_Reports/Mission%20Statement.pdf.

Federal Emergency Management Agency (FEMA). 2021. Disaster Declarations for States and Counties. https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties.

Federal Emergency Management Agency (FEMA). 2021. FEMA Benefit Cost Analysis (BCA) Toolkit 6.0 Release Notes. On-Line Address: https://www.fema.gov/sites/default/files/2020-08/fema_bca_toolkit_release-notes-july-2020.pdf

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Federal Emergency Management Agency (FEMA). 2018a. "Why Dams Fail." On-Line Address: https://www.fema.gov/why-dams-fail

Federal Emergency Management Agency (FEMA). 2007. Floodplain Management Principles and Current Practices. Accessed 2021. On-Line Address: https://training.fema.gov/hiedu/aemrc/courses/coursetreat/fm.aspx

Federal Emergency Management Agency (FEMA). 2003. "FEMA Flood Insurance Study Tutorial." Accessed 2021. On-Line Address: https://www.fema.gov/media-library-data/20130726-1550-20490-1795/ot_fis.pdf

Federal Emergency Management Agency (FEMA). 1997. FEMA's Multi-Hazard Identification and Risk Assessment (MHIRA). Accessed 2021. < http://www.fema.gov/media-library/assets/documents/7251?id=2214>

Federal Emergency Management Agency (FEMA). N.d. "Coastal Construction Manual." On-Line Address: https://www.fema.gov/media-library-data/20130726-1510-20490-9375/fema55_volii_ch10rev.pdf

Green, S. 2019. Effects of a Mudslide. Online Address: https://sciencing.com/effects-mudslide-8660158.htmlchast

Illinois Association for Floodplain and Stormwater Management. 2006. Section 1 Natural Aspects of Flooding: Part 1 Flooding and Floodplain Management. Mar. On-Line Address: http://www.illinoisfloods.org/documents/home_study_course/1%20Natural%20Aspects%20of%20Fl ooding.pdf.

Kreeger et al. 2010. Three Case Studies in Vulnerability Assessment and Adaptation Planning. Online Address: https://www.nrc.gov/docs/ML1434/ML14345A598.pdf

National Aeronautics and Space Administration. 2013. Severe thunderstorms and climate change. Online Address: https://climate.nasa.gov/news/897/severe-thunderstorms-and-climate-change/

National Oceanographic and Atmospheric Administration (NOAA) Storm Prediction Center (SPC). 2017. "SPC Products." https://www.spc.noaa.gov/misc/about.html

National Oceanographic and Atmospheric Administration (NOAA). 2013. "Ice Jams." March 13. On-Line Address: http://www.floodsafety.noaa.gov/ice_jam.shtml

National Oceanographic and Atmospheric Administration (NOAA). National Weather Service (NWS). 2011 "Flood Safety". Last Modified 5 July 2011.Online address: http://www.floodsafety.noaa.gov/floodsafe.shtml

National Oceanographic and Atmospheric Administration (NOAA). 2011. "Tornadoes 101." Online address: https://www.noaa.gov/stories/tornadoes-101

National Oceanographic and Atmospheric Administration (NOAA) "Climate change impacts us coasts threaten public health safety and economy" https://www.noaa.gov/noaa-usgs-climate-change-impacts-us-coasts-threaten-public-health-safety-and-economy

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Oceanographic and Atmospheric Administration (NOAA). National Weather Service (NWS). Accessed 2021. Historical Hurricane Tracker. Online address: NOAA Historical Hurricane Tracks

National Oceanographic and Atmospheric Administration (NOAA). 2019. Climate Change Impacts. Online Address: https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts

National Severe Storms Laboratory (NSSL). 2015. "Severe Weather 101 – Winter Weather Basics." Accessed 2021. On-Line Address: https://www.nssl.noaa.gov/education/svrwx101/winter/types/

National Severe Storms Laboratory (NSSL). 2013. "Severe Thunderstorm Climatology." National Oceanic & Atmospheric Administration. March 29. On-Line Address: http://www.nssl.noaa.gov/projects/hazard/index.html

National Snow and Ice Data Center (NSIDC). 2013. "Introduction to Snow." On-Line Address: http://nsidc.org/cryosphere/snow/index.html

National Weather Service (NWS). 2018. "Explanation of EF Scale Ratings." Online address: https://www.weather.gov/hun/efscale_explanation

National Weather Service (NWS). 2018. "Winter Weather." On-Line Address: https://www.weather.gov/aly/preparednessWinter

National Weather Service (NWS). 2016. "Winter Weather Safety." Accessed 2021. On-Line Address: http://www.nws.noaa.gov/om/winter/windchill.shtml

National Weather Service (NWS). 2015. "Natural hazard Statistics." National Oceanic & Atmospheric Administration. June 10. Accessed 2021. On-Line Address: http://www.nws.noaa.gov/om/hazstats.shtml

National Weather Service (NWS). 2013. "Winter Weather Forecasting." January. Accessed 2021. On-Line Address: http://www.weather.gov/media/abr/Skyscanner/2013/20130101.pdf

National Weather Service (NWS). 2010c. "Hail Awareness." On-Line Address: http://www.weather.gov/cae/hail.html

National Weather Service (NWS). 2009. "National Weather Service Glossary." June 25. On-Line Address: http://w1.weather.gov/glossary/

National Weather Service (NWS). 2009. "Thunderstorm." On-Line Address: http://w1.weather.gov/glossary/index.php?word=thunderstorm

National Weather Service (NWS). National Oceanic and Atmospheric Administration (NOAA). No date. "Watch/Warning/Advisory Definitions". Accessed August 2021. Online address: https://www.weather.gov/lwx/WarningsDefined

New York City Hazard Mitigation Plan. Accessed 2021. https://"www1.nyc.gov/site/em/ready/hazard-mitigation.page

New York State Department of Environmental Conservation (NYSDEC). 2020. "Bulk Storage Database Search." Online address: https://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=4

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

New York State Department of Environmental Conservation (NYSDEC). 2020. "Inventory of Dams." Online Address: http://gis.ny.gov/gisdata/metadata/nysdec.dams.xml

New York State Department of Environmental Conservation (NYSDEC). 2020. "Niagara River/Lake Erie Watershed". https://www.dec.ny.gov/lands/48024.html#Watershed.

New York State Department of Environmental Conservation (NYSDEC). 2018. "Map of Wildfires as Reported by NYS Forest Rangers and Fire Departments." Online address: http://www.dec.ny.gov/lands/68333.html

New York State Department of Environmental Conservation (NYSDEC). 2015. "New York State Stormwater Management Design Manual." Online address: https://www.dec.ny.gov/chemical/29072.html

New York State Department of Environmental Conservation (NYSDEC). 2009. "Guidance for Dam Hazard Classification". Online address: http://www.dec.ny.gov/docs/water_pdf/togs315.pdf.

New York State Department of Transportation (NYS DOT). 2020. County Roads Listing – Erie County. Accessed 2020. https://www.dot.ny.gov/divisions/engineering/technical-services/hds-respository/NYSDOT_2020_LHI_County_Roads_Erie_County.pdf.

New York State Department of Transportation (NYS DOT). 2019. Railroads in New York – 2019. Accessed 2020. https://www.dot.ny.gov/divisions/operating/opdm/passenger-rail/passenger-rail-repository/2019%20NYS%20Rail%20Map.pdf.

New York State Disaster Preparedness Commission (NYSDPC). New York State Emergency Management Office (NYSEMO). Draft New York State Comprehensive Emergency Management Plan (Volume 1). New York State Standard Multi-Hazard Mitigation Plan. Accessed 2021. Online address: http://www.semo.state.ny.us/programs/planning/hazmitplan.cfm

New York State Division of Homeland Security and Emergency Services (NYS DHSES). 2019 New York State Standard Multi-Hazard Mitigation Plan. 2019. Accessed 2021. Online address: https://mitigateny.availabs.org/

New York State Division of Homeland Security and Emergency Services (NYS DHSES). 2014 New York State Standard Multi-Hazard Mitigation Plan. 2014. Accessed 2021. Online address: http://www.dhses.ny.gov/oem/mitigation/plan.cfm

New York State Energy Research and Development Authority (NYSERDA). Responding to Climate Change in New York. 2014. Accessed 2021. Online address: http://www.nyserda.ny.gov/climaid

New York State Energy Research and Development Authority (NYSERDA). 2011. Responding to Climate Change in New York State – Synthesis Report. Accessed 2021. On-Line Address: https://www.nyserda.ny.gov/climaid

Radbruch-Hall, Dorothy H., et. al. "Landslide Overview Map of the Conterminous United States." United States Government Printing Office, Washington: 1982.

Stewart et. al. 2007. "Defining the Wildland-Urban Interface" Online address: http://silvis.forest.wisc.edu/wp-content/uploads/2018/10/Stewart-et-al-JOF-2007.pdf

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Tantala, M. et al.. 2003."The New York City Consortium for Earthquake Loss Mitigation (NYCEM) Earthquake Risks and Mitigation in New York, New Jersey, and Connecticut Region." Accessed 2021<http://nycem.org/techdocs/FinalReport/03-SP02p.pdf>.

Town of Alden. 2010. Town of Alden Comprehensive Plan.

Town of Boston. 2002. Town of Boston Comprehensive Plan.

Town of Brant. 2003. Town of Brant Comprehensive Plan.

Town of Clarence. 2007. Town of Clarence Master Plan.

Town of Concord and Village of Springville. 1999. Town of Concord and Village of Springville Comprehensive Plan.

Town of Eden 2015. Town of Eden Comprehensive Plan.

Town of Elma. 2020. Accessed 2020. http://www.elmanewyork.com/

Town of Evans & Village of Angola. 2019. Town of Evans & Village of Angola Comprehensive Plan.

Town of Hamburg. 2020. Accessed 2020. https://www.townofhamburgny.com/

Town of Lancaster. 2020. Accessed 2020. https://www.lancasterny.gov/

Town of Lancaster, Village of Lancaster, and Village of Depew. 2000. Town of Lancaster, Village of Lancaster, and Village of Depew Comprehensive Plan.

Town of Newstead and Village of Akron. 2001. Town of Newstead and Village of Akron Comprehensive Plan.

Town of North Collins. 2020. Accessed 2020. http://www.northcollinsny.org/

Town of Orchard Park. 2007. Town of Orchard Park Comprehensive Plan.

Town of Tonawanda. 2020. Accessed 2020. https://www.tonawanda.ny.us/

U.S. Army Corps of Engineers (USACE). 2020. "Dam Safety Program. Program Activities". On-Line Address: https://www.usace.army.mil/Missions/Civil-Works/Dam-Safety-Program/Program-Activities/

U.S. Army Corps of Engineers (USACE). 2020. "National Levee Database." Online address: https://levees.sec.usace.army.mil/#/

United States Bureau of Reclamation (USBR). 2012. "Flood Overtopping Failure of Dams and Levees". Online address: https://www.usbr.gov/ssle/damsafety/risk/BestPractices/Chapters/IV-2-20121126.pdf

U.S. Census Bureau. 2020. "Poverty Thresholds." Accessed 2021. Online address: https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

U.S. Department of Transportation (USDOT). Pipeline and Hazardous Materials Administration (PHSMA). 2020. "National Pipeline Mapping System Public Viewer." Online address: https://pvnpms.phmsa.dot.gov/PublicViewer/

U.S. Environmental Protection Agency 2020. Hazardous Waste. On-Line Address: https://www.epa.gov/hw/learn-basics-hazardous-waste

U.S. Environmental Protection Agency. 2020. "Envirofacts". Accessed 2021. https://enviro.epa.gov/.

U.S. Environmental Protection Agency (USEPA). 2001. "Chemical Accidents from Electrical Power Outages." September. On-Line Address: http://www.sbcfire.org/hazmat/Forms/BP_CalARP%20Forms/CalARPguidance/EPA_Safety%20Alerts/epa%20alert%20power%20outages.pdf

U.S. Forest Service (USFS). 2020. "Wildland Fire Management". Online address: https://www.fs.usda.gov/managing-land/fire

U.S. Forest Service (USFS). 2013. Wildfire, Wildlands, and People: Understanding and Preparing for Wildfire in the Wildland-Urban Interface. Online Address: https://www.fs.fed.us/openspace/fote/reports/GTR-299.pdf

U.S. Forest Service (USFS). 2003. "Influence of Forest Structure on Wildfire Behavior and the Severity of Its Effects". Online address: https://www.fs.fed.us/projects/hfi/docs/forest_structure_wildfire.pdf

U.S. Forest Service (USFS). Wildland Fire Assessment System (WFAS). Adjective Class Rating. Date Unknown. Accessed 2021. Online address: http://www.wfas.net/index.php/fire-danger-rating-fire-potential--danger-32/class-rating-fire-potential--danger-51

U.S. Geological Survey (USGS). 2020. At what magnitude does damage begin to occur in an earthquake? Online Address: https://www.usgs.gov/faqs/what-magnitude-does-damage-begin-occur-earthquake?qt-news_science_products=0#qt-news_science_products

U.S. Geological Survey (USGS). 2020. "Drought, Fire and Extreme Weather". On-Line Address: https://www.usgs.gov/ecosystems/climate-adaptation-science-centers/science/drought-fire-and-extreme-weather

U.S. Geological Survey (USGS). 2020. Ground Failure. Online Address: https://earthquake.usgs.gov/data/ground-failure/

U.S. Geological Survey (USGS). 2018. Water Quality after a Wildfire. Online Address: https://ca.water.usgs.gov/wildfires/wildfires-water-quality.html

U.S. Geological Survey (USGS). "Landslide Preparedness." December 18, 2013. Accessed 2021. Online address: http://landslides.usgs.gov/learn/prepare.php

U.S. Geological Survey (USGS). Hurricane Hazards – A National Threat. Fact Sheet 2005-3121. Oct. 2005. Accessed 2021. Online address: http://walrus.wr.usgs.gov/infobank/programs/html/factsheets/pdfs/2005_3121.pdf

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

U.S. Geological Survey (USGS). Geospatial Multi-Agency Coordination (GeoMAC). Accessed 2021 https://www.usgs.gov/special-topic/water-science-school/science/snowmelt-runoff-and-water-cycle?qt-science_center_objects=0#qt-science_center_objects

U.S. Geological Survey (USGS).. n.d. Sediment and Suspended Sediment. Online Address: https://www.usgs.gov/special-topic/water-science-school/science/sediment-and-suspended-sediment?qt-science_center_objects=0#qt-science_center_objects

U.S. Geological Survey (USGS). n.d.. What are the Effects of Earthquakes? Online Address: https://www.usgs.gov/natural-hazards/earthquake-hazards/science/what-are-effects-earthquakes?qt-science_center_objects=0#qt-science_center_objects

U.S. Geological Survey (USGS). "What is a Landslide and what causes one?" Accessed 2021. https://www.usgs.gov/faqs/what-a-landslide-and-what-causes-one?qt-news_science_products=0#qt-news_science_products

U.S. Nuclear Regulatory Commission (NRC). 2020. "New York". Accessed 2021. https://www.nrc.gov/info-finder/region-state/newyork.html.

Weather Channel. Weather Glossary. 2012. Accessed 2021. Online address: http://www.weather.com/glossary/h.html

Village of Alden. 2000. Village of Alden Comprehensive Plan.

Village of Angola. 2020. Accessed 2020. https://www.villageofangola.org/index.html

Village of Blasdell. 2020. Accessed 2020. https://www.blasdell.org/

Village of Hamburg. 2012. Village of Hamburg Comprehensive Plan.

Village of Kenmore. 2020. Accessed 2020. https://www.villageofkenmore.org/

Village of Sloan. 2020. Accessed 2020. https://villageofsloan.org/

Village of Springville. 2020. Accessed 2020. https://www.villageofspringvilleny.com/

Village of Springville. 2014. Village of Springville Comprehensive Plan.

Village of Williamsville. 2020. Accessed 2020. http://walkablewilliamsville.com/

Visit Buffalo Niagara. 2017. About Us. Online Address: https://www.visitbuffaloniagara.com/about/

Attachment: 26-References-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

%	Percent
ACS	American Community Survey
ADA	Americans with Disabilities Act
AFG	Assistance to Firefighters Grants
BCA	Benefit Cost Analysis
BCEGS	Building Code Effectiveness Grading Schedule
BFE	Base Flood Elevation
BOCES	Board of Cooperative Educational Services
BRIC	Building Resilient Infrastructure and Communities Program
BUI	Buildup Index
CAV	Community Assistance Visit
CBS	Chemical Bulk Storage
CDBG	Community Development Block Grant
CDBG-DR	Community Development Block Grant Disaster Recovery
CDC	Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CRRA	Community Risk and Resiliency Act
CRREL	Cold Regions Research and Engineering Laboratory
CRS	Community Rating System
CSC	Climate Smart Communities (NYSDEC)
CTC	Community Transportation Coalition
CWSRF	Clean Water State Revolving Fund
DCEA	Division of Code Enforcement and Administration
DFIRM	Digital Flood Insurance Rate Map
DMA 2000	Disaster Mitigation Act of 2000
DOT	Department of Transportation
DPW	Department of Public Works
DR	Major Disaster Declaration (FEMA)
DSR	Damage Survey Report
EAP	Education and Awareness Program
EAP	Emergency Action Plan
EC PHEP	Erie County Office of Public Health Emergency Preparedness

Attachment: 27-Acronyms-and-Abbreviations-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

EC DHSES	Erie County Department of Homeland Security and Emergency Services
EC DEP	Erie County Department of Environment and Planning
EC DOH	Erie County Department of Health
EF	Enhanced Fujita Scale
EFC	New York State Environmental Facilities Corporation
EHP	Environmental Planning and Historic Preservation
EM	Emergency Declaration (FEMA)
EM	Emergency Management
EMS	Emergency Medical Services
EOC	Emergency Operation Center
EOP	Emergency Operation Plan
EPA	Environmental Protection Agency
EPF LWRP	Environmental Protection Fund Local Waterfront Revitalization Program
ES	Emergency Services
ESRI	Environmental Systems Research Institute
EWP	Emergency Watershed Protection Program
FD	Fire Department
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FIA	Flood Insurance Administration
FIS	Flood Insurance Study
FM	Fuel Moisture
FMA	Flood Mitigation Assistance
FPA	Floodplain Administrator
FPI	Fire Potential Index
FSA	Farm Service Agency
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GIS	Geographic Information System
GML	General Municipal Law
HAZMAT	Hazardous Materials
HAZUS	Hazards U.S.
HAZUS-MH	Hazards U.S. Multi-Hazard
HMP	Hazard Mitigation Plan
HSGP	Homeland Security Grant Program

Attachment: 27-Acronyms-and-Abbreviations-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
IA	Individual Assistance
ID	Identification
ISO	Insurance Services Office
IT	Information Technology
KBDI	Keetch-Byram Drought Index
LEWPA	Lake Erie Watershed Protection Alliance
LGRMIF	Local Government Records Management Improvement Fund
LLC	Limited Liability Company
LPR	Local Plans and Regulations
LWRP	Local Waterfront Revitalization Program
MOSF	Major Oil Storage Facilities
MRP	Mean Return Period
NAC-AAA	National Avalanche Center – American Avalanche Association
NCEI	National Centers for Environmental Information
NEHRP	National Earthquake Hazard Reductions Program
NEP	National Estuary Program
NFDRS	National Fire Danger Rating System
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NGVD	National Geodetic Vertical Datum
NHC	National Hurricane Center
NID	National Inventory of Dams
NOAA	National Oceanic and Atmospheric Administration
NPDP	National Performance of Dams Program
NPL	National Priorities List
NRCC	Northeast Regional Climate Center
NR	Natural Resource Protection
NSIDC	National Snow and Ice Data Center
NSP	Natural Systems Protection
NSSL	National Severe Storms Library
NWP	Nationwide Permit
NWS	National Weather Service
NY	New York
NYC OEM	New York City Office of Emergency Management

Attachment: 27-Acronyms-and-Abbreviations-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

NYCRR	New York Codes, Rule, and Regulations
NYOIT	New York Office of Information Technology Services
NYS	New York State
NYS DEC	New York State Department of Environmental Conservation
NYS DHSES	New York State Division of Homeland Security and Emergency Services
NYS HMP	New York State Hazard Mitigation Plan
NYS GIS	New York State Geographic Information System
NYS OEM	New York State Office of Emergency Management
NYS OFP&C	New York State Office of Fire Prevention and Control
NYS OPRHP	New York State Parks, Recreation & Historic Preservation
NYSERDA	New York State Energy Research and Development Authority
NYSGS	New York State Geologic Survey
PA	Public Assistance
PBS	Petroleum Bulk Storage
PD	Police Department
PDM	Pre-Disaster Mitigation Program
PGA	Peak Ground Acceleration
EC PHEP	Erie County Office of Public Health Emergency Preparedness
PI	Public Information
POC	Point of Contact
Pop.	Population
PP	Property Protection
PR	Preventative Measures
RCV	Replacement Cost Value
RL	Repetitive Loss
RLF	Revolving Loan Fund
RSI	Regional Snowfall Index
RTE	Route
RTP	Recreational Trails
SBA	Small Business Administration
SGIA	Smart Growth Implementation Assistance program
SFHA	Special Flood Hazard Area
SIP	Structure and Infrastructure Project
SP	Structural Flood Control Projects
SPC	Storm Prediction Center
SPDES	State Pollutant Discharge Elimination System

Attachment: 27-Acronyms-and-Abbreviations-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

SSBG	Social Services Block Grant Program
SVI	Social Vulnerability Index
Sq. Mi.	Square mile
SRL	Severe Repetitive Loss
STAPLEE	Social, Technical, Administrative, Political, Legal, Economic, Environmental
SUNY Buffalo	State University of New York at Buffalo
SWCD	Soil and Water Conservation District
SWMP	Stormwater Management Plan/Program
SWOO	Strengths, Weaknesses, Obstacles and Opportunities
SWPPP	Stormwater Pollution Prevention Plan
TBD	To Be Determined
THIRA	Threat & Hazard Identification & Risk Assessment
TIGER	Topologically Integrated Geographic Encoding & Reference
TMDL	Total Maximum Daily Load
TS	Tropical Storm
UASI	Urban Areas Security Initiative
US	United States
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USD	U.S. Dollar
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEDA	U.S. Economic Development Administration
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
WFAS	Wildland Fire Assessment System
WQIP	Water Quality Improvement Project
WUI	Wildland Urban Interface

Attachment: 27-Acronyms-and-Abbreviations-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

GLOSSARY

This resource defines terms that are used in or support the hazard mitigation plan. These definitions were based on terms defined in documents included in the references section, with modifications as appropriate to address the Erie County specific definitions and requirements.

1% flood (100-year flood) – A flood that has a 1-percent chance of being equaled or exceeded in any given year. This flood event is also referred to as the base flood. The term "100-year flood" can be misleading; it is not the flood that will occur once every 100 years. Rather, it is the flood elevation that has a 1- percent chance of being equaled or exceeded each year. Therefore, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management to determine the need for flood insurance.

0.2 % flood (500-year flood) – A flood that has a 0.2-percent chance of being equaled or exceeded in any one year.

Aggregate Data – Data gathered together across an area or region (for example, census tract or census block data).

Annualized Loss – The estimated long-term value of losses from potential future hazard occurrences of a particular type in any given single year in a specified geographic area. In other words, the average annual loss that is likely to be incurred each year based on frequency of occurrence and loss estimates. Note that the loss in any given year can be substantially higher or lower than the estimated annualized loss.

Annualized Loss Ratio – Represents the annualized loss estimate as a fraction of the replacement value of the local building inventory. This ratio is calculated using the following formula: Annualized Loss Ratio = Annualized Losses / Exposure at Risk. The annualized loss ratio gauges the relationship between average annualized loss and building value at risk. This ratio can be used as a measure of relative risk between hazards as well as across different geographic units

Asset – Any man-made or natural feature that has value, including but not limited to people, buildings, infrastructure (such as bridges, roads, and sewer and water systems), and lifelines (such as electricity and communication resources or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks).

At-Risk – Exposure values that include the entire building inventory value in census blocks that lie within or border the inundation areas or any area potentially exposed to a hazard based on location.

Base Flood – Flood that has a 1 percent probability of being equaled or exceeded in any given year. It is also known as the 100-year flood.

Base Flood Elevation (BFE) – Elevation of the base flood in relation to a specified datum, such as the National Geodetic Vertical Datum of 1929. The BFE is used as the standard for the National Flood Insurance Program.

Benefit – Net project outcomes, usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of conducting a benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable, risk reduction factors, including a reduction in expected property losses (building, content, and function) and protection of human life.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Benefit-cost analysis (BCA) – Benefit-cost analysis is a systematic, quantitative method of comparing the projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness.

Blizzard – Characterized by low temperatures, wind gusts of 35 mph or more and falling and/or blowing snow that reduces visibility to 0.25 miles or less for an extended period of time (three or more hours).

Building – A structure that is walled and roofed, principally aboveground and permanently fixed to a site. The term includes a manufactured home on a permanent foundation on which the wheels and axles carry no weight.

Building Codes – Regulations that set forth standards and requirements for construction, maintenance, operation, occupancy, use, or appearance of buildings, premises, and dwelling units. Building codes can include standards for structures to withstand natural disasters.

Capability Assessment – An assessment that provides a description and analysis of a community or state's current capacity to address the threats associated with hazards. The capability assessment attempts to identify and evaluate existing policies, regulations, programs, and practices that positively or negatively affect the community or state's vulnerability to hazards or specific threats.

Climate – The meteorological elements, including temperature, precipitation, and wind, that characterizes the general conditions of the atmosphere over a period of time (typically 30-years) for a particular region.

Community Rating System (CRS) – CRS is a program that provides incentives for National Flood Insurance Program communities to complete activities that reduce flood hazard risk. When the community completes specific activities, the insurance premiums of these policyholders in communities are reduced.

Comprehensive Plan – A document, also known as a "general plan", covering the entire geographic area of a community and expressing community goals and objectives. The plan lays out the vision, policies, and strategies for the future of the community, including all of the physical elements that will determine the community's future development. This plan can discuss the community's desired physical development, desired rate and quantity of growth, community character, transportation services, location of growth, and siting of public facilities and transportation. In most states, the comprehensive plan has no authority in and of itself, but serves as a guide for community decision-making.

Critical Facility – Facilities that are critical to the health and welfare of the population and that are especially important following a hazard. Critical facilities include essential facilities, transportation systems, lifeline utility systems, high-potential loss facilities, and hazardous material facilities. As defined for the Erie County risk assessment, this category includes police stations, fire and/or EMS stations, major medical care facilities, and emergency communications.

Crop Moisture Index (CMI) – The CMI was developed by Wayne Palmer in 1968, can be used to measure the status of dryness or wetness affecting warm season crops and field activities. It gives the short-term or current status of purely agricultural drought or moisture surplus and can change rapidly from week to week.

Debris – The scattered remains of assets broken or destroyed during the occurrence of a hazard. Debris caused by a wind or water hazard event can cause additional damage to other assets.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Digital Elevation Model (DEM) – U.S. Geological Survey (USGS) Digital Elevation Model (DEM) data files that are digital representations of cartographic information in a raster form. DEMs include a sampled array of elevations for a number of ground positions at regularly spaced intervals. These digital cartographic/geographic data files are produced by USGS as part of the National Mapping Program.

Digital Flood Insurance Rate Maps (DFIRMs) – These maps are used to calculate the cost insurance premiums, establish flood risk zones and base flood elevations to mitigate against potential future flood damages to properties.

Displacement Time – After a hazard occurs, the average time (in days) that a building's occupants must operate from a temporary location while repairs are made to the original building due to damages resulting from the hazard.

Disaster Mitigation Act of 2000 (DMA 2000) – Law that requires and rewards local and state pre-disaster planning, promotes sustainability as a strategy for disaster resistance, and is intended to integrate state and local planning with the aim of strengthening state-wide mitigation planning.

Drought - A deficiency of moisture that results in adverse impacts on people, animals, or vegetation over a sizeable area.

Drought Impact Reporter (DIR) – The DIR is an interactive tool developed by the NDMC to collect, quantify, and map reported drought impacts for the U.S.

Duration – The length of time a hazard occurs.

Earthquake – A sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of earth's tectonic plates.

Essential Facility – A facility that is important to ensure a full recovery of a community or state following the occurrence of a hazard. These facilities can include: government facilities, major employers, banks, schools, and certain commercial establishments (such as grocery stores, hardware stores, and gas stations). For the Erie County risk assessment, this category was defined to include schools, colleges, shelters, adult living and adult care facilities, medical facilities and health clinics, hospitals.

Exposure – The number and dollar value of assets that are considered to be at risk during the occurrence of a specific hazard.

Extent – The size of an area affected by a hazard or the occurrence of a hazard.

Extra Tropical Cyclone – A group of cyclones defined as synoptic scale, low pressure, weather systems that occur in the middle latitudes of the Earth. These storms have neither tropical nor polar characteristics and are connected with fronts and horizontal gradients in temperature and dew point otherwise known as "baroclinic zones". These cyclones produce impacts ranging form cloudiness and mild showers to heavy gales and thunderstorms.

Federal Emergency Management Agency (FEMA) – Independent agency (now part of the Department of Homeland Security) created in 1978 to provide a single point of accountability for all federal activities related to disaster mitigation and emergency preparedness, response, and recovery.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Flash Flood – A flood occurring with little or no warning where water levels rise at an extremely fast rate.

Flood – A general and temporary condition of partial or complete inundation of normally dry land areas resulting from (1) the overflow of inland or tidal waters, (2) the unusual and rapid accumulation or runoff of surface waters from any source, or (3) mudflows or the sudden collapse of shoreline land.

Flood Depth – Height of the flood water surface above the ground surface.

Flood Elevation – Height of the water surface above an established datum (for example, the National Geodetic Vertical Datum of 1929, North American Vertical Datum of 1988, or mean sea level).

Flood Hazard Area – Area shown to be inundated by a flood of a given magnitude on a map.

Flood Insurance Rate Map (FIRM) – Map of a community, prepared by the FEMA that shows both the special flood hazard areas and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) – A study that provides an examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations in a community or communities.

Flood Mitigation Assistance (FMA) Program – A program created as a part of the National Flood Insurance Report Act of 1994. FMA provides funding to assist communities and states in implementing actions that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other NFIP insurance structures, with a focus on repetitive loss properties.

Floodplain – Any land area, including a watercourse, susceptible to partial or complete inundation by water from any source.

Flood Polygon – A geographic information system vector file outlining the area exposed to the flood hazard. HAZUS-MH generates this polygon at the end of the flood computations in order to analyze the inventory at risk.

Freezing Rain – Rain that falls as a liquid but freezes into glaze upon contact with the ground.

Frequency – A measure of how often events of a particular magnitude are expected to occur. Frequency describes how often a hazard of a specific magnitude, duration, and/or extent typically occurs, on average. Statistically, a hazard with a 100-year recurrence interval is expected to occur once every 100 years on average, and would have a 1 percent chance of happening in any given year. The reliability of this information varies depending on the kind of hazard being considered.

Fujita Scale of Tornado Intensity – Rates tornadoes with numeric values from F0 to F5 based on tornado wind speed and damage sustained. An F0 (wind speed less than 73 mph) indicates minimal damage such as broken tree limbs or signs, while an F5 (wind speeds of 261 to 318 mph) indicated severe damage sustained.

Geology – The scientific study of the earth, including its composition, structure, physical properties, and history.

Goals – General guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term in nature, and represent global visions.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Geographic Information Systems (GIS) – A computer software application that relates data regarding physical and other features on the earth to a database to be used for mapping and analysis.

GIS Shape Files – A type of GIS vector file developed by ESRI for their ArcView software. This type of file contains a table and a graphic. The records in the table are linked to corresponding objects in the graphic.

Hailstorm – Storm associated with spherical balls of ice. Hail is a product of thunderstorms or intense showers. It is generally white and translucent, consisting of liquid or snow particles encased with layers of ice. Hail is formed within the higher reaches of a well-developed thunderstorm. When hailstones become too heavy to be caught in an updraft back into the clouds of the thunderstorm (hailstones can be caught in numerous updrafts adding a coating of ice to the original frozen droplet of rain each time), they fall as hail and a hailstorm ensues.

Hazard – A source of potential danger or an adverse condition that can cause harm to people or cause property damage. For this risk assessment, priority hazards were identified and selected for the pilot project effort. A natural hazard is a hazard that occurs naturally (such as flood, wind, and earthquake). A man-made hazard is one that is caused by humans (for example, a terrorist act or a hazardous material spill). Hazards are of concern if they have the potential to harm people or property.

Hazards of Interest – A comprehensive listing of hazards that may affect an area.

Hazards of Concern – Those hazards that have been analytically determined to pose significant risk in an area, and thus the focus of the particular mitigation plan for that area (a subset of the Hazards of Interest).

Hazard Identification – The process of identifying hazards that threaten an area.

Hazardous Material Facilities – Facilities housing industrial and hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

Hazard Mitigation – Sustained actions taken to reduce or eliminate the long-term risk and effects that can result from the occurrence of a specific hazard. For example, building a retaining wall can protect an area from flooding.

Hazard Mitigation Grant Program (HMGP) – Authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, HMGP is administered by FEMA and provides grants to states, tribes, and local governments to implement hazard mitigation actions after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as a community recovers from a disaster.

Hazard Mitigation Plan – A collaborative document in which hazards affecting the community are identified, vulnerability to hazards assessed, and consensus reached on how to minimize or eliminate the effects of these hazards.

Hazard Profile – A description of the physical characteristics of a hazard, including a determination of various descriptors including magnitude, duration, frequency, probability, and extent. In most cases, a community can most easily use these descriptors when they are recorded and displayed as maps.

Hazards U.S. (HAZUS) – A GIS-based nationally standardized earthquake loss estimation tool developed by FEMA. HAZUS was replaced by HAZUS-MH (see below) in 2003.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazards U.S. – Multi-Hazard (HAZUS-MH) – A GIS-based nationally standardized earthquake, flood, and wind loss estimation tool developed by FEMA. The purpose of this pilot project is to demonstrate and implement the use of HAZUS-MH to support risk assessments

HAZUS-MH Risk Assessment Methodology – This analysis uses the HAZUS-MH modules (earthquake, wind--hurricane and flood) to analyze potential damages and losses. For this pilot project risk assessment, the flood and hurricane hazards were evaluated using this methodology.

HAZUS-MH-Driven Risk Assessment Methodology – This analysis involves using inventory data in HAZUS-MH combined with knowledge such as (1) information about potentially exposed areas, (2) expected impacts, and (3) data regarding likelihood of occurrence for hazards. For this risk assessment, a HAZUS-Driven Risk Assessment Methodology could not be used to estimate losses associated with any hazards because of a lack of adequate data. However, the methodology was used, based on more limited data to estimate exposure for the dam failure, urban fire, fuel pipeline breach, and HazMat release hazards.

Heavy Snow – Snowfall accumulating to 4" or more in depth in 12 hours or less; or snowfall accumulating to 6" or more in depth in 24 hours or less.

High Potential Loss Facilities – Facilities that would have a high loss associated with them, such as nuclear power plants, dams, and military installations.

Hurricane – An intense tropical cyclone, formed in the atmosphere over warm ocean areas, in which wind speeds reach 74 miles-per-hour or more and blow in a large spiral around a relatively calm center or "eye." Hurricanes develop over the North Atlantic Ocean, northeast Pacific Ocean, or the South Pacific Ocean (east of 160°E longitude). Hurricane circulation is counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.

Hydraulics – That branch of science, or of engineering, which addresses fluids (especially, water) in motion, its action in rivers and canals, the works and machinery for conducting or raising it, its use as a prime mover, and other fluid-related areas.

Hydrology – The science of dealing with the waters of the earth (for example, a flood discharge estimate is developed through conduct of a hydrologic study).

Infrastructure – The public services of a community that have a direct impact on the quality of life. Infrastructure includes communication technology such as phone lines or Internet access, vital services such as public water supplies and sewer treatment facilities, transportation system (such as airports, heliports; highways, bridges, tunnels, roadbeds, overpasses, railways, bridges, rail yards, depots; and waterways, canals, locks, seaports, ferries, harbors, dry docks, piers and regional dams).

Ice Jam – An accumulation of ice in a river that acts as a natural dam and can flood low-lying areas upstream. They occur when warm temperatures and heavy rains cause rapid snow melt.

Ice Storm – Term used to describe occasions when damaging accumulations of ice are expected during freezing rain situations. Significant accumulations of ice pull down trees and utility lines resulting in loss of power and communication.

Intensity – A measure of the effects of a hazard occurring at a particular place.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Inventory – The assets identified in a study region. It includes assets that can be lost when a disaster occurs and community resources are at risk. Assets include people, buildings, transportation, and other valued community resources.

Level 1 Analysis – A HAZUS-MH analysis that yields a rough estimate or preliminary analysis based on the nationwide default database included in HAZUS-MH. A Level 1 analysis is a great way to begin the risk assessment process and prioritize high-risk communities without collecting or using local data.

Level 2 Analysis – A HAZUS-MH analysis that requires the input of additional or refined data and hazard maps that will produce more accurate risk and loss estimates. Assistance from local emergency management personnel, city planners, GIS professionals, and others may be necessary for this level of analysis.

Level 3 Analysis – A HAZUS-MH analysis that yields the most accurate estimate of loss and typically requires the involvement of technical experts such as structural and geotechnical engineers who can modify loss parameters based on the specific conditions of a community. This level analysis will allow users to supply their own techniques to study special conditions such as dam breaks and tsunamis. Engineering and other expertise is needed at this level.

Lifelines – Critical facilities that include utility systems (potable water, wastewater, oil, natural gas, electric power facilities and communication systems) and transportation systems (airways, bridges, roads, tunnels and waterways).

Lightning – A visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds or between a rain cloud and the ground.

Loss Estimation – The process of assigning hazard-related damage and loss estimates to inventory, infrastructure, lifelines, and population data. HAZUS-MH can estimate the economic and social loss for specific hazard occurrences. Loss estimation is essential to decision making at all levels of government and provides a basis for developing mitigation plans and policies. It also supports planning for emergency preparedness, response, and recovery.

Lowest Floor – Under the NFIP, the lowest floor of the lowest enclosed area (including basement) of a structure. For the HAZUS-MH flood model, this information can be used to assist in assessing the damage to buildings.

Magnitude – A measure of the strength of a hazard occurrence. The magnitude (also referred to as severity) of a given hazard occurrence is usually determined using technical measures specific to the hazard. For example, ranges of wind speeds are used to categorize tornados.

Major Disaster Declarations – Post-disaster status requested by a state's governor when local and state resources are not sufficient to meet disaster needs. It is based on the damage assessment, and an agreement to commit state funds and resources to the long-term recovery. The event must be clearly more than the state or local government can handle alone.

Mean Return Period (MRP) – The average period of time, in years, between occurrences of a particular hazard (equal to the inverse of the annual frequency of exceedance).

Mitigation Actions – Specific actions that help you achieve your goals and objectives.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Mitigation Goals – General guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions.

Mitigation Objectives – Strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific and measurable.

Mitigation Plan – A plan that documents the process used for a systematic evaluation of the nature and extent of vulnerability to the effects of natural hazards typically present in a state or community. The plan includes a description of actions to minimize future vulnerability to hazards. This plan should be developed with local experts and significant community involvement.

National Drought Mitigation Center (NDMC) – The NDMC helps develop and implement measures to reduce societal vulnerability to drought, stressing preparedness and risk management rather than crisis management. Most of the NDMC's services are directed to state, federal, regional, and tribal governments that are involved in drought and water supply planning. The NDMC produces a daily drought monitor map that identifies drought areas and ranks droughts by intensity. U.S. Drought Monitor summary maps are available from May 1999 through the present and identify general drought areas and classification droughts by intensity ranging from D1 (moderate drought) to D4 (exceptional drought). Category D0, drought watch areas, are either drying out and possibly heading for drought, or are recovering from drought but not yet back to normal, suffering long-term impacts such as low reservoir levels.

National Flood Insurance Program (NFIP) – Federal program created by Congress in 1968 that makes flood insurance available in communities that enact minimum floodplain management regulations in 44 Code of Federal Regulations (CFR) §60.3.

New York State Division of Homeland Security & Emergency Services (NYS DHSES) – NYS DHSES and its predecessor agencies have been responsible for coordinating the activities of all State agencies to protect New York's communities, the State's economic well-being, and the environment from natural and man-made disasters and emergencies. NYS DHSES routinely assists local governments, voluntary organizations, and private industry through a variety of emergency management programs including hazard identification, loss prevention, planning, training, operational response to emergencies, technical support, and disaster recovery assistance.

Nor'Easter – Named for the strong northeasterly winds blowing in ahead of the storm, are also referred to as a type of extra-tropical cyclones (mid-latitude storms, or Great Lake storms). A Nor'Easter is a macro-scale extra-tropical storm whose winds come from the northeast, especially in the coastal areas of the Northeastern U.S. and Atlantic Canada.

North America Drought Monitor (NA-DM) – The NA-DM is a cooperative effort between drought experts in Canada, Mexico and the U.S. to monitor drought across the continent on an ongoing basis. The Drought Monitor concept was developed as a process that synthesizes multiple indices, outlooks and local impacts, into an assessment that best represents current drought conditions. The final outcome of each Drought Monitor is a consensus of federal, state and academic scientists. Maps of U.S. droughts are available from this source from 2003 to the present.

Objectives – Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific and measurable.

Occupancy Classes – Categories of buildings used by HAZUS-MH (for example, commercial, residential, industrial, government, and "other").

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Ordinance – A term for a law or regulation adopted by local government.

Palmer Drought Severity Index (PDSI) – The PDSI was developed in 1965, and indicates the prolonged and abnormal moisture deficiency or excess. The PDSI is an important climatological tool for evaluating the scope, severity, and frequency of prolonged periods of abnormally dry or wet weather. It can be used to help delineate disaster areas and indicate the availability of irrigation water supplies, reservoir levels, range conditions, amount of stock water, and potential intensity of forest fires.

Planning – The act or process of making or carrying out plans; the establishment of goals, policies and procedures for a social or economic unit.

Post-disaster mitigation – Mitigation actions taken after a disaster has occurred, usually during recovery and reconstruction.

Presidential Disaster Declaration – A post-disaster status that puts into motion long-term federal recovery programs, some of which are matched by state programs, and designed to help disaster victims, businesses, and public entities in the areas of human services, public assistance (infrastructure support), and hazard mitigation. If declared, funding comes from the President's Disaster Relief Fund and disaster aid programs of other participating federal agencies.

Preparedness – Actions that strengthen the capability of government, citizens, and communities to respond to disasters.

Priority Hazards – Hazards considered most likely to impact a community based on frequency, severity, or other factors such as public perception. These are identified using available data and local knowledge.

Provided Data – The databases included in the HAZUS-MH software that allow users to run a preliminary analysis without collecting or using local data.

Probability – A statistical measure of the likelihood that a hazard event will occur.

Public Education and Outreach Programs – Any campaign to make the public more aware of hazard mitigation and mitigation programs, including hazard information centers, mailings, public meetings, etc.

Recovery – The actions taken by an individual or community after a catastrophic event to restore order and lifelines in the community.

Regulation – Most states have granted local jurisdictions broad regulatory powers to enable the enactment and enforcement of ordinances that deal with public health, safety, and welfare. These include building codes, building inspections, zoning, floodplain and subdivision ordinances, and growth management initiatives.

Recurrence Interval – The average time between the occurrences of hazardous events of similar size in a given location. This interval is based on the probability that the given event will be equaled or exceeded in any given year.

Repetitive Loss Property – A property that is currently insured for which two or more National Flood Insurance Program losses (occurring more than ten days apart) of at least $1,000 each have been paid within any 10-year period since 1978.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Replacement Value – The cost of rebuilding a structure. This cost is usually expressed in terms of cost per square foot and reflects the present-day cost of labor and materials to construct a building of a particular size, type and quality.

Resolutions – Expressions of a governing body's opinion, will, or intention that can be executive or administrative in nature. Most planning documents must undergo a council resolution, which must be supported in an official vote by a majority of representatives to be adopted. Other methods of making a statement or announcement about a particular issue or topic include proclamations or declarations.

Resources – Resources include the people, materials, technologies, money, etc., required to implement strategies or processes. The costs of these resources are often included in a budget.

Risk – The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Risk Assessment – A methodology used to assess potential exposure and estimated losses associated with priority hazards. The risk assessment process includes four steps: (1) identifying hazards, (2) profiling hazards, (3) conducting an inventory of assets, and (4) estimating losses.

Risk Factors – Characteristics of a hazard that contribute to the severity of potential losses.

Riverine – Of or produced by a river (for example, a riverine flood is one that is caused by a river overflowing its banks).

Saffir-Simpson Scale – This scale categorizes or rates hurricanes from 1 (Minimal) to 5 (Catastrophic) based on their intensity. It is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor in the shape of the coastline, in the landfill region.

Scale – A proportion used in determining a dimensional relationship; the ratio of the distance between two points on a map and the actual distance between the two points on the earth's surface.

Scour – Removal of soil or fill material by the flow of floodwaters. This term is frequently used to describe storm-induced, localized, conical erosion around pilings and other foundation supports where the obstruction of flow increases turbulence.

Severe Repetitive Loss Property – A structure that is currently insured for which four or more National Flood Insurance Program losses (including building and contents) of at least $5,000 each, and with the cumulative amount of claim payments exceeding $20,000; or for which two separate claim payments (building only) have been made with the cumulative amount of claim payments exceeding the market value of the structure.

Special Flood Hazard Area (SFHA) – An area within a floodplain having a 1-percent or greater chance of flood occurrence in any given year (that is, the 100-year or base flood zone); represented on FIRMs as darkly shaded areas with zone designations that include the letter "A" or "V."

Stafford Act – The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law (PL) 100-107 was signed into law on November 23, 1988. This law amended the Disaster Relief Act of 1974,

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

PL 93-288. The Stafford Act is the statutory authority for most Federal disaster response activities, especially as they pertain to FEMA and its programs.

Stakeholder – Stakeholders are individuals or groups, including businesses, private organizations, and citizens, that will be affected in any way by an action or policy.

Standardized Precipitation Index (SPI) – The SPI is a probability index that considers only precipitation. It is based on the probability of recording a given amount of precipitation, and the probabilities are standardized so that an index of zero indicates the median precipitation amount (half of the historical precipitation amounts are below the median, and half are above the median). The index is negative for drought, and positive for wet conditions.

State Hazard Mitigation Officer (SHMO) – The representative of state government who is the primary point of contact with FEMA, other state and Federal agencies, and local units of government in the planning and implementation of pre- and post-disaster mitigation activities.

Structure – Something constructed (for example, a residential or commercial building).

Study Area – The geographic unit for which data are collected and analyzed. A study area can be any combination of states, counties, cities, census tracts, or census blocks. The study area definition depends on the purpose of the loss study and in many cases will follow political boundaries or jurisdictions such as city limits.

Substantial Damage – Damage of any origin sustained by a structure in a SFHA, for which the cost of restoring the structure to its pre-hazard event condition would equal or exceed 50 percent of its pre-hazard event market value.

Thunderstorm – A local storm produced by a cumulonimbus cloud and accompanied by lightning and thunder. It forms from a combination of moisture, rapidly rising warm air and a force capable of lifting air, such as a warm and cold front, a sea breeze, or a mountain.

Topographic – Map that shows natural features and indicate the physical shape of the land using contour lines based on land elevation. These maps also can include man-made features.

Tornado – A violently rotating column of air extending from a thunderstorm to the ground.

Transportation Systems – One of the lifeline system categories. This category includes: airways (airports, heliports, highways), bridges, tunnels, roadbeds, overpasses, transfer centers; railways (tracks, tunnels, bridges, rail yards, depots), and waterways (canals, locks, seaports, ferries, harbors, dry docks, piers).

Tropical Cyclone – A generic term for a cyclonic, low-pressure system over tropical or sub-tropical waters containing a warm core of low barometric pressure which typically produces heavy rainfall, powerful winds and storm surge.

Tropical Depression – An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of less than 38 mph. It has no “eye”(the calm area in the center of the storm) and does not typically have the organization or the spiral shape of more powerful storms.

Tropical Storm – An organized system of strong thunderstorms with a defined surface circulation and maximum sustained wind between 39 to 73 mph.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Utility Systems – One of the lifeline systems categories. This category includes potable water, wastewater, oil, natural gas, electric power facilities and communication systems.

Vulnerability – Description of how exposed or susceptible an asset is to damage. This value depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power. If an electric substation is flooded, it will affect not only the substation itself, but a number of businesses as well. Often, indirect affects can be much more widespread and damaging than direct affects.

Vulnerability Assessment – Evaluation of the extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability assessment should address impacts of hazard occurrences on the existing and future built environment.

Watershed – Area of land that drains down gradient (from areas of higher land to areas of lower land) to the lowest point; a common drainage basin. The water moves through a network of drainage pathways, both underground and on the surface. Generally, these pathways converge into streams and rivers, which become progressively larger as the water moves downstream, eventually reaching an estuary, lake, or ocean.

Zone – A geographical area shown on a National FIRM that reflects the severity or type of flooding in the area.

Zoning Ordinance – Designation of allowable land use and intensities for a local jurisdiction. Zoning ordinances consist of two components: a zoning text and a zoning map.

Attachment: 28-Glossary-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

APPENDIX A. ADOPTION RESOLUTIONS

The Erie County and municipal adoption resolutions will be included in this appendix upon receipt of the Federal Emergency Management Agency (FEMA) Approval Pending Adoption (APA) status. Please refer to Section 8 (Planning Partnership) for additional information on plan adoption procedures.

This appendix also includes an example resolution to be submitted by Erie County and participating jurisdictions authorizing adoption of the Erie County Hazard Mitigation Plan.

Attachment: 29-Appendix-A-Adoption-Resolution-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

RESOLUTION NO. XXXX-XX

A RESOLUTION OF THE Governing Body OF THE Jurisdiction Name

AUTHORIZING THE ADOPTION OF THE

2022 ERIE COUNTY, NY HAZARD MITIGATION PLAN

WHEREAS, all jurisdictions within Erie County have exposure to hazards that increase the risk to life, property, environment, and the County and local economy; and

WHEREAS; pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre- and post-disaster hazard mitigation programs; and

WHEREAS; a coalition of Erie County municipalities with like planning objectives has been formed to pool resources and create consistent mitigation strategies within Erie County; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising this strategy;

NOW, THEREFORE, BE IT RESOLVED that the [**jurisdiction name**]:

1) Adopts in its entirety, the 2022 Erie County Hazard Mitigation Plan (the "Plan") as the jurisdiction's Hazard Mitigation Plan, and resolves to execute the actions identified in the Plan that pertain to this jurisdiction.
2) Will use the adopted and approved portions of the Plan to guide pre- and post-disaster mitigation of the hazards identified.
3) Will coordinate the strategies identified in the Plan with other planning programs and mechanisms under its jurisdictional authority.
4) Will continue its support of the Planning Partnership as described within the Plan.
5) Will help to promote and support the mitigation successes of all participants in this Plan.
6) Will incorporate mitigation planning as an integral component of government and partner operations.
7) Will provide an update of the Plan in conjunction with the County no less than every five years.

Attachment: 29-Appendix-A-Adoption-Resolution-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

PASSED AND ADOPTED on this X[st], X[nd], X[rd], X[th] day of MONTH, YEAR, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Mayor, City/Town/Village of _____

ATTEST: _____

Clerk, City/Town /Village of _____

Attachment: 29-Appendix-A-Adoption-Resolution-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Erie County																		
Amy Alduino	Recycling Coordinator, DEP	x		x				x						x				
Greg Butcher	Deputy Commissioner, Department of Homeland Security and Emergency Services	x	x	x	x	x	x	x		x	x	x	x	x	x		x	x
Melissa Calhoun	Public Safety Officer - Special Assistant, Department of Homeland Security and Emergency Services	x	x	x	x	x		x	x		x			x	x	x	x	x
Dan Castle	Deputy Commissioner, Erie County DEP	x	x	x			x	x		x	x	x	x	x				
Mark Cornell	Deputy Commissioner, Erie County Department of Parks	x					x	x		x		x	x					
John Deplanche	Senior Civil Engineer	x			x	x	x	x	x	x		x	x	x				
Joseph Fiegl	Deputy Commissioner, Erie County Division of Sewerage Management					X		X		X						x		
Tracy Fricano-Chalmers	Regional Coordinator, Department of Health	x			x			x	x									
Mike Gangemi	Senior Planner, DEP	x			x													
Mark Gaston	Erie County Soil and Water Conservation District							x										
William Geary	Commissioner, Department of Public Works							x										
John Hood	Environmental Compliance, DEP	x			x													
Lisa Mathies-Wiza	Director, GIS	x			x													

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Daniel Neaverh	Commissioner, Department of Homeland Security and Emergency Services	x	x	x		x					x				x			
Joanna Panasiewicz	Erie County Soil and Water Conservation District	x		x	x		x	x	x	x	x	x	x	x	x		x	
Darien Pratchett	Emergency Services Coordinator, Erie County Department of Homeland Security and Emergency Services																x	
Brian Rose	Senior Project Manager, Erie County Department of Public Works	x		x			x	x		x		x	x					
Ryan Sheedy	Senior MERS Coordinator, Erie County Department of Homeland Security and Emergency Services	x	x	x			x	x		x		x	x					
Kristofer Strauss	Senior Project Manager, Erie County Department of Public Works	x					x	x		x		x	x					
Josh Wilson	Coordinator, Departmant of Environment & Planning	x	x	x														
Erie County Water Authority																		
Matt Barrett	Security Officer	x	x	x	x	x	x	x		x	x	x	x	x				x
Akron V																		
Michael Borth	Code Enforcement Officer					x		x						x				
Jon Cummings	Public Works Manager					x												
Jayne DeTine	Clerk	x					x	x		x		x	x	x				
Daniel Kowalik	Emegency Manager	x		x		x		x			x							x
Carl Patterson	Mayor																	x
Alden T																		
Dean Adamski	Supervisor																	x

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Terry Wochowiak	Administrator	x			x			x										
Alden V																		
Joseph Czechowski	Code Enforcement Officer					X		X										
Michael Manicki	Mayor																	x
Mark Pruitt	OEM Coordinator	x					x	x		x		x	x					x
Amherst T																		
Mark Berke	Building Inspector					x		x										
Douglas Gesel	Code Enforcement Officer					x		x										
Laurie Stillwell	Community Development Director					x		x										
Dan Ulatowski	Town Planner					x		x										
Jim Zymanek	Director Emergency Services	x			x		x	x		x			x	x		x		x
Angola V																		
Howard Frawley	Mayor																	x
Jack Krajacic	DPW																	
Nicole Milks	Clerk/Treasurer	x				X	x	X		x		X	x			x		x
Phil Tremblay	Building Inspector/Code Enforcement/ FPA	x				X	x	X		x		x	x					
Aurora T																		
Elizabeth Cassidy	CEO	x												x		x	x	x
Mark Hartley	Emergency Manager	x					x	x		x		x	x					
Martha Librock	Clerk	x					x	x		x		x	x					
Randy Taylor	Emergency Manager	x					x	x		x		x	x					
Blasdell V																		
Joseph Fox	Emergency Manager	x		x		X	x	X		x		X	x					x
Janet Plarr	Village Administrator					X		X										x
Boston T																		
Jason Keding	Supervisor	x			x		x	x		x		x	x				x	x
Brant T																		
Jim Brecker	Code Enforcement Officer	x					x	x		x		x	x					
Mark DeCarlo	Supervisor	x					x	x		x		X	x					x

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Jefferey Grier		x					x	x		x		x	x					
Connie Miner	Grant Manager	x					x	x		x		x	x					x
Buffalo C																		
Don Poleto	Engineer, DPW	x	x				x	x		x		x	x					
Michael Tuberdyke	Buffalo Fire Department	x					x	x		x		x	x					x
Cheektowaga T																		
Mike Mazurowski	Emergency Services Coordinator	x			x		x	x		x		X	x	x			x	x
Lynn Rybak	Supervisor's Office	x			x		x	x		x		x	x					
Clarence T																		
Dave Baumler	Emergency Manager	x		x														x
David Bissonette	Emergency Manager	x		x		x		x				x	x				x	x
Timothy Lavocat	Town Engineer					x		x										
Colden T																		
James DePasquale	Supervisor	x					x	x		x		x	x					x
Patty Zurbrick	Councilwonam	x					x	x		x		x	x					x
Collins T																		
Ken Martin	Supervisor	x		x			x	x		x		X	x	x			x	x
Concord T																		
Clyde Drake	Supervisor	x			x		x	x				x	x	x				x
Mikek Willibey		x												x			x	x
Depew V																		
Anthony Fischone	Code Enforcement Officer	x			x	X	x	X		x			x					
RJ Nieman	Emergency Manager	x	x	x		X	x	x		x	x	x	x					x
Terry Wachowak	Administrator					X		X										
East Aurora V																		
Elizabeth Cassidy	Clerk																x	
Randy Taylor	Emergency Manager	x					x	x		x		x	x					
Cathie Thomas	Administrator	x		x			x	x		x	x	x	x	x		x		x
Eden T																		
Brian Burgstahler	Emergency Manager	x		x		X	X	X		x		X	x	x				x
Scott Hultquist	Eden EMS, Director of Operations					X		X										
Rick Kirst	East Eden Fire Chief					X		X										

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Glenn Kirwin	Assistant Emergency Manager	x					x	x		x		x	x					
Bill Laing	Eden Fire, Clerk					X		X										
Ronald Maggs	Highway Superintendent					X		X					X					
David Rice	Code Enforcement Officer					X		X										
Gregory Savage	Chief of Police					X		X										
Robert Stickney	Emergency Management	x		x														
Elma T																		
Wayne A. Clark	Supervisor					X		X										x
Joeseph Colern	Code Enforcement Officer					X		X										
Kerry Galuski	Bookkeeper					X												
Evans T																		
Corey Baskerville	Supervising Code Enforcement Officer & MS4 Officer					X		X					X					x
William Smith	Director of Planning & Community Development	x				X	x	X		x		X	x					x
Farnham V																		
Jere Hoisington	Mayor	x					x	x		x		X	x					x
Gowanda V																		
Nick Crassi	Disaster Coordinator	x					x	x		x		x	x					x
Carol Sheibley	Deputy Mayor	x					x	x		x		X	x					x
Grand Island T																		
Bob Westfall	Engineer	x				x	x	x		x		x	x			x	x	
John Whitney	Supervisor	x			x		x	x		x		x	x					x
Hamburg T																		
Sean Crotty	Emergency Manager	x	x		x							X						x
Roger Gibson	Supervising Code Enforcement Officer					X		X										
Nicholas Pikul	Deputy Emergency Manager	x												x				
Hamburg V																		
Jason Cozza	Village Administrator					X		X										
Sean Crotty	Emergency Manager	x					x	x		x		x	x					x

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Ric Dimpfl Jr.	Emergency Manager	x				X	x	X		X		X	x					x
Roger Gibson	Supervising Code Enforcement Officer					X		X										
Dean Messing	Assistant Emergency Manager					X		X										
Holland T																		
Michael C. Kasprzyk	Supervisor							x				x	X			x		x
Geoff Hack	Emergency Manager	x			x		x	x		x		x	x	x		x	x	x
Kenmore V																		
AJ Kiefer	Police Captain					x		x		x								x
Kathleen Johnson	Clerk/Treasurer					x		x										x
Lackawanna C																		
Pat Hayes	Code Enforcement	x					x	x		x		x	x					
Rich Stanton	Director of Development																x	
John Wolf	Director Public Safety	x					x	x		x		x	x					
Lancaster T																		
Ron Rozler	Disaster Coordinator	x			x		x	x		x		x	x	x				x
Lancaster V																		
William Cansdale	Superintendent DPW	x					x	x		x		x	x					
Scott Kuhlmey	Emergency Manager	x			x			x					x			x		x
Marilla T																		
Earl Gingrich, Jr.	Supervisor					x		x		x		x	x					x
Brian Nolan	Emergency Manager					x		x		x		x	x					x
Newstead T																		
David Cummings	Supervisor	x			x									x				x
Dawn Izydorczak	Town Clerk	x				x	x	x		x		x	x	x				x
Daniel Kowalik	Emergency Manager	x		x		x		x		x	x			x			x	
David Miller	Code Enforcement Officer and Fire Marshall					x		x		x								
North Collins T																		
Vincent George	Mayor	x			x													
Rick Meyers	Emergency Manager	x					x	x		x		X	x				x	
North Collins V																		
Vinent George	Mayor	x					x	x		x		X	x					x

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
Jan Hutchinson	Clerk	x					x	x		x		x	x					x
Orchard Park T																		
John Gullo	Building Inspector	x					x	x		x		x	x					
Jordan Kellerman	Engineer	x		x										x				
Richard Mrugalski	Emergency Manager	x		x							x					x	x	x
Orchard Park V																		
John Gullo	Building Inspector	x					x	x		x		x	x					x
Richard Mrugalski	Emergency Manager	x			x			x								x	x	x
Sardinia T																		
Jerry Whittington	Emergency Manager	x					x	x		x		x	x				x	x
Sloan V																		
Vincent Ferraraccio	CEO					x		x										
Debra Smith	Clerk	x			x	x	x	x		x		X	x					x
Robert Smith	DPW Crew Chief					x		x										
Springville V																		
Todd Catalano	Disaster Coordinator	x		x							x			x				
Bill Krebs	Mayor	x			x		x	x		x		x	x	x				x
Liz Melock	Administrator	x		x	x		x	x		x	x	x	x	x				x
Greg Stowell	Emergency Manager	x			x													
Tonawanda C																		
Mark Banks	Deputy Director Office of Emergency Management	x		x	x	x	x	x		x	x	x	x	x		x	x	x
Rick Davis	Mayor	x		x														
Erik Lindhurst	Building Inspector	x				x	x	x		x		x	x					
Chuck Stuart	Fire Chief	x			x		x	x		x		x	x	x				x
Tonawanda T																		
James Chatham	Emergency Services	x		x							x			x			x	
Robert Lutz	Emergency Services Coordinator, Town Police Department	x			x	x	x	x		x		x	x	x			x	x
Matthew Sutton	Town Engineer					x		x										
Wales T																		
Walter Rachel	Emergency Manager	x			x													x
West Seneca T																		
Eric Conley	Emergency Manager	x		x			x	x		x		X	x				x	x

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
James Unger	Police Department	x			x		x	x		x		X	x	x			x	x
Williamsville V																		
Jim Zymanek		x			x									x				x
Stakeholders																		
Adam Kneis Erie 1 BOCES	Safety Analyst	x		x														
Kevin Clapp	Planning Manager, Mitigation Programs, NYS DHSES	x									x			x			x	
Christine Ljunberg	Business Administrator, Holland Central School	x		x														
Karis Manning	Division of Water, NYSDEC	x		x														
Albert Cheverie	Emergency Preparedness, NYS Department of Health	x		x														
Chris Renschler	Professor, Department of Geography, SUNY Buffalo	x		x														
Jason Tolsma	Manager, National Fuel Gas	x		x							x						x	
Judith Levan	Administrator, National Weather Service	x		x							x							
William Major	Niagara Frontier Transportation Authority	x		x							x							
Dave Delorenzo	Security, Catholic Health	x			x													
Cindy Shelton	Environmental Health, Chemical Distributors, Inc.	x			x													
Daniel McCartan	Emergency Managament, Erie County Medical Center	x			x													
David McKnight	Emergency Manager, Kaleida Health	x			x													
Laura Dewey	Health and Safety, Mt. St. Mary's Hospital	x			x													

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

Name	Title / Position	Attended Meeting(s)	Attended Steering Comm. Meeting 11/2/20	Attended Planning Part. Kickoff Meeting #1 11/18/20	Attended Planning Part. Kickoff Meeting #2 11/19/20	Completed Info. Gathering Worksheets / Surveys	Attended Muni. Support Meetings	Provided Data and Info.	Reviewed/ Updated Invent-ories (e.g. Critical Facilities)	Ident-ified vulner-abilities	Risk Assess-ment Review Meeting 5/19/21	Identified progress on original Mit. Strategy	Supported update of Mit. Strategy	Attended Mitigation Strategy Workshops 6/9/21	Facilitated/ Supported public and stakeholder outreach	Reviewed/ Approved Draft and Final Plan Sections	Attended Plan Draft Review Meeting 9/8/21	Designated Project Point of Contact
John Waszak	Chemical Security, Region 2, Cybersecurity and Infrastructure Security Agency	x			x													
Michael Fries	Meteorologist, National Weather Service	x			x													
Mary McIntosh	Regional Spill Geologist, NYSDEC	x			x													
Theodore Meyers	Flood Engineer, NYSDEC	x			x													
Lynn Segeti	Preparedness Coordinator, WNY Healthcare Association	x			x													
Jillian Brown	Safety, Sisters of Charity Hospital	x			x													

Attachment: 30-Appendix-B-Participation-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the

APPENDIX C. MEETING DOCUMENTATION

Appendix C includes meeting agendas, sign-in sheets, and meeting notes (where applicable and available) for meetings convened during the development of the Erie County Hazard Mitigation Plan.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Steering Committee Kickoff Meeting		
Date	November 2, 2020	**Time**	9:30 – 11:15 a.m.
Location	Webinar		
Attendees	Daniel Neaverth, Commissioner, Erie County Department of Homeland Security and Emergency Services (DHSES)		
	Gregory J. Butcher, Deputy Commissioner, Erie County DHSES		
	Melissa Calhoun, Public Safety Officer - Special Assistant Erie County, Erie County DHSES		
	Ryan Sheedy, Senior MERS Coordinator, Erie County DHSES		
	Daniel Castle, Deputy Commissioner, Planning & Economic Development, Erie County Department of Environment and Planning		
	Josh Wilson, Coordinator - Pollution Prevention Program, Erie County Department of Environment and Planning		
	Matthew W. Barrett, Security Officer, Erie County Water Authority		
	Don Poleto, Senior Operations Engineer, City of Buffalo		
	R.J. Nieman, Emergency Manager, Village of Depew		
	Sean Crotty, Emergency Manager, Town of Hamburg; Chair, Erie County Emergency Managers Association		
	Jane Rice, Principal, Director of Planning, Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)		
	Erica Tauzer, Planner, EDR		
	Matthew Butwin, Planner, Prospect Hill Consulting		
	Michael Kane, Planner, Prospect Hill Consulting		
	Brian Kehoe, Planner, Tetra Tech, Inc. (Tetra Tech)		
	Tony Subbio, Project Manager, Tetra Tech, Inc. (Tetra Tech)		

Discussion Points

This section summarizes each discussion point addressed during the Steering Committee Kickoff Meeting.

Introductions

Mr. Subbio welcomed the group. Attendees introduced themselves. Mr. Wilson stated that the county is undergoing a climate assessment that may be relevant for the HMP. Mr. Crotty is particularly interested in mitigation along the shore of Lake Erie.

Overview of Hazard Mitigation

Mr. Subbio provided a brief overview of hazard mitigation and the funding available from the Federal Emergency Management Agency (FEMA). He described the requirements of the Disaster

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Mitigation Act of 2000 (DMA 2000) and the New York State Division of Homeland Security and Emergency Services (NYS DHSES) for HMPs.

Project Scope Review

This section summarizes each phase of the project discussed at the meeting.

Phase 1 – Planning Process

Mr. Subbio discussed the nature of the Steering Committee as providing strategic oversight of the planning process, and the series of Steering Committee meetings that will be conducted over the course of the planning process. He then described the formation of the Planning Partnership (the Partnership), which consists of the group of representatives from jurisdictions and stakeholder agencies involved with the HMP update process. Mr. Butcher reported that Jim Zymanek from the Town of Amherst will be part of the Steering Committee.

The Planning Partnership Kickoff Meeting will be held to introduce the members to the planning process and explain the data-gathering worksheets to be completed by each jurisdiction. The following organizations were discussed and will be invited to participate in the planning process:

- County departments
- All municipalities
- Soil and Water Conservation District
- The Erie County Water Authority
- Schools and higher education facilities
- The first response community, consisting of police, fire, and ambulance companies
- New York State (NYS) Agencies
- The business community and chambers of commerce
- Neighboring counties
    - Planning departments
    - Offices of emergency management
- The general public

Mr. Castle recommended including personnel from the Department of Sewage Management, as they operate six or seven sewage treatment plants in the county. He also recommended including representatives from the Office of Geographic Information Systems (GIS).

Phase 2 – Update the Risk Assessment

The group discussed the hazards that were profiled in the 2015 version of the HMP and what will be profiled in the updated plan. Reliability of the electrical grid was discussed. The need to examine areas that have had major transportation accidents was also discussed, as was vector-borne diseases. Mr. Subbio identified other hazards that had been examined in other counties, including epidemic/pandemic, agricultural product spills, harmful algal blooms, and dam failures. Ms. Calhoun

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

shared the list of high-priority hazards from the County Emergency Preparedness Assessment (CEPA).

The following hazards will be profiled in the updated HMP:

- Coastal Erosion
- Cyber Attack
- Earthquake
- Expansive Soils
- Extreme Temperatures
- Flood
- Hazardous Materials
- Landslide
- Pandemic
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

Mr. Subbio described the vulnerability analysis that will be conducted for each of the hazards.

Upon completion of the hazard profiles, Tetra Tech will review the risk assessment with the Partnership and the public.

Phase 3 – Public Involvement Strategy

Municipalities will complete a Letter of Intent to Participate (LOI) to acknowledge that they will be plan participants and to confirm their understanding of their roles and responsibilities in the planning process. Mr. Butcher reported that he has received 27 LOIs so far. Mr. Butcher confirmed that, since the county already met with the municipalities and has been collecting LOIs, the proposed set of municipal introductory meetings was not necessary.

Tetra Tech will conduct a series of information-gathering meetings with participating jurisdictions after the Planning Partnership Kickoff Meeting. These information-gathering meetings will be held to answer questions and gather information to feed the planning process. They will be conducted via webinar, with possible in-person follow up.

Mr. Subbio briefly introduced the set of information-gathering worksheets that Tetra Tech will use to collect information from the municipalities. The worksheets will be discussed in greater detail at the Planning Partnership Kickoff Meeting.

Mr. Subbio then described the project website that will be developed to provide information on the planning process. Additionally, a set of SurveyMonkey surveys will be deployed to get feedback from members of the general public and stakeholder organizations (e.g., emergency responders, healthcare facilities, schools, and higher education, etc.). Tetra Tech will also develop a simple online survey tool for individuals to identify problem areas caused by different hazards in the county.

Mr. Subbio then stated that there will be two public information meetings at the beginning of the planning process to provide information to the general public. There will be two Partnership meetings open to the general public as well- one to review the results of the risk assessment, and the other to review the completed draft HMP.

Phase 4 – Mitigation Strategy

The Steering Committee will set the goals and objectives for the HMP and will share them with the Partnership. Tetra Tech will use the information reported by the municipalities regarding their

MEETING NOTES

capabilities and will also review the status of the mitigation actions identified in the 2015 version of the HMP to identify and prioritize new and existing mitigation actions for inclusion in the updated HMP.

Tetra Tech and NYS DHSES will conduct a Mitigation Strategy Workshop to assist in developing new mitigation actions for inclusion in the plan.

Tetra Tech will compile the information from the worksheets, risk assessment, capability assessment, and mitigation actions into a jurisdictional annex for the county and each of its municipalities. The annexes detail the analysis and information of the HMP for the respective jurisdictions to make the document easier to use for local officials. The Erie County Water Authority will participate as a separate jurisdiction, and will have its own annex in the plan.

Phase 5 – Plan Maintenance

Tetra Tech will work with the Steering Committee to develop procedures for maintaining the HMP over the next 5 years. These procedures will be documented in the Plan Maintenance section of the HMP. This section will also describe the ways in which the HMP will be integrated with other planning mechanisms, such as comprehensive and master plans, local regulations, etc.

Mitigation actions will be loaded into Tetra Tech's plan review tool to allow for ongoing plan maintenance.

Phase 6 – Plan Update and Deliverables

Throughout the planning process, Tetra Tech will develop the HMP document. The main body will profile the county, explain the planning process, include the risk assessment and mitigation strategy, and discuss maintenance of the plan. Each jurisdiction will have its own annex in the HMP, which will provide information specific to that jurisdiction.

The draft plan will be shared with the Steering Committee for review and comment throughout the planning process.

Phase 7 – Plan Review and Adoption

After making any required changes, Tetra Tech will post the HMP for public review. The public review period will be advertised and will last for 30 days. Tetra Tech will then conduct a public meeting with the Planning Partnership to gather feedback on the draft plan and make any required changes.

Tetra Tech will then submit the draft for the State's formal review. NYS DHSES will review the draft. If changes are required, Tetra Tech will make the changes and resubmit the document to the State. After the State is satisfied with the draft, the State will forward it to Federal Emergency Management Agency (FEMA) Region II for review. FEMA Region II will review the draft within 45 days, and Tetra Tech will make any required changes upon receipt of FEMA review comments. When FEMA is satisfied with the HMP, FEMA will grant the HMP "approvable pending adoption" status to indicate that it meets all requirements.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The county and participating jurisdictions will formally adopt the HMP by resolution. After adoption, each jurisdiction will receive a letter from FEMA stating that the HMP is formally approved.

Project Team

Mr. Subbio discussed how the three firms on Tetra Tech's project team will integrate to carry out the project. Tetra Tech's planners will lead the plan update, work with municipal officials, conduct analysis, and develop the document. EDR will perform the capabilities assessment and the plan and regulatory review, and will discuss capabilities with local officials. Prospect Hill will lead municipal engagement, work with municipalities, help gain participation, and provide local support as needed.

All three firms will participate in the planning meetings and municipal information gathering sessions.

Project Schedule Review

Mr. Subbio reviewed the project schedule. The Planning Partnership Kickoff Meetings have been scheduled for November 18 and 19, 2020. The Municipal Information Gathering Sessions and Public Information Meetings will be conducted in mid-December 2020. The jurisdictional annexes will be complete by April 9, 2021, and the rest of the plan will be complete by the following week. This allows for the public review, NYS DHSES review, and federal review to occur to receive "approvable pending adoption" (APA) status by November 2021, and for the plan to be adopted and approved in December 2021. The timeline depends heavily on how quickly Tetra Tech can obtain GIS data from the county and how quickly the project team receives all required information from the municipalities.

Next Steps

- The county will execute the project contract as soon as possible.
- Steering Committee members will send any relevant plans, studies, or documents to Mr. Subbio.
- County officials will complete the GIS Wishlist and send it to Mr. Butcher and Mr. Subbio.
- Tetra Tech will develop the project website and stakeholder surveys.
- The Planning Partnership Kickoff Meetings will be conducted on November 18 and 19, 2020.
- Tetra Tech and the county will schedule the municipal information gathering sessions and public information meetings in the coming weeks.
- Tetra Tech will continue to update the risk assessment.
- Ms. Calhoun will provide the blank status tracker from NYS DHSES to Mr. Subbio.

Mr. Butcher confirmed that Tetra Tech may reach out directly to Steering Committee members to address issues, with copies of any emails to Mr. Butcher and Ms. Calhoun.

The meeting adjourned at 11:15 a.m.

TETRA TECH

complex world | CLEAR SOLUTIONS™

Erie County Hazard Mitigation Plan

2021 Update

Steering Committee Kickoff Meeting

November 2, 2020

2

Agenda

- Introductions
- Overview of Hazard Mitigation
- Project Scope Review
- Project Team
- Project Schedule Review
- Next Steps
- Questions

3

Introductions

- Name
- Agency
- Mitigation Experience
- Focus and Concerns

4

Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, DPC

EDR is a woman owned small business doing business since 1979 from our offices located in Upstate New York. Our founder's resource-based approach, and philosophy of seeking balance with nature are the sustainable principles we strive for and continue to provide the foundation for our growing and maturing practice. Now spanning a broad range of practice disciplines, these founding principles are applied to benefit our clients now and into the future.

Practice Areas:

- Landscape Architecture
- Engineering
- Community Planning
- GIS Services
- Environmental Permitting & Ecological Resource Management
- Cultural Resources
- Visual & Graphic Communication

Jane Rice, JD, AICP
Principal of Planning Division

Erica Tauzer, AICP
Project Manager

Kalyna Paraszczak,
Project Planner

Kyle Hatch,
Project Planner

5

PROSPECT HILL
CONSULTING LLC

Meet Our Team

ENVIRONMENTAL AND COMMUNITY PLANNING SPECIALISTS

Together we are better.
This belief influences how we collaborate with our clients and community to focus on the future.

Mike Kane
PLANNER

Matthew Butwin
PLANNER

Jenny Mogavero
DATA ANALYST

Christine Gunn
PLANNER

6

TETRA TECH

Overview of Hazard Mitigation

7

7

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

What is hazard mitigation?

Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

"provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability…" (CFR).

8

8

Mitigation Works!

- The nation saves **$6** for every **$1** spent through mitigation grants funded via select federal agencies.

National Benefit-Cost Ratio (BCR) Per Peril *BCR numbers in this study have been rounded	Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio	$4:1	$6:1
Riverine Flood	$5:1	$7:1
Hurricane Surge	$7:1	Too few grants
Wind	$5:1	$5:1
Earthquake	$4:1	$3:1
Wildland-Urban Interface Fire	$4:1	$3:1

9

9

Federal Requirements

- Disaster Mitigation Act of 2000
  - Risk assessment
  - Public outreach and participation
  - Process for update
  - Formal state and FEMA review
  - Documentation of acceptance by the community

10

New York State Requirements

- Develop jurisdictional teams
- Assess critical facilities
- Plan for displaced residents
- Plan for evacuation needs and sheltering
- Document past mitigation accomplishments
- Include jurisdictional annexes
- Develop mitigation actions
- Identify funding sources
- Plan for climate change

11

TETRA TECH

Project Scope Review

12

12

Project Scope Review

- Phase 1 – Planning Process
  - Steering Committee
    - Strategic oversight
    - Meetings
      - With municipal information gathering sessions
      - With Risk Assessment Review and Strengths, Weaknesses, Opportunities, and Obstacles (SWOO) Meeting
      - To confirm updated goals and objectives
      - With Mitigation Strategy Workshop
      - Prior to the public comment period of the draft
      - With Plan Draft Review Meeting
      - Other meetings as needed

13

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Project Scope Review

- Phase 1 – Planning Process
  - Planning Partnership
    - County Departments
    - State Agencies
    - Emergency Responders
    - Municipalities
    - Neighboring Counties
    - General Public
    - Soil and Water Conservation District
    - Chamber of Commerce
    - Schools and Higher Education
    - Tourism Groups

14

Project Scope Review (Continued)

- Phase 2 – Update the Risk Assessment
  - Hazards of Concern (2015)
    - Coastal Erosion
    - Earthquake
    - Expansive Soils
    - Extreme Temperatures
    - Extreme Wind
    - Flood
    - Ice Jams
    - Landslide
    - Tornado
    - Wave Action
    - Wildfire
    - Winter Storm

15

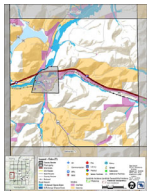
Project Scope Review (Continued)

- Phase 2 – Update the Risk Assessment (continued)
  - Hazards of Concern – Suggested
    - Coastal Erosion (includes wave action)
    - Earthquake
    - Extreme Temperature
    - Flood (includes ice jams)
    - Landslide
    - Severe Storm (includes extreme wind and tornadoes)
    - Severe Winter Storm
    - Wildfire
  - Keep Expansive Soils?
  - Add Up to Four Others – hazmat, utility failure, etc.?

16

Project Scope Review (Continued)

- Phase 2 – Update the Risk Assessment (Continued)
  - HAZUS-MH Analysis
    - Earthquake: 500-year MRP event
    - Flood: 1-percent and 0.2-percent annual chance floodplains
    - Wind: 100-year and 500-year MRP events
  - Quantitative Analysis for Geographic Hazards
  - Review Risk Assessment with Planning Partnership (open to the public)



17

Project Scope Review (Continued)

- Phase 3 – Public Involvement Strategy
  - Letter of Intent to Participate
  - Information Gathering Meetings
    - Six webinars
    - In-person follow up

18

Project Scope Review (Continued)

- Phase 3 – Public Involvement Strategy (continued)
  - Jurisdictional Worksheets
    - Evaluation of Identified Hazards and Risk
    - Capability Assessment and Integration
    - NFIP Floodplain Administrator Questionnaire
    - Mitigation Action Review
    - New Development and Building Permits
    - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

19

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Project Scope Review (Continued)

- Phase 3 – Public Involvement Strategy (continued)
  - Stakeholder Outreach
    - Project Website
    - Surveys
      - Individuals
      - Stakeholders
      - Problem Areas
    - Public Information Meetings
    - Planning Partnership Meetings (Open to the Public)
      - Risk Assessment Review
      - Plan Draft Review

20

Project Scope Review (Continued)

- Phase 4 – Mitigation Strategy
  - Develop Goals and Objectives
    - Develop with Steering Committee
    - Review with Planning Partnership
  - Assess Capabilities
  - Conduct Mitigation Strategy Workshop
  - Develop Annexes

21

Project Scope Review (Continued)

- Phase 5 – Plan Maintenance
  - Annual Review
  - Integration with Other Planning Mechanisms
  - BATool[SM]
- Phase 6 – Plan Update and Deliverables
  - Develop the Document
    - Develop and finalize main body
    - Finalize jurisdictional annexes
  - Draft Plan Reviewed by the Steering Committee throughout the process

22

Project Scope Review (Continued)

- Phase 7 – Plan Review and Adoption
  - Public Review
  - Draft Plan Review Meeting (open to the public)
  - Submittal to the New York State Division of Homeland Security and Emergency Services (NYS DHSES) and FEMA
  - Update as Necessary
  - "Approvable Pending Adoption"

23

TETRA TECH

Project Team

edr

PROSPECT HILL CONSULTING LLC

24

TETRA TECH

Project Schedule Review

25

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Project Schedule Review

Task	Timeframe
Phase 1 – Planning Process	► Conduct a Steering Committee Kickoff Meeting on November 2, 2020 ► Conduct Planning Partnership Kickoff Meetings on November 18 and 19, 2020 ► Conduct Steering Committee Meetings in conjunction with other planning meetings through submittal of the HMP to NYS DHSES
Phase 2 – Update the Risk Assessment	► Perform a thorough risk assessment of each hazard by the middle of February 2021 ► Conduct a Risk Assessment Review and Strengths, Weaknesses, Obstacles, and Opportunities (SWOO) Meeting on or about February 15, 2021
Phase 3 – Public Involvement Strategy	► Implement public outreach throughout the planning process ► Conduct two Public Information Meetings during the week of December 7-11, 2020 ► Conduct municipal information gathering sessions during the week of December 14-18, 2020
Phase 4 – Mitigation Strategy	► Assess local capabilities by the middle of February 2021 ► Conduct the SWOO discussion during the Risk Assessment Review and SWOO Meeting on or about February 15, 2021 ► Identify goals and objectives by the beginning of March 2021 ► Conduct a Mitigation Strategy Workshop on or about March 18, 2021 ► Complete the jurisdictional annexes by April 9, 2021
Phase 5 – Plan Maintenance	► Develop plan maintenance procedures by the end of November 2020 ► Populate the BATtool™ Plan Review Tool upon receiving APA status
Phase 6 – Plan Update and Deliverables	► Begin plan development at the start of the project ► Complete the draft HMP by April 13, 2021 ► Allow public review from April 14-May 14, 2021 ► Conduct the draft review meeting on or about May 17, 2021 ► Finalize the draft HMP by May 20, 2021
Phase 7 – Plan Review and Adoption	► Submit the draft HMP to NYS DHSES for review by May 21, 2021 ► Revise and finalize the HMP to ensure compliance with state and federal requirements through mid-November 2021 ► Receive APA status in late November 2021 (estimated) ► Facilitate adoption of the updated HMP in December 2021
Phase 8 – Project Management	► Develop monthly status reports and invoices ► Conduct project close-out in January 2022

26

TETRA TECH

Next Steps

27

27

Next Steps

- Document Request
- GIS Data
- Develop Website and Surveys
- Planning Partnership Kickoff Meetings
- Information Gathering Sessions
- Risk Assessment Update

28

Questions?

Thank you for your time!

29

Contacts

Gregory Butcher
gregory.butcher@erie.gov
(716) 858-2944

Tony Subbio
tony.subbio@tetratech.com
(717) 839-5654

30

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Steering Committee Kickoff Meeting

Monday, November 2, 2020 | 9:30 – 11:30 a.m.

1. **Introductions**
2. **Overview of Hazard Mitigation**
3. **Project Scope Review**
   a. Phase 1 – Planning Process
   b. Phase 2 – Update the Risk Assessment
   c. Phase 3 – Public Involvement Strategy
   d. Phase 4 – Mitigation Strategy
   e. Phase 5 – Plan Maintenance
   f. Phase 6 – Plan Update and Deliverables
   g. Phase 7 – Plan Review and Adoption
4. **Project Team**
5. **Project Schedule Review**
6. **Next Steps**
   a. Document Request
   b. GIS Data
   c. Develop Website and Surveys
   d. Planning Partnership Kickoff Meetings
   e. Information Gathering Sessions
   f. Risk Assessment Update
7. **Questions**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Planning Process	► Conduct a Steering Committee Kickoff Meeting on November 2, 2020 ► Conduct Planning Partnership Kickoff Meetings on November 18 and 19, 2020 ► Conduct Steering Committee Meetings in conjunction with other planning meetings through submittal of the HMP to NYS DHSES
Phase 2 - Update the Risk Assessment	► Perform a thorough risk assessment of each hazard by the middle of February 2021 ► Conduct a Risk Assessment Review and Strengths, Weaknesses, Obstacles, and Opportunities (SWOO) Meeting on or about February 15, 2021
Phase 3 - Public Involvement Strategy	► Implement public outreach throughout the planning process ► Conduct two Public Information Meetings during the week of December 7-11, 2020 ► Conduct municipal information gathering sessions during the week of December 14-18, 2020
Phase 4 - Mitigation Strategy	► Assess local capabilities by the middle of February 2021 ► Conduct the SWOO discussion during the Risk Assessment Review and SWOO Meeting on or about February 15, 2021 ► Identify goals and objectives by the beginning of March 2021 ► Conduct a Mitigation Strategy Workshop on or about March 18, 2021 ► Complete the jurisdictional annexes by April 9, 2021
Phase 5 - Plan Maintenance	► Develop plan maintenance procedures by the end of November 2020 ► Populate the BATool[SM] Plan Review Tool upon receiving APA status
Phase 6 - Plan Update and Deliverables	► Begin plan development at the start of the project ► Complete the draft HMP by April 13, 2021 ► Allow public review from April 14-May 14, 2021 ► Conduct the draft review meeting on or about May 17, 2021 ► Finalize the draft HMP by May 20, 2021
Phase 7 - Plan Review and Adoption	► Submit the draft HMP to NYS DHSES for review by May 21, 2021 ► Revise and finalize the HMP to ensure compliance with state and federal requirements through mid-November 2021 ► Receive APA status in late November 2021 (estimated) ► Facilitate adoption of the updated HMP in December 2021
Phase 8 - Project Management	► Develop monthly status reports and invoices ► Conduct project close-out in January 2022

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Planning Partnership Kickoff Meeting #1		
Date	November 18, 2020	**Time**	6:00 – 7:10 p.m.
Location	Webinar		
Attendees	Dan Castle, Deputy Commissioner, Erie County Department of Environment and Planning		
	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer - Special Assistant Erie County, Erie County Department of Homeland Security and Emergency Services		
	Daniel Neaverth, Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Ryan Sheedy, Senior MERS Coordinator, Erie County Department of Homeland Security and Emergency Services		
	Brian Rose, Senior Project Manager, Erie County Department of Public Works Division of Highways		
	Adam Kneis, Senior Safety Analyst; Health, Safety Risk Management, Erie 1 Board of Cooperative Extension Services		
	Sean Crotty, Emergency Manager, Chair Erie County Emergency Managers Association		
	Christine Ljungberg, School Business Administrator, Holland Central School District		
	Karis Manning, Professional Engineer 2 (Environmental), Division of Water; Chief, Western Flood Protection and Dam Safety Hub Section, New York State Department of Environmental Conservation		
	Albert Cheverie, Hospital Emergency Preparedness Representative, Western Region, New York State Department of Health; Office of Health Emergency Preparedness		
	Chris Renschler, Professor - Department of Geography, State University at Buffalo/Erie County Local Emergency Planning Association		
	Daniel Kowalik, Emergency Manager, Chair Village of Akron & Town of Newstead		
	Joe Fox, Emergency Manager, Chair Village of Blasdell		
	Dave Baumler, Deputy Coordinator of Emergency Management, Town of Clarence		
	Dave Bissonette, Emergency Manager, Chair Town of Clarence		
	Kenneth Martin, Supervisor, Town of Collins		
	Brian Burgstahler, Emergency Manager, Chair Town of Eden		
	Robert Stickney, Emergency Manager, Chair Town of Eden		
	Rick Davis, Mayor, City of Tonawanda		
	Eric Conley, OEM, Town of West Seneca		
	Erica Tauzer, Planner, Consultant - EDR		
	Jane Rice, Principal, Director of Planning, Consultant - EDR		
	Kyle Hatch, Planner, Consultant - EDR		

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

	Matthew Butwin, Planner, Consultant - Prospect Hill Consulting
	Michael Kane, Planner, Consultant - Prospect Hill Consulting
	Brian Kehoe, Planner, Consultant - Tetra Tech
	Tony Subbio, Project Manager, Consultant - Tetra Tech

Discussion Points

This section summarizes each discussion point addressed during Planning Partnership Kickoff Meeting #1. This was the first of two identical sessions conducted to kick off the planning process.

Introductions

Mr. Subbio opened the meeting. As attendees entered the virtual meeting, they were prompted to provide their name and affiliation either verbally or via the webinar chat function. Mr. Neaverth and Mr. Butcher then welcomed all attendees and emphasized the importance of active participation from municipal representatives.

Mr. Subbio noted that the meeting will be recorded. He asked if there were any specific issues in the county that attendees would like to address during the planning process. The following issues were noted:

- Mr. Crotty noted that Grand Island has experienced flooding. He stated that any municipality along Lake Erie can experience damage from high water levels and storm surge and these events have occurred recently. Mr. Crotty is interested in tapping into any available mitigation grants.
- Mr. Cheverie identified (1) infectious disease and (2) the public health impacts of the water level of Lake Ontario as concerns for the Health Department.

Overview of Hazard Mitigation

Mr. Subbio introduced hazard mitigation planning. He encouraged each municipal representative at the meeting to work with a team of officials within their municipality to provide information for the HMP update. Mr. Subbio defined types of mitigation activities and described the Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance (HMA) grant program. In addition, Mr. Subbio provided a brief overview of federal and New York State (NYS) planning requirements for HMPs. For the plan to be finalized, review and approval are required by the NYS Division of Homeland Security and Emergency Services (DHSES) as well as FEMA. In order to be eligible for certain types of funding, the participation of a municipality must be documented in the HMP.

Project Scope Review

Mr. Subbio reviewed the planning process and the ways in which each phase meets a state and/or FEMA requirement.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Phase 1 – Planning Process

Mr. Subbio discussed the formation of the Steering Committee and the Planning Partnership, and their respective roles in forwarding and completing the HMP. Each partnership member has shown their commitment to the HMP process by attending this meeting. Members are further encouraged to work with stakeholders to provide information about community-specific hazards. Members are asked to recommend actions that can be taken to mitigate the impact of the identified hazards of concern.

Phase 2 – Update the Risk Assessment

The following hazards of concern will be profiled in the updated HMP. This list reflects input from the HMP Steering Committee:

- Coastal Erosion
- Cyber Attack
- Earthquake
- Epidemic/Pandemic
- Expansive Soils
- Extreme Temperatures
- Flood (including ice jams)
- Hazardous Materials
- Landslide
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

The 500-year earthquake, the 1-percent and 0.2-percent annual chance floods, and the 100-year and 500-year wind events will be examined using FEMA's Hazards-U.S. (HAZUS) software. Quantitative analysis will be conducted for geographic hazards; qualitative analysis will be completed for other hazards. Upon completion of the hazard profiles, Tetra Tech will review the risk assessment with the Planning Partnership and the public.

Phase 3 – Public Involvement Strategy

Municipalities have been requested to complete a Letter of Intent to Participate (LOI) to acknowledge that they will actively participate in the HMP update process. The LOI confirms that the municipality understands its roles and responsibilities throughout the planning process. The template LOI has been provided by the Erie County Department of Homeland Security and Emergency Services.

Tetra Tech will conduct six information-gathering meetings with participating jurisdictions in early 2021. Specific dates are to be determined. These meetings provide a targeted venue to gather information crucial to creating a high-quality HMP and to address any questions from municipalities. Mr. Subbio stated that information will be gathered from participating municipalities via a set of jurisdictional worksheets, and he provided an overview of each.

Mr. Subbio described the multi-faceted stakeholder outreach efforts that are an important part of the HMP planning process. Tetra Tech will create and maintain a project-specific website to lessen data upload requirements on county staff and to provide information quickly. This website will be launched very soon. Tetra Tech has developed an innovative yet simple online mapping tool that

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

can be used by all stakeholders. The graphic and geographically-referenced tool guides respondents through a process of identifying specific hazards that concern them. These digital platforms will be promoted through social media.

Tetra Tech will prepare a distinct online survey targeted to elicit meaningful hazard-related data from residents, members of academia, business members, and other stakeholders. A pair of Public Information Meetings will be held to introduce people to the planning process, at dates to be determined. The public is also welcome to participate in the Risk Assessment Review Meeting and the Plan Draft Review Meeting.

Mr. Butcher noted that he invited stakeholders interested in water quality and watershed management to participate in the HMP process via a contact list maintained by the Erie County Department of Environment and Planning. Mr. Butcher has reached out to the Local Emergency Planning Committee to draw in local expertise about hazardous materials. Mr. Castle offered to reach out with invitations to municipal planning officials, planning boards, zoning boards of appeal, code enforcement officers, and highway superintendents. Mr. Castle offered to make available a mailing list maintained by the Association of Erie County Governments. Outreach could potentially be facilitated via the One Region Forward distribution partner (http://www.oneregionforward.org/).

Mr. Subbio reviewed HMP information-gathering worksheets with the attendees. He recommended that each attendee work with a team of local officials to complete these worksheets. It is not expected that any one official will have the knowledge to complete all six of the worksheets. The targeted deadline for completion of the worksheets is December 15, 2020. The project consultant team will follow up with municipalities to facilitate worksheet completion, and upcoming meetings will provide additional opportunities to refine municipal-specific input. The six jurisdictional worksheets are:

- Evaluation of Identified Hazards and Risk
- Capability Assessment and Integration
- NFIP Floodplain Administrator Questionnaire
- Mitigation Action Review
- New Development and Building Permits
- Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

Phase 4 – Mitigation Strategy

Tetra Tech has designed a robust program that guides municipalities in determining strategic actions going forward that address hazard threats. Tetra Tech will work with the Steering Committee to set the goals and objectives for the HMP, and will share them with the Planning Partnership. Municipalities will be asked to confirm the status of mitigation actions from the most-recent version (2015) of the Erie County HMP. Municipalities will then be guided to plan the next round of mitigation actions to be included in the updated HMP.

Municipal capability is an important element of hazard mitigation planning. The consultant project team will catalogue municipal capabilities for implementing hazard mitigation. Tetra Tech and NYS

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

DHSES will also conduct a Mitigation Strategy Workshop to assist municipalities with developing strategic mitigation actions to include in the final HMP.

Information gathered from participating jurisdictions about their capabilities will be used to develop implementable mitigation actions. As part of this process, the consultant project team will examine the ways in which regulations work together, as well as how other programs, such as capital improvement plans, can be leveraged to implement hazard mitigation. Problems and capabilities will be discussed at a Mitigation Strategy Workshop to assist in developing strategic mitigation actions for inclusion in the final HMP.

Phase 5 – Plan Maintenance

Tetra Tech and the Steering Committee will develop procedures for maintaining the HMP over the next 5 years. These procedures will be documented in the Plan Maintenance section of the HMP. This section will also describe integration of the HMP with other planning mechanisms, such as comprehensive and master planning, local regulations, etc. Mitigation actions will be loaded into Tetra Tech's plan review tool to streamline ongoing plan maintenance.

Phase 6 – Plan Update and Deliverables

Throughout the planning process, Tetra Tech will compile and refine the HMP document. Tetra Tech has already begun developing the HMP. The draft plan will be shared with the Steering Committee and Planning Partnership for review and comment throughout the planning process.

Phase 7 – Plan Review and Adoption

Tetra Tech will also provide the draft HMP through various digital platforms to encourage public review and comment. The public review period will be advertised and will last for 30 days. In addition, Tetra Tech and the Planning Partnership will conduct a public meeting to gather feedback on the draft plan and to make required changes.

After the HMP draft is reviewed and updated, Tetra Tech will oversee submission of the formal draft to NYS DHSES for agency review. In the event that NYS DHSES identifies needed changes, Tetra Tech will make these changes and subsequently resubmit the document for final NYS review. After determining that requirements have been satisfied, NYS DHSES will forward the HMP to FEMA Region II for review. FEMA is required to review a submitted HMP within 45 days of receipt. If FEMA indicates that any changes are needed, Tetra Tech will make these changes and resubmit to FEMA. At this point, the HMP will be granted "approvable pending adoption" status to indicate that it meets all requirements.

The county and participating jurisdictions will formally adopt the HMP by resolution. After such adoption, each jurisdiction will receive a letter from FEMA stating that the HMP is formally approved.

Project Team

The consultant project team is led by Tetra Tech. The project is also supported by team members from EDR and from Prospect Hill Consulting. Several consultant team members participated in this

MEETING NOTES

meeting and briefly reviewed how and when they would engage with partnership members to elicit and refine municipal input. Planners from Tetra Tech and Prospect Hill will directly support municipalities in completing worksheets. EDR will coordinate the data received from municipalities and prepare the municipal capability assessments. The team aims to facilitate an efficient and productive planning process that provides value to municipalities.

Project Schedule Review

Mr. Subbio reviewed the project schedule. If all municipalities complete required worksheets expeditiously, the draft HMP should be ready for public review by the April 2021. The Steering Committee and Tetra Tech will strive to complete the HMP according to this project schedule.

Next Steps

The following next steps were discussed at the meeting:

- The consultant project team requested that the county and municipalities complete information-gathering worksheets by December 15, 2020. Partnership members will receive digital versions of the worksheets to be distributed via e-mail.
- Partnership members are requested to provide copies of local plans, regulations, or studies that may be relevant to hazard mitigation in their municipality. These documents can be emailed to Mr. Subbio.
- The information-gathering sessions will soon be scheduled; the date has not yet been determined.
- A pair of public information meetings will be soon be scheduled; the date has not yet been determined.
- Tetra Tech will continue updating the risk assessment.

Mr. Subbio and then Mr. Butcher ended the meeting by thanking participants for their attendance and forthcoming active engagement.

The meeting adjourned at 7:10 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Planning Partnership Kickoff Meeting #2		
Date	November 19, 2020	**Time**	10:00 – 11:15 a.m.
Location	Webinar		
Attendees	Amy Alduino, Recycling Coordinator, Erie County Department of Environment and Planning		
	Mike Gangemi, Senior Planner - GIS, Erie County Department of Environment and Planning		
	John Hood, Chief Environmental Compliance Specialist, Erie County Department of Environment and Planning		
	Bonnie Lawrence, Deputy Commissioner, Erie County Department of Environment and Planning		
	Joanna Panasiewicz, Watershed Coordinator, Erie County Department of Environment and Planning		
	Lisa Matthies-Wiza, Director, Erie County Office of Geographic Information Services		
	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services		
	Tracy Falco Chalmers, Erie County Department of Public Health		
	Jonathan DePlanche, Senior Civil Engineer, Erie County Department of Public Works Division of Highways		
	Matthew W. Barrett, Security Officer, Erie County Water Authority		
	Terry Wachowiak, Village Administrator/Treasurer, Village Alden		
	Jim Zymanek, Director, Emergency Services, Town of Amherst, Village of Williamsville		
	Jason Keding, Supervisor, Town of Boston		
	Mike Mazarowski, Emergency Manager, Town of Cheektowaga		
	Lynn Rybak, Assistant to the Supervisor, Town of Cheektowaga		
	Clyde Drake, Supervisor, Town of Concord		
	John Whitney, Supervisor, Town of Grand Island		
	Sean Crotty, Emergency Manager, Town of Hamburg		
	Geoffrey Hack, Emergency Manager, Town of Holland		
	Ronald Rozler, Disaster Coordinator, Town of Lancaster		
	David L. Cummings, Supervisor, Town of Newstead		
	Robert Lutz, Emergency Services Coordinator, Town of Tonawanda		
	RJ Nieman, Emergency Manager, Village of Depew		
	Tony Fischione, Code Enforcement Officer, Village of Depew		

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

	Scott Kuhlmey, Director of Emergency Management, Village of Lancaster
	Vincent George, Mayor, Village of North Collins
	Richard Mrugalski, Emergency Manager, Town & Village of Orchard Park
	Debra Smith, Clerk/Treasurer, Village of Sloan
	Liz Melock, Village Administrator, Village of Spring Valley
	Bill Krebs, Mayor, Village of Springville
	Greg Stowell, Emergency Manager, Village of Springville
	Mark Banks, Deputy Director, OEM, City of Tonawanda
	Charles Stuart, Fire Chief, City of Tonawanda
	Chief Dan Denz, Police Department, West Seneca Police Department
	James Unger, Patrol Captain / Public Information Officer, West Seneca Police Department
	Walter Rachel, Emergency Manager, Town of Wales
	Christina Norman, Administrator, Buffalo Ambulatory Surgery Center
	Dave DeLorenzo, Vice President, Security/Emergency Management, Catholic Health
	Cindy Shelton, Environmental Health & Safety Manager , Chemical Distributors, Incorporated
	Daniel McCartan, Emergency Manager, Erie County Medical Center
	David McKnight, Emergency Manager, Kaleida Health
	Laura Dewey, Health, Safety & Environment Manager, Mount St. Mary's Hospital
	John Waszak, Supervisory Chemical Security Inspector, Region 2, Cybersecurity and Infrastructure Security Agency
	Jason Tolsma, Emergency Response Manager, National Fuel Gas
	Michael Fries, Warning Coordination Meteorologist, National Weather Service
	Mary McIntosh, Regional Spill Geologist, New York State Department of Environmental Conservation
	Theodore Myers, Regional Flood Control Engineer, Region 9, NYS Department of Environmental Conservation
	Lynn Sigeti, Regional Emergency Preparedness Coordinator, Western New York Healthcare Association
	Jillian Brown, Health, Safety & Environment Manager, Sisters of Charity Hospital, Main St. & St. Joseph Campus
	Kyle Hatch, Planner, Consultant - EDR
	Jane Rice, Planning Director, Consultant - EDR
	Erica Tauzer, Project Manager, Consultant - EDR
	Christine Gunn, Planner, Consultant - Prospect Hill

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

	Matthew Butwin, Planner, Consultant - Prospect Hill
	Brian Kehoe, Planner, Consultant - Tetra Tech
	Subbio, Tony, Project Manager, Consultant - Tetra Tech

Discussion Points

This section summarizes each discussion point addressed during the Planning Partnership Kickoff Meeting #2. This was the second of two identical sessions conducted to kick off the planning process.

Introductions

Mr. Subbio opened the meeting. As attendees entered the virtual meeting, they were prompted to provide their name and affiliation either verbally or via the webinar chat function. Mr. Butcher then welcomed all attendees and emphasized the importance of active participation from municipal representatives.

Mr. Subbio noted that the meeting will be recorded. He asked if there were any specific issues in the county that attendees would like to address during the planning process. The following issues were noted:

- Ms. Alduino (*Erie County Recycling Coordinator*) indicated that she was specifically concerned or wanted to bring up debris clean-up and disposal – especially for woody debris.
- Mr. Zymanek (*Town of Amherst*) also wanted to see if and how flood management projects are being incorporated into the HMP and wanted to make sure they were evaluated and included.
- Mr. Myers (*NYS DEC*) brought up two items:
    - Would like to make sure flood protection program projects being done with NYSDEC and local jurisdictions, in conjunction with the USACE, would be included – especially as it relates to operations and management.
    - Would like dam safety included in the HMP.
- Ms. Panasiewicz (*Lake Erie Watershed Protection Alliance*) would like to be sure water quality and quantity are both included. In addition, watershed management plans are being developed and overlap with this planning and should be coordinated, as well as some Resilient New York projects. Also inquired about current status and reliability of FIRMs.
- Mr. DePlanche (*Erie County DPW – Highways*) would like both roads and bridges to be included in the HMP, as they pursued some FEMA funding recently and were not eligible because the projects were not in the previous HMP. They have an informal list or collection of roads and bridges and could pull something together.

Overview of Hazard Mitigation

Mr. Subbio provided an introduction to hazard mitigation planning. He encouraged each municipal representative at the meeting to work with a team of officials within their municipality to provide

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

information for the HMP update. Mr. Subbio defined types of mitigation activities and described the Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance (HMA) grant program. In addition, Mr. Subbio provided a brief overview of federal and New York State (NYS) planning requirements for HMPs. For the plan to finalized, review and approval are required by NYS Division of Homeland Security and Emergency Services (DHSES) as well as FEMA. In order to be eligible for certain types of funding, the participation of a municipality must be documented in the HMP.

Project Scope Review

Mr. Subbio reviewed the planning process and the ways in which each phase meets a state and/or FEMA requirement.

Phase 1 – Planning Process

Mr. Subbio discussed the formation of the Steering Committee and the Planning Partnership, and their respective roles in forwarding and completing the HMP. Each partnership member has shown their commitment to the HMP process by attending this meeting. Members are further encouraged to work with stakeholders to provide information about community-specific hazards. Members are asked to recommend actions that can be taken to mitigate the impact of the identified hazards of concern.

Phase 2 – Update the Risk Assessment

The following hazards of concern will be profiled in the updated HMP. This list reflects input from the HMP Steering Committee:

- Coastal Erosion
- Cyber Attack
- Earthquake
- Epidemic/Pandemic
- Expansive Soils
- Extreme Temperatures
- Flood (including ice jams)
- Hazardous Materials
- Landslide
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

The 500-year earthquake, the 1-percent and 0.2-percent annual chance floods, and the 100-year and 500-year wind events will be examined using FEMA's Hazards-U.S. (HAZUS) software. Quantitative analysis will be conducted for geographic hazards; qualitative analysis will be completed for other hazards. Upon completion of the hazard profiles, Tetra Tech will review the risk assessment with the Planning Partnership and the public. Attendee comments included the following:

- Mr. Whitney *(Grand Island)* indicated leaving storm surge as a hazard is essential, as it is a problem facing many communities along the lake and river.

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Phase 3 – Public Involvement Strategy

Municipalities have been requested to complete a Letter of Intent to Participate (LOI) to acknowledge that they will actively participate in the HMP update process. The LOI confirms that the municipality understands its roles and responsibilities throughout the planning process. The template LOI has been provided by the Erie County Department of Homeland Security and Emergency Services.

Tetra Tech will conduct six information-gathering meetings with participating jurisdictions in early 2021. Specific dates are to be determined. These meetings provide a targeted venue to gather information crucial to creating a high-quality HMP and to address any questions from municipalities. Mr. Subbio stated that information will be gathered from participating municipalities via a set of jurisdictional worksheets.

Mr. Subbio described the multi-faceted stakeholder outreach efforts that are an important part of the HMP planning process. Information and outreach will be shared throughout the course of the project via Erie County's website. In addition, Tetra Tech will create and maintain a project-specific website to lessen data upload requirements on county staff, and to provide information quickly. This website will be launched very soon. Tetra Tech has developed an innovative yet simple online mapping tool that can be used by all stakeholders. The graphic and geographically referenced tool guides respondents through a process of identifying specific hazards that concern them. These digital platforms will be promoted through social media.

Tetra Tech will prepare a distinct online survey targeted to elicit meaningful hazard related data from residents, members of academia, business members and other stakeholders. A pair of Public Information Meetings will be held to introduce people to the planning process, at dates to be determined. The public is also welcome to participate in the Risk Assessment Review Meeting and the Plan Draft Review Meeting.

Mr. Subbio reviewed HMP information gathering worksheets with the attendees. He recommended that each attendee work with a team of local officials to complete these worksheets. It is not expected that any one official will have the knowledge to complete all six of the worksheets. The targeted deadline for completion of the worksheets is December 15, 2020. The project consultant team will follow up with municipalities to facilitate worksheet completion, and upcoming meetings will provide additional opportunities to refine municipal-specific input. The six jurisdictional worksheets are:

- Evaluation of Identified Hazards and Risk
- Capability Assessment and Integration
- NFIP Floodplain Administrator Questionnaire
- Mitigation Action Review
- New Development and Building Permits
- Shelters, Evacuation Routes, Temporary Housing and Long-Term Housing

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Phase 4 – Mitigation Strategy

Tetra Tech has designed a robust program that guides municipalities in determining strategic actions going forward that address natural hazard threats. Tetra Tech will work with the Steering Committee to set the goals and objectives for the HMP with input from the Planning Partnership. Municipalities will be asked to confirm the status of mitigation actions from the most recent version (2015) of the Erie County HMP. Municipalities will then be guided to plan the next round of mitigation actions to be included in the updated HMP.

Municipal capability is an important element of hazard mitigation planning. The consultant project team will catalogue municipal capabilities for implementing hazard mitigation. Tetra Tech and NYS DHSES will also conduct a Mitigation Strategy Workshop to assist municipalities with developing strategic mitigation actions to include in the final HMP.

Crucial information from jurisdictional worksheets, risk assessment, capability assessment, and mitigation actions will be compiled into a jurisdictional annex for each municipality and the county. These annexes are a detailed compendium of municipality-specific data with analyses specific to the hazards of concern. The annexes facilitate access by local officials.

Phase 5 – Plan Maintenance

Tetra Tech and the Steering Committee will develop procedures for maintaining the HMP over the next 5 years (to 2025). These procedures will be documented in the Plan Maintenance section of the HMP. This section will also describe integration of the HMP with other planning mechanisms, such as comprehensive and master planning, local regulations, etc. Mitigation actions will be loaded into Tetra Tech's plan review tool to streamline ongoing plan maintenance.

Phase 6 – Plan Update and Deliverables

Throughout the planning process, Tetra Tech will compile and refine the HMP document. The main body of the HMP will profile the county, explain the planning process, describe the risk assessment and mitigation strategy, and discuss maintenance of the plan. Jurisdictional annexes and additional information provide context and depth to a final HMP. Draft versions of the plan will be shared with the Steering Committee and Planning Partnership for review and comment throughout the planning process.

Phase 7 – Plan Review and Adoption

Tetra Tech will also provide the draft HMP through various digital platforms to encourage public review and comment. The public review period will be advertised and will last for 30 days. In addition, Tetra Tech and the Planning Partnership will conduct a public meeting to gather feedback on the draft plan and to make required changes.

After the HMP draft is reviewed and updated, Tetra Tech will oversee submission of the formal draft to NYS DHSES for agency review. In the event that NYS DHSES identifies needed changes, Tetra Tech will make these changes and subsequently resubmit the document for final NYS review. After determining that requirements have been satisfied, NYS DHSES will forward the HMP to FEMA

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Region II for review. FEMA is required to review a submitted HMP within 45 days of receipt. If FEMA indicates that any changes are needed, Tetra Tech will make these changes and resubmit to FEMA. At this point, the plan will be granted "approvable pending adoption" status to indicate that it meets all requirements.

The county and participating jurisdictions will formally adopt the HMP by resolution. After such adoption, each jurisdiction will receive a letter from FEMA stating that the HMP is formally approved.

Project Team

The consultant project team is led by Tetra Tech. The project is also supported by team members from EDR and from Prospect Hill Consulting. Several consultant team members participated in this meeting and briefly reviewed how and when they would engage with partnership members to elicit and refine municipal input. Planners from Tetra Tech and Prospect Hill will directly support municipalities in completing worksheets. EDR will coordinate the data received from municipalities and prepare the municipal capability assessments. The team aims to facilitate an efficient and productive planning process that provides value to municipalities.

Project Schedule Review

Mr. Subbio reviewed the project schedule. If all municipalities complete required worksheets expeditiously, then the draft HMP should be ready for public review by the April 2021. The Steering Committee and Tetra Tech will strive to complete the Plan according to this project schedule.

Next Steps

The following next steps were discussed at the meeting:

- The consultant project team requested that the county and municipalities complete information-gathering worksheets by December 15, 2020. Partnership members will receive digital versions of the worksheets to be distributed via e-mail.
- Partnership members are requested to provide copies of local plans, regulations, or studies that may be relevant to hazard mitigation in their municipality. These documents can be emailed to Mr. Subbio.
- The information-gathering sessions will soon be scheduled; the date has not yet been determined.
- A public information meeting will soon be scheduled; the date has not yet been determined.
- Tetra Tech will continue developing hazard profiles, risk assessment, and other plan sections for the hazards of concern analyzed in the HMP.

Mr. Subbio and then Mr. Butcher ended the meeting by thanking participants for their attendance and forthcoming active engagement.

The meeting adjourned at 11:15 a.m.

TETRA TECH

complex world | CLEAR SOLUTIONS™

Erie County Hazard Mitigation Plan

2021 Update

Planning Partnership Kickoff Meetings

November 18, 2020
November 19, 2020

2

Agenda

- Introductions
- Overview of Hazard Mitigation
- Project Scope Review
- Project Team
- Project Schedule Review
- Next Steps
- Questions

3

Introductions

- Name
- Agency
- Mitigation Experience
- Focus and Concerns

4

TETRA TECH

Overview of Hazard Mitigation

5

What is hazard mitigation?

Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

"…provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and local ability…" (CFR).

6

Mitigation Works!

- The nation saves **$6** for every **$1** spent through mitigation grants, funded through select federal agencies.

National Benefit-Cost Ratio (BCR) Per Peril *BCR numbers in this study have been rounded	Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio	$4:1	$6:1
Riverine Flood	$5:1	$7:1
Hurricane Surge	$7:1	Too few grants
Wind	$5:1	$5:1
Earthquake	$4:1	$3:1
Wildland-Urban Interface Fire	$4:1	$3:1

7

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Federal Requirements

Disaster Mitigation Act of 2000

- Risk assessment
- Public outreach and participation
- Process for update
- Formal state and FEMA review
- Documentation of acceptance by the community

8

New York State Requirements

- Develop jurisdictional teams
- Assess critical facilities
- Plan for displaced residents
- Plan for evacuation needs and sheltering
- Document past mitigation accomplishments
- Include jurisdictional annexes
- Develop mitigation actions
- Identify funding sources
- Plan for climate change

9

TETRA TECH

Project Scope Review

10

Project Scope Review

- Phase 1 – Planning Process
  - Steering Committee - Strategic oversight
  - Planning Partnership
    - Municipal officials
    - Stakeholders
    - General Public

11

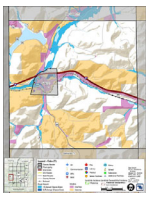
Project Scope Review (Continued)

- Phase 2 – Update the Risk Assessment
  - Hazards of Concern
    - Coastal Erosion
    - Cyber Attack
    - Earthquake
    - Expansive Soils
    - Extreme Temperatures
    - Flood
    - Hazardous Materials
    - Landslide
    - Pandemic
    - Severe Storm
    - Severe Winter Storm
    - Utility Failure
    - Wildfire

12

Project Scope Review (Continued)

- Phase 2 – Update the Risk Assessment (Continued)
  - HAZUS-MH Analysis
    - Earthquake: 500-year MRP event
    - Flood: 1-percent and 0.2-percent annual chance floodplains
    - Wind: 100-year and 500-year MRP events
  - Quantitative Analysis for Geographic Hazards
  - Review Risk Assessment with Planning Partnership (open to the public)



13

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

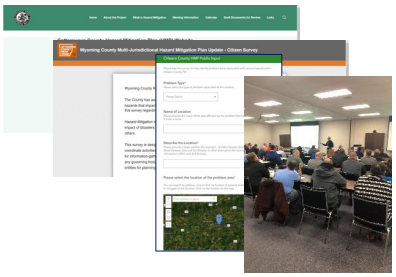
Project Scope Review (Continued)

- Phase 3 – Public Involvement Strategy
  - Letter of Intent to Participate
  - Six Information Gathering Meetings – Webinars
  - Jurisdictional Worksheets
    - Evaluation of Identified Hazards and Risk
    - Capability Assessment and Integration
    - NFIP Floodplain Administrator Questionnaire
    - Mitigation Action Review
    - New Development and Building Permits
    - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

14

Project Scope Review (Continued)

- Phase 3 – Public Involvement Strategy (Continued)



15

Project Scope Review (Continued)

- Phase 4 – Mitigation Strategy
  - Develop Goals and Objectives
  - Assess Capabilities
  - Conduct Mitigation Strategy Workshop
  - Develop Annexes

16

Project Scope Review (Continued)

- Phase 5 – Plan Maintenance
- Phase 6 – Plan Update and Deliverables
  - Develop the Document
    - Develop and finalize main body
    - Finalize jurisdictional annexes
  - Draft Plan Reviewed throughout the Process

17

Project Scope Review (Continued)

- Phase 7 – Plan Review and Adoption
  - Public Review
  - Draft Plan Review Meeting (open to the public)
  - Submittal to the New York State Division of Homeland Security and Emergency Services (NYS DHSES) and FEMA
  - Update As Necessary
  - "Approvable Pending Adoption"

18

TETRA TECH

Project Team

edr

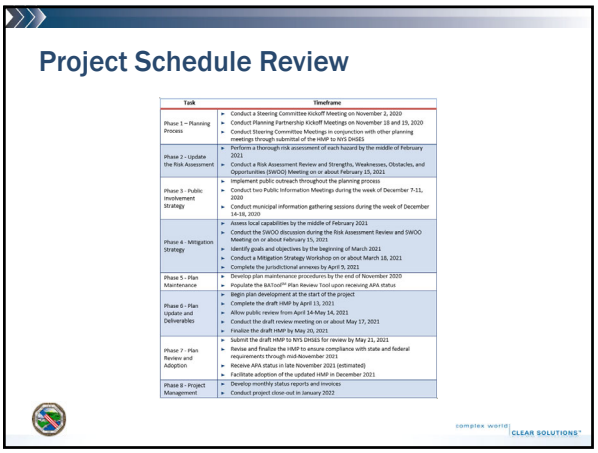
PROSPECT HILL CONSULTING LLC

19

19

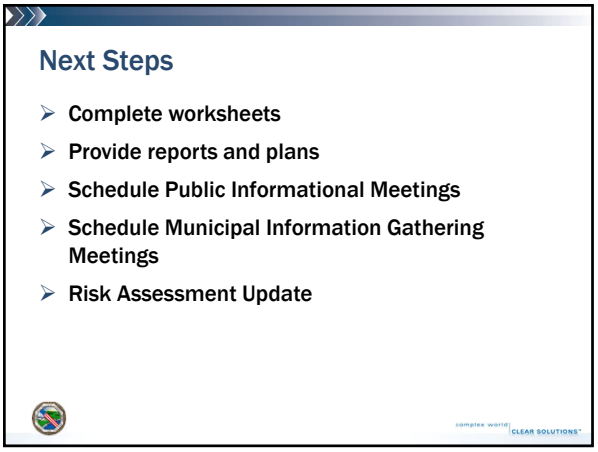
Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

20

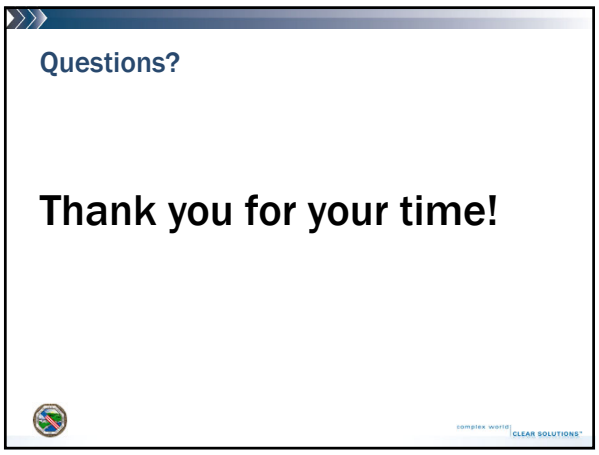


21

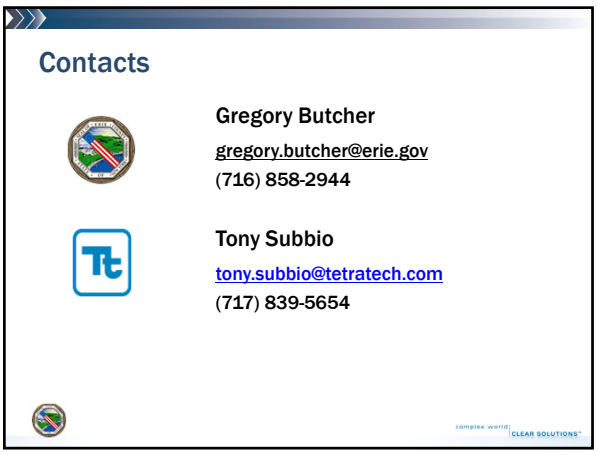
22



23



24



25

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Planning Partnership Kickoff Meeting #1

Wednesday, November 18, 2020 | 6:00 – 8:00 p.m.

1. **Introductions**
2. **Overview of Hazard Mitigation**
3. **Project Scope Review**
   a. Phase 1 – Planning Process
   b. Phase 2 – Update the Risk Assessment
   c. Phase 3 – Public Involvement Strategy
   d. Phase 4 – Mitigation Strategy
   e. Phase 5 – Plan Maintenance
   f. Phase 6 – Plan Update and Deliverables
   g. Phase 7 – Plan Review and Adoption
4. **Project Team**
5. **Project Schedule Review**
6. **Next Steps**
   a. Complete worksheets
   b. Provide reports and plans
   c. Schedule Public Informational Meetings
   d. Schedule Municipal Information Gathering Meetings
   e. Risk Assessment Update
7. **Questions**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Planning Partnership Kickoff Meeting #2

Thursday, November 19, 2020 | 10:00 a.m. – 12:00 p.m.

1. **Introductions**
2. **Overview of Hazard Mitigation**
3. **Project Scope Review**
   a. Phase 1 – Planning Process
   b. Phase 2 – Update the Risk Assessment
   c. Phase 3 – Public Involvement Strategy
   d. Phase 4 – Mitigation Strategy
   e. Phase 5 – Plan Maintenance
   f. Phase 6 – Plan Update and Deliverables
   g. Phase 7 – Plan Review and Adoption
4. **Project Team**
5. **Project Schedule Review**
6. **Next Steps**
   a. Complete worksheets
   b. Provide reports and plans
   c. Schedule Public Informational Meetings
   d. Schedule Municipal Information Gathering Meetings
   e. Risk Assessment Update
7. **Questions**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Project Schedule

Subject to Change

Task	Timeframe
Phase 1 – Planning Process	► Conduct a Steering Committee Kickoff Meeting on November 2, 2020 ► Conduct Planning Partnership Kickoff Meetings on November 18 and 19, 2020 ► Conduct Steering Committee Meetings in conjunction with other planning meetings through submittal of the HMP to NYS DHSES
Phase 2 - Update the Risk Assessment	► Perform a thorough risk assessment of each hazard by the middle of February 2021 ► Conduct a Risk Assessment Review and Strengths, Weaknesses, Obstacles, and Opportunities (SWOO) Meeting on or about February 15, 2021
Phase 3 - Public Involvement Strategy	► Implement public outreach throughout the planning process ► Conduct two Public Information Meetings during the week of December 7-11, 2020 ► Conduct municipal information gathering sessions during the week of December 14-18, 2020
Phase 4 - Mitigation Strategy	► Assess local capabilities by the middle of February 2021 ► Conduct the SWOO discussion during the Risk Assessment Review and SWOO Meeting on or about February 15, 2021 ► Identify goals and objectives by the beginning of March 2021 ► Conduct a Mitigation Strategy Workshop on or about March 18, 2021 ► Complete the jurisdictional annexes by April 9, 2021
Phase 5 - Plan Maintenance	► Develop plan maintenance procedures by the end of November 2020 ► Populate the BATool[SM] Plan Review Tool upon receiving APA status
Phase 6 - Plan Update and Deliverables	► Begin plan development at the start of the project ► Complete the draft HMP by April 13, 2021 ► Allow public review from April 14-May 14, 2021 ► Conduct the draft review meeting on or about May 17, 2021 ► Finalize the draft HMP by May 20, 2021
Phase 7 - Plan Review and Adoption	► Submit the draft HMP to NYS DHSES for review by May 21, 2021 ► Revise and finalize the HMP to ensure compliance with state and federal requirements through mid-November 2021 ► Receive APA status in late November 2021 (estimated) ► Facilitate adoption of the updated HMP in December 2021
Phase 8 - Project Management	► Develop monthly status reports and invoices ► Conduct project close-out in January 2022

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #1		
Date	January 21, 2021	**Time**	2:00–3:30 p.m.
Location	Webinar		
Attendees	Jonathan DePlanche, Senior Civil Engineer, Erie County Highways		
	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Michael Tuberdyke, Special Operations Division Chief, Buffalo Fire Department		
	Mike Mazurowski, Emergency Services Coordinator, Town of Cheektowaga		
	Lynn Rybak, Supervisor's Office, Town of Cheektowaga		
	Dawn Izydorczak, Clerk, Town of Newstead		
	Vincent George, Mayor, Village of North Collins		
	Jan Hutchinson, Clerk/Treasurer, Village of North Collins		
	Jerry Whittington, Emergency Manager, Town of Sardinia		
	Mark Banks, Deputy Director Emergency Management, City of Tonawanda		
	Captain Fredric Foels, Captain of Patrol Operations, City of Tonawanda		
	Erik Lindhurst, Building Inspector and Flood Plain Administrator, City of Tonawanda		
	Chuck Stuart, Fire Chief, City of Tonawanda		
	Robert Lutz, Emergency Services Coordinator, Town of Tonawanda		
	Tony Subbio, Project Manager, Tetra Tech		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Mike Kane, Principal, Prospect Hill Consulting		
	Kyle Hatch, Planner, EDR		
	Erica Tauzer, Project Manager, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Subbio provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000) and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding streams. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Subbio then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations, (2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Project Overview

Mr. Subbio then described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Erie County Highway Department – There is not a significant issue with regular flooding of culverts; the Highway Department aims to address issues quickly. Flooding and erosion are impacting roads and bridges, but repairs to these facilities are expensive, and funds are short. The department will provide a list of county-owned critical facilities that need backup power for inclusion in HMP update.

Buffalo Fire Department – Flooding caused by ice jams is common each year along Cazenovia Creek. The city has a routine for addressing flood events, including citizen evacuations. Recent storms caused erosion and damaged break walls along the lakeshore. The Old First Ward contains a 4–5 block area that floods, during which emergency responders are on standby until floodwaters recede. Most homes are slab construction (no basement), typically residents do not evacuate, and residents do not want to leave their homes anyway. Typically, flooding and sometimes snow fall are the events that trigger emergency response and rescues.

Town of Cheektowaga – Snow storage is an issue each year, particularly after very large snow events. The town would like to dedicate certain areas to snow storage instead of relying upon ad hoc storage at town parks. The town wants the county and state to mitigate their roadways so that their respective roadways do not close during high waters. The HMP can include mitigation actions encouraging coordination between the town, county, and state highway agencies.

Village of North Collins – Each year, an area between Route 249, Park Terrace, and the railroad tracks floods. Mitigation of this area should be included as an action item in the HMP update.

City of Tonawanda – The City Department of Public Works (DPW) facility lacks backup power. A private facility, Tonawanda Towers, is a low-income/high-rise housing that lacks adequate backup power. Firefighters have had to carry residents down 11 flights of stairs in the past. Flooding is not an issue in the city.

Town of Tonawanda – The Police Department/Emergency Operation Center has an older diesel generator, and a new one is needed. The municipal building is also in need of backup power. The town is determining the scale of generator needed. There is little open space in the town, and many properties are historic. The floodplain in the town is open land that does not contain any buildings.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Mitigation Projects Completed

Erie County Highway Department – The county has completed many mitigation projects. These projects were not listed in the 2015 mitigation actions list. Staff will compile mitigation projects completed back to 2015 and will provide this data to Melissa Calhoun or to Tony Subbio at Tetra Tech.

Town of Cheektowaga – Town staff walk the creek beds with New York State Department of Environmental Conservation (NYS DEC) annually to identify obstacles to water flow. Scajaquada Creek and Cazenovia Creek are large creeks.

Village of North Collins – The village is implementing mitigation projects; however, after one project is finished, another soon pops up. The village's location among hills means that water flows overland in many directions. Flooding occurred recently on Eagle Drive near North Collins High School, and on High Street, which divides the village. A recently installed turf field at the high school was installed improperly, and water overflows onto side streets, including Harrison Avenue. Drainage is now improved, and water is diverted along Eagle Drive into Eighteen Mile Creek. A new culvert is needed in this area. Storm drain upgrades are being constructed with installation of a new water line. The village is replacing the bridge over Big Sister Creek in Spring 2021, working with New York State Department of Transportation (NYSDOT). The village will try to compile a list of projects.

City of Tonawanda – Shore hardening along Niagara River has been a successful mitigation project and has virtually eliminated flooding in the city. The park floods, but this does not present a hazard since it is a passive recreation area.

Town of Tonawanda – Similar to the City of Tonawanda, the town has only small amounts of flood prone areas, and these are open space.

Information Provided

Mr. Subbio reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.
- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 3:30 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #3		
Date	January 22, 2021	**Time**	9:00–10:20 a.m.
Location	Webinar		
Attendees	Joanna Panasiewicz, Planner, Erie County – Department of Environment and Planning, LEWPA		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Matt Barrett, Security, Erie County Water Authority		
	Martha Librock, Clerk, Town of Aurora		
	Joseph Fox, Fire/Police Department, Village of Blasdell		
	Jason Keding, Supervisor, Town of Boston		
	Don Poleto, Engineer, City of Buffalo Department of Public Works		
	Clyde Drake, Supervisor, Town of Concord		
	Cathie Thomas, Administrator, Village of East Aurora		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Mike Kane, Principal, Prospect Hill Consulting		
	Samantha Morrone, Planner, EDR		
	Erica Tauzer, Project Manager, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed participants and invited them to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000), and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding programs. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations,

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

(2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Project Overview

Mr. Kehoe then described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Erie County Planning/watersheds – Lake Erie Watershed Protection – The Lake Erie beach in Evans was heavily damaged by the October 2019 storm, including washing out bio-gardens. Storms this past November washed debris along the lakeshore, notably in the Town of Evans.

Erie County Water Authority (ECWA) – The ECWA plants (one draws from Lake Erie and one from the Niagara River) are not heavily impacted by flooding. Similarly, there is only minimal concern about flooding around pump stations. The Williams pump station (South Penora Street in the Town of Lancaster) is located in a high water table, which can be an issue when heavy snowmelt combines with rainfall. High winds affect Sturgeon Point because it is thickly wooded. Winds damage fencing at this ECWA facility, which is repaired immediately because security is a highest priority due to the facility's critical nature.

Town of Aurora – The east branch of Cazenovia Creek often jams with trees and changes the course of the creek. This is also true along Olean Creek, which is low-lying. 103S7244There have not been any big floods recently. The severity of windstorms is increasing, with more gusts above 50 mph. New York State Electric and Gas (NYSEG) is responsible for clearing limbs.

City of Buffalo Department of Public Works – The biggest cause of flooding is during the spring thaw, which causes ice jams. On Cazenovia Creek and the Buffalo River, pieces break off and cause significant and regular flooding in certain areas. Certain creek bends are problematic. Cazenovia Creek has sloped walls that were installed as part of a flood control project that started construction in the 1920s. The final section was installed in the late 1990s. The city is seeking funds to extend these sloped walls further. Scajaquada Creek does not experience heavy ice jamming, but floods occur during Lake Erie seiche events. This creek backs up into the Niagara River, then the Black Rock Canal. Delaware Park and pump stations get overwhelmed during heavy rains, which results in road closings. The Buffalo River is dredged to 22–25 feet. Storm surge from the lake is common; homes and streets flood, and evacuations are necessary.

The New York State Department of Transportation (NYSDOT) Stevenson Bridge was reconstructed in the 1990s because abutments stuck out into the river, and ice jams resulted. The bridge now allows greater water flow underneath, and the deck was raised. The city's current project priority is the Bailey Avenue Bridge between McKinley Parkway and Elk Street – the "Y" where the Buffalo River and Cazenovia Creek split. The cost of the project is estimated at $20 million. The South Ogden Bridge on West Seneca and South Buffalo border is being repaired.

The 2019 Halloween storm overtopped the Erie Basin Marina, damaged the roadway, and dislodged part of the Rhode Island pier. The city is working with FEMA to acquire funds to repair those

MEETING NOTES

locations. The City Fire Department will be asked for information about hazardous materials transport along rail lines. This information will be passed along to Melissa Calhoun.

National Grid is responsible for keeping power lines clear, but the city addresses this issue on an emergency basis.

Town of Concord – Nuclear waste moves along regional roads (West Valley nuclear site, which is only 5 miles from the town in Cattaraugus County)

Village of East Aurora – Tannery Brook runs through the entire village. Two significant, recent projects were performed by the county and have mitigated some related flooding problems. The town Highway Department replaced two bridges where the brook runs under North Grove, and Whaley Roads and the stream bank was stabilized.

This year, a culvert failed and created a parking lot sinkhole at Mikey D's Cafe. An emergency repair was completed, but a full repair will be done this year. An engineering firm has been selected, and the project will soon go out to bid. The village contains old infrastructure in areas like Oakwood, which requires road drainage and waterline upgrades.

The May 2020 train derailment was a frightening event that luckily did not cause much negative impact. It could have been a disaster since the train was carrying oil tankers. Starting the following day, cleanup of the contained diesel spill commenced. Despite being caused by human error, this event should be documented in the HMP update under the hazardous materials consideration.

Mitigation Projects Completed

Erie County Planning/Lake Erie Watershed Planning Association – Asked how participation in the Community Rating System (CRS) relates to this HMP update. Amherst is an active CRS community, and the Town of Evans is considering participating also. LEWPA is planning on creating a brochure for lakeshore landowners outlining coastal erosion processes and technical assistance. LEWPA provides educational information to the public through distribution at public libraries.

ECWA – The ECWA distributes information via email, through its website, and via alerts.

Town of Aurora – In 2019, the town updated its Flood Damage Prevention Ordinance. Public information, mostly FEMA materials and storm data, is distributed via the town website.

Village of Blasdell – Flooding is not a big problem in this landlocked village. Sometimes flooding occurs on a small creek as it passes under the railroad. Flooding occurs along Rush Creek along Jeffrey Boulevard near the Milestrip Expressway. One village-owned storage facility experiences occasional and minor flooding. National Grid is responsible for tree trimming.

Town of Boston – The town coordinates with Erie County and NYS agencies. Eighteen Mile Creek runs through the town, which is a Municipal Separate Storm Sewer Systems (MS4) community. The town is creating a digital town-wide drainage plan, which will assist with creating grant applications for mitigation project funding. The town takes a proactive approach to hazard mitigation.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

City of Buffalo – DPW – The Baily Avenue bridge project is the largest mitigation project in several years; this is a two span to one span conversion.

Information Provided

Mr. Kehoe reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.
- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 10:20 a.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #4		
Date	January 25, 2021	**Time**	2:00–3:15 p.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Brian Rose, Senior Project Manager, Erie County Department of Public Works		
	Mark Hartley, Emergency Manager, Town of Aurora		
	Jim Zymanek, Director Emergency Services, Town of Amherst/Village of Williamsville,		
	Jayne DeTine, Clerk, Village of Akron		
	Randy Taylor, Emergency Manager, Town of Aurora and Village of East Aurora		
	Bill Smith, Planning and Development, Town of Evans		
	Jere Hoisington, Mayor, Village of Farnham		
	Ric Dimpfl, Emergency Manager, Village of Hamburg		
	Geoff Hack, Emergency Operations Manager, Town of Holland		
	Ronald Rozler, Disaster Coordinator, Town of Lancaster		
	Liz Melock, Administrator, Village of Springville		
	Bill Krebs, Mayor, Village of Springville		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Laura Evans, Planner, Prospect Hill Consulting		
	Samantha Morrone, Planner, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed the participants and invited each to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000), and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding programs. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations, (2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Project Overview

Mr. Kehoe described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Erie County – There are many county roads that parallel streams. High water flows cause erosion. Brian Rose will provide a list of roads that erode.

Town of Amherst – Debris issues occur in Ellicott Creek. The U.S. Army Corps of Engineers (USACE) made some recent changes to move water through the town to Tonawanda Creek and not impact their tributaries. Most recent flooding is an inconvenience, not requiring evacuation. Most soil and foundation issues have been remedied.

Town of Aurora – Route 400 comes through town, and there is concern about potential hazmat spills with tractor trailers. Speeds on that roadway should be reduced. Trimming of trees is needed in many rights-of-way.

Village of East Aurora – Village was lucky to escape serious damage from a recent train derailment; most cars were empty. There were propane tanks involved, but not damaged. Locomotive spilled some diesel fuel, but this was contained before it seeped into Tannery Brook. The railroad paid for the cleanup.

Town of Evans – The town is a coastal community with many tributaries and a heavily developed shoreline community. Stormwater drainage systems upgrade needed in Fern Brook and Muddy Creek portions of town. Coastal flooding due to high water levels and wave runup into tributaries. The town's lower elevations are in the southwest—the Point Breeze and Grandview Bay area. Ice jams and flooding occur on Big Sister Creek and have led to evacuations. The county is undertaking water quality improvements. The October 2019 storm caused much damage to waterfront parks and riprap and retaining walls, breakwater damage, stream bank erosion. Extensive documentation is needed with respect to downed trees and debris removal. The Emerald Ash borer infestation is an issue causing dead trees to fall on electric lines.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Village of Farnham – Hazardous materials on trains is a serious concern. Train traffic has increased. The village is considering moving its emergency operations away from the tracks.

Town of Lancaster – Both the Town and Village of Lancaster have two very active rail lines (CSX & Norfolk Southern), and hazardous materials transit is an issue.

Village of Springville – The village has not experienced much stormwater damage. The wastewater treatment plant only has a small generator to run the digester plant. The village aims to upgrade backup power at the Mill St. facility. Springville has municipal electric. The village would like National Grid to consistently trim trees in order to avoid power outages. Greg Butcher mentioned municipalities should voice their concerns to the NYS Public Service Commission.

Mitigation Projects Completed

Town of Amherst – The town has upgraded the building code to raise standards for foundations. Several bridges and culverts were replaced, and floodplain restoration projects were completed. Public outreach is routine.

Village of East Aurora – Two culverts were replaced, and the creek bed was worked on. The village aims to complete a culvert project at Willow and Oakwood Avenue at Cazenovia Creek.

Town of Evans – The town is working with New York State Department of Environmental Conservation (NYS DEC) on shoreline restoration. Numerous FEMA claims are in process (Sturgeon Point Marina, breakwater reconstruction, and repairs to Lake Erie Beach Park). The town foreclosed on a residential property along Muddy Creek area.

Village of Farnham – The village installed generator backup at municipal buildings, including the designated emergency shelter.

Information Provided

Mr. Kehoe reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 3:15 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #5		
Date	January 26, 2021	**Time**	7:00–8:15 p.m.
Location	Webinar		
Attendees	Kristofer Strauss, Senior Project Manager, Erie County Department of Public Works		
	Greg Butcher, Deputy Director, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Dan Castle, Deputy Commissioner, Erie County Department of Environment and Planning		
	Connie Miner, Grant Manager, Town of Brant		
	Ken Martin, Supervisor, Town of Collins		
	Brian Burgstahler, Emergency Manager, Town of Eden		
	Glenn Kirwin, Assistant Emergency Manager, Town of Eden		
	Rick Meyers, Emergency Manager, Town of North Collins		
	Eric Conley, Emergency Manager, Town of West Seneca		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Laura Evans, Planner, Prospect Hill Consulting		
	Samantha Morrone, Planner, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed the participants and invited them to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000), and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding programs. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations, (2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Project Overview

Mr. Kehoe then described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Erie County Department of Environment & Planning – The Springville Dam is county-owned and has structural issues. This is a safety concern, and the U.S. Army Corps of Engineers (USACE) is involved with repairing the dam. The Buffalo Bills stadium is on county-owned property and is adjacent to Smoke Creek. The stadium's stormwater system is old and can manage only a 2–5-year frequency storm. Larger rain events fill up the parking lot with water. The Bills football organization and the county have developed embankment and energy dissipation measures to prevent erosion. Upgrading of the storm system and a larger distribution box are planned.

The county building at 25 Delaware Street was built defectively and pieces fall into the street. During wind events, the Erie Community College (ECC) downtown campus loses shingles. Overhead scaffolding has been installed as a short-term fix. The county owns 240 buildings, all of which require some maintenance.

Town of Collins – The town, including the Village of Gowanda, experiences significant flooding. Cattaraugus Creek is the largest waterway, but the smaller streams feeding into Cattaraugus Creek typically cause flooding. FEMA and USACE are working on a plan to cut a ditch through the village to divert water.

Town of North Collins – A specific dam upstream has the potential to flood a portion of the town were it to fail. Clear Lake Dam is owned and maintained by the New York State Department of Environmental Conservation (NYS DEC) as part of the Clear Lake Wildlife Management Area.

Mitigation Projects Completed

Erie County – The county is updating or replacing many of its aged buildings to address updated building codes, etc. The Fire Training Academy in Cheektowaga, which also serves as the Emergency Operations Center, is being upgraded. The county has been replacing generators in various buildings at Erie Community College campuses that have not been updated since the 1960s.

Town of Collins – The town manages three water districts and two pump houses, one of which flooded in 1998. The berm surrounding this pumphouse was raised to 10 feet high in 2010.

Town of Eden – The town highway department has upgraded culverts and regularly clears ditches in floodprone areas. More highway projects are planned.

Information Provided

Mr. Kehoe reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.
- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 8:15 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #6		
Date	January 27, 2021	**Time**	9:00–10:15 a.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Ryan Sheedy, Senior MERS Coordinator, Erie County Department of Homeland Security and Emergency Services		
	Mark Pruitt, OEM Coordinator, Village of Alden		
	Jim Brecker, Code Officer, Town of Brant		
	Mark DeCarlo, Supervisor, Town of Brant		
	Jeffrey Grier, Town of Brant		
	James DePasquale, Town Supervisor, Town of Colden		
	Patty Zurbrick, Councilwoman, Town of Colden		
	Tony Fischione, Building Inspector, Village of Depew		
	RJ Nieman, Emergency Manager, Village of Depew		
	Sean Crotty, Emergency Manager, Town of Hamburg		
	William Cansdale, Superintendent Public Works, Village of Lancaster		
	John Gullo, Building Inspector, Village of Orchard Park		
	Richard Mrugalski, Emergency Manager, Town and Village of Orchard Park		
	Debra Smith, Clerk, Treasurer, Village of Sloan		
	James Unger, Police Department, Town of West Seneca		
	Brian Kehoe, Planner, Tetra Tech		
	Mike Kane, Principal, Prospect Hill Consulting		
	Laura Evans, Planner, Prospect Hill Consulting		
	Samantha Morrone, Planner, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed the participants and invited each to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000) and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding programs. The Building Resilient Infrastructure and Communities (BRIC) grant program was

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations, (2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Project Overview

Mr. Kehoe then described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Town of Brant – When Cattaraugus Creek floods, it pushes debris around. During the large 2009 flood, a mobile home was pushed out into Lake Erie and then landed on Brant Beach. FEMA assisted with cleanup after this 2009 event. Snow is a hazard each year. Raw sewage outfalls are an issue in some of the town's creeks, and the Erie County Health Department is assisting with that problem. The beach in Brant collects a great amount of trash during heavy storms.

Town of Colden – Cazenovia Creek is eroding banks adjacent to residences on Route 240, south of Town Hall. The town is working with Erie County Soil and Water to address erosion issues. The town has obtained a perpetual permit from New York State Department of Environmental Conservation (NYS DEC) to access the creek bed and remove obstacles. Tree removal involves coordination with Erie County. The town has acquired funds to address erosion around the railroad tracks.

Village of Depew – Depew works to keep Scajaquada Creek flowing free by removing branches from the creek bed. The village has to encourage property owners to remove these branches because the village does not have easement access to the creek bed.

Town of Hamburg – Sean Crotty talked about aging infrastructure, which is being addressed by the Engineering/Highway Departments. The town wants to address seven problem areas where tributaries run into Lake Erie; water is backing up and storm sewers are clogging with debris. Sean Crotty will send a list of these locations to Tetra Tech.

Debris from Eighteen Mile Creek washes up on Woodlawn Beach, a New York State (NYS) park. There are erosion issues along the shoreline, and the town has been trying to get assistance from the U.S. Army Corps of Engineers (USACE). Hoover Beach floods every time the lake seiches. Residential areas on the stretch of Hamburg's Lake Erie shoreline are losing lands daily. Hoover Road, a town road, is only 18 feet from the edge of the lake.

The town would like to seek BRIC grant funding for repair of a clock tower damaged by storms. The Town of Hamburg Park boat launch gets dredged twice each year. The boat launch gets filled with debris.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Town of Orchard Park – The town asked if the BRIC program can fund installation of backup power, tree trimming costs, dredging creeks or ponds, or bank stabilization. The utility companies are responsible for tree trimming, but sometimes the town has to remove trees and limbs as needed. The majority of flooding occurs in people's backyards. Most creeks flow unimpeded. The town has dredging and bank stabilization needs on Freeman Pond and Smoke Creek.

Town of West Seneca – Ice jams occur each year along the Buffalo and Cazenovia Creeks, and the town coordinates with the City of Buffalo to do ice breakups. Some small sections of berms have been constructed, but the town has not been proactive in dealing with flooding. Buffalo Creek flooding resulted in evacuations on that street two years ago.

Mitigation Projects Completed

Village of Alden – Mark Pruitt was on the line but did not have a microphone. He will send us a list of projects completed in the village.

Town of Brant – Some roads have been upgraded and some overpasses rebuilt.

Village of Depew – Road and bridge repairs are a regular part of the capital program.

Town of Hamburg – The town has had a somewhat reactive approach to hazards. On NYS Route 5, the USACE just put up a break wall that will head off some erosion.

Town of Orchard Park – Town has upgraded some roads, just completed dredging Green Lake, and has rehabilitated that dam with a new spillway.

Information Provided

Mr. Kehoe reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.
- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 10:15 a.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Municipal Support Meeting #7		
Date	February 2, 2021	**Time**	2:00–3:00 p.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Mark Cornell, Deputy Commissioner, Erie County Parks Department		
	Nicole Milks, Clerk/Treasurer, Village of Angola		
	Phil Tremblay, Code Enforcement, Village of Angola		
	Carol Sheibley, Deputy Mayor, Village of Gowanda		
	Nick Crassi, Disaster Coordinator, Village of Gowanda		
	Bob Westfall, Engineer, Town of Grand Island		
	John Whitney, Supervisor, Town of Grand Island		
	John Wolf, Director of Public Safety, City of Lackawanna		
	Pat Hayes, Code Enforcement, City of Lackawanna		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Planner, Prospect Hill Consulting		
	Samantha Morrone, Planner, EDR		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed the participants and invited each to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000) and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding programs. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: (1) Local Plans and Regulations, (2) Education and Awareness Programs, (3) Natural Systems Protection, and (4) Structure and Infrastructure Projects.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Project Overview

Mr. Kehoe then described the Erie County HMP and the process by which it is being updated, incorporating input and efforts from county staff and municipal representatives.

Problems and Problem Areas

Village of Angola – Storms have an impact in the village. The storm this past November was damaging. Freight trains run through village. There was a question on how residents would evacuate if there were a hazmat spill.

Town of Grand Island – The town is not typically impacted by flooding, though sometimes flooding impacts the shoreline dues to winds off the Niagara River. The island depends upon safe and dependable bridge connections. Grand Island operates its own water and wastewater treatment capacity, and both facilities have backup generators. The level of the Niagara River is controlled by the power authority.

Village of Gowanda – The village has had a large amount of flooding during its recorded history. The brooks running through the village back up and cause flooding. Since about the 2013 flood, the village has emphasized flood mitigation. A $6.5 million diversion channel through the village was completed. This has increased safety in the village and retained businesses and residents. The stability of the village reservoir is a concern due to past storm damage. The reservoir is the village's main water source.

City of Lackawanna – There are many rail lines throughout the city. It is not known if critical facilities have backup power.

Mitigation Projects Completed

Village of Gowanda – Persistence has paid off when pursuing funding from FEMA. It is necessary to wait a long time for the funding to come through, and there is extensive paperwork, but the funding has allowed the village to complete important mitigation projects.

Information Provided

Mr. Kehoe reviewed the information required from each jurisdiction that has not yet been submitted.

Next Steps

The following next steps were discussed at the end of the meeting:

- Municipal officials will complete and submit any missing information-gathering worksheets still owed to the county.
- Attendees will discuss problems and problem areas caused by hazards with their colleagues at their respective municipalities.
- Attendees will discuss solutions to those problems with their colleagues and Tetra Tech's assigned planners.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

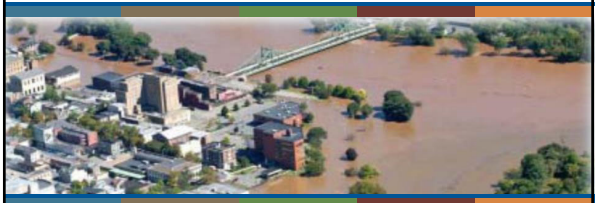
- Tetra Tech will finish the risk assessment update and will conduct a public meeting to review the results of the risk assessment in the coming weeks.

The webinar adjourned at 3:00 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

TETRA TECH
complex world | CLEAR SOLUTIONS™

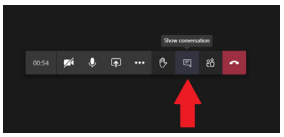
Erie County Hazard Mitigation Plan Update Municipal Support Meetings



1

Welcome

- If you are attending the webinar on your computer, please add your name, title, and organization(s) to the Chat.
  - Bring your mouse to the lower part of the screen until a set of buttons appears.
  - Click "Show Conversation."



2

Agenda

- Welcome and Introductions
- Hazard Mitigation Planning
- Project Overview
- Problems and Problem Areas
- Mitigation Projects Completed
- Information Provided
- Next Steps

Please ask questions at any time.

3

3

Hazard Mitigation Planning

*Hazard Mitigation is any action taken to reduce or eliminate **long-term risk** to people and property from disasters.*

- Disaster Mitigation Act of 2000
- Hazard Mitigation Assistance

- Building Resilient Infrastructure & Communities (BRIC)

4

4

Hazard Mitigation Planning

Local Plans and Regulations	• Updating building codes • Integrating risk into Master Plans
Education and Awareness Programs	• Flood insurance information • Know Your Risk! campaign
Natural Systems Protection	• Preserving natural floodplain functions • Protecting well recharge areas
Structure and Infrastructure Projects	• Constructing a levee • Elevating a house above the base flood level

5

5

Project Overview

- Update Erie County's HMP (2015)
- Organize resources and build the Planning Team
- Develop hazard risk assessments
- Assess local mitigation capabilities
- Develop mitigation strategies
- Determine plan maintenance process
- Approval of HMP by NYS DHSES and FEMA
- Local municipal adoption of the approved HMP

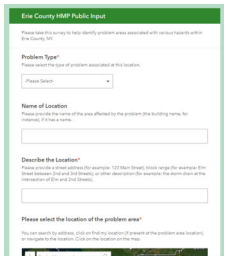
6

6

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Problems and Problem Areas

- Flooding, stormwater drainage
- Lake Erie shoreline
- Hazardous materials releases
- Lack of backup power
- Trees/branches on wires
- Take the survey at:
  https://arcg.is/9bzzr



7

7

Mitigation Projects Completed

- Regulations updated?
- Plans updated?
- Culverts or bridges upgraded?
- Property buyouts?
- Floodplain restoration?
- Public outreach conducted?

8

8

Information Provided

1. Evaluation of Identified Hazards of Concern
2. Capability Assessment and Integration
3. NFIP Floodplain Administrator Questionnaire
4. Mitigation Actions
5. New Development and Building Permits
6. Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing

9

9

Information Provided

Jurisdiction	Worksheet 1 - Events and Losses	Worksheet 2 - Cap. Ass.	Worksheet 3-NFIP Floodplain Admin Questionnaire	Worksheet 4 - Past Action Progress	Worksheet 5 - New Development	Worksheet 6 - Shelters
Blasdell V	X	X	X	X	X	X
Boston T			X		X	
Brant T						
Buffalo C						
Cheektowaga T						
Clarence T						
Colden T						
Collins T						
Concord T	X	X	X	X	X	X
Depew V	X	X	X		X	
East Aurora V	X	X	X	X	X	X
Eden T	X	X		X	X	
Elma T	X	X	X	X	X	X
Evans T						
Farnham V						
Gowanda V						

10

10

Next Steps

- Submit completed worksheets
- Discuss problems and problem areas with your assigned planner
- Discuss solutions with your colleagues and assigned planner
- Complete the risk assessment

11

11

Contacts

Melissa Calhoun
Melissa.Calhoun@erie.gov
(716) 858-8440

Tony Subbio
tony.subbio@tetratech.com
(717) 545-3580

12

12

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #1

Thursday, January 21, 2021 | 2:00–4:00 p.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #3

Friday, January 22, 2021 | 9:00–11:00 a.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #4

Monday, January 25, 2021 | 2:00–4:00 p.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #5

Tuesday, January 26, 2021 | 7:00–9:00 p.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #6

Wednesday, January 27, 2021 | 9:00–11:00 a.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Municipal Support Meeting #7

Tuesday, February 2, 2021 | 2:00–4:00 p.m.

1. Welcome and Introductions
2. Hazard Mitigation Planning
3. Project Overview
4. Problems and Problem Areas
5. Mitigation Projects Completed
6. Information Provided
7. Next Steps

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Jurisdiction	Worksheet 1 - Events and Losses	Worksheet 2 - Cap. Ass.	Worksheet 3-NFIP Floodplain Admin Questionnaire	Worksheet 4 - Past Action Progress	Worksheet 5 - New Development	Worksheet 6 - Shelters, etc.
Erie County						
Erie County Water Authority	X	X	X	X	X	X
Akron V	X	X	X	X	X	X
Alden T						
Alden V			X		X	
Amherst T						
Angola V	X			X		X
Aurora T	X	X	X	X	X	X
Blasdell V	X	X	X	X	X	X
Boston T			x		x	
Brant T						
Buffalo C						
Cheektowaga T						
Clarence T	X	X	X	X	X	X
Colden T						
Collins T	X	X	X	X	X	X
Concord T	X	X	X	X	X	X
Depew V	X	X	X	X	X	
East Aurora V	X	X	X	X	X	X
Eden T	X	X		X	X	
Elma T	X	X	X	X	X	X
Evans T	X					
Farnham V						
Gowanda V	X	X	X	X	X	X
Grand Island T						
Hamburg T						
Hamburg V	X	X	X	X	X	X
Holland T	X	X	X	X	X	X
Kenmore V	X	X	X	X	X	X
Lackawanna C						
Lancaster T						
Lancaster V						
Marilla T						
Newstead T	X	X	X	X	X	X
North Collins T						
North Collins V	X	X	X	X	X	X
Orchard Park T	X	X	X	X	X	X
Orchard Park V	X	X	X	X	X	X
Sardinia T		X	X		X	
Sloan V						
Springville V	X	X	X	X	X	X
Tonawanda C	X	X	X	X	X	X
Tonawanda T	X	X	X	X	X	X
Wales T						
West Seneca T	X	X			X	
Williamsville V						

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Public Information Meeting #1		
Date	January 25, 2021	**Time**	6:00 – 7:30 p.m.
Location	Webinar		
Attendees	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Dan Castle, Deputy Commissioner, Erie County Department of Environment and Planning		
	John Hood, Planner, Erie County Department of Environment and Planning		
	Mike Desmond, Reporter, WBFO		
	Kevin Clapp, Planning Manager, NYS Division of Homeland Security and Emergency Services		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Mike Kane, Principal, Prospect Hill Consulting		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed all attendees and invited each to introduce themselves. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000), and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding streams. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible. Mr. Kehoe also shared the benefit-cost ratio for investments by FEMA into specified natural hazards around the country.

Mr. Kehoe then reviewed the four Hazard Mitigation project types: 1) Local Plans and Regulations, 2) Education and Awareness Programs, 3) Natural Systems Protection, and 4) Structure and Infrastructure Projects.

Public Participation

Mr. Kehoe prompted the participants to share what hazard problems are occurring in their community. The following issues were discussed.

Limbs/tree branches cause power outages when they fall on power lines. National Grid/NYSEG is responsible for tree trimming around power lines and rights-of-way (ROW). Emerald Ash Borer has

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

resulted in many dead or dying ash trees, which is becoming an issue as these trees and branches fall on power lines.

Communications infrastructure is vulnerable to disruption during storms or other hazard events. Cell phone service and the internet are very important. Mr. Kehoe indicated this topic would be considered in the HMP update. Several large communications companies are part of the county's Disaster Team, and they meet regularly and have plans in place.

The Town of Hamburg recently installed rip rap near St. Francis High School.

Next Steps

The HMP project team has been conducting ongoing meetings with municipal contacts. To date, the team has met have with 23 municipalities to gather useful information. All of the input from tonight's meeting will be considered as the plan is assembled. Participants were requested to complete the Public Survey; the link is displayed in the PowerPoint and is hosted on the project website. Participants were encouraged to review the project website regularly.

There will be two more public events as this project progresses; both dates TBD. The first will be the Risk Assessment Review meeting and later will be the Draft Plan Review meeting.

The webinar adjourned at 7:30 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Public Information Meeting #2		
Date	January 28, 2021	**Time**	6:00 – 7:30 p.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Amy Alduino, Recycling Coordinator, Erie County		
	Mark Gaston, District Field Manager, Erie County Soil and Water Conservation District		
	Jim Jozwiak, Planning Board, Town of Concord		
	Paul Michalec, Town of Evans		
	Scott Hayes, Code Enforcement Officer (CEO), City of Lackawanna		
	Matthew Fischione, CEO, Town of Lancaster		
	Debbie Smith, Clerk, Village of Sloan		
	Robert Lutz, Emergency Services Coordinator, Town of Tonawanda		
	Jeanne Beiter, Buffalo Niagara Waterkeeper		
	Chris Renschler, SUNY Buffalo, Geography Professor		
	Jackie McLean		
	David Root		
	Kevin Clapp, Planning Manager, NYS Division of Homeland Security and Emergency Services		
	Brian Kehoe, Planner, Tetra Tech		
	Matt Butwin, Principal, Prospect Hill Consulting		
	Mike Kane, Principal, Prospect Hill Consulting		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Hazard Mitigation Planning

Mr. Kehoe welcomed all attendees and invited each to introduce themselves. He noted that this was the second of two public information meetings held for the HMP update project. Mr. Kehoe provided an overview of hazard mitigation planning, the Disaster Mitigation Act of 2000 (DMA 2000), and the Federal Emergency Management Agency's (FEMA) suite of Hazard Mitigation Assistance (HMA) funding streams. The Building Resilient Infrastructure and Communities (BRIC) grant program was created in 2020 to replace and expand the existing Pre-Disaster Mitigation grant. The Hazard Mitigation Grant Program (HMGP) provides funding to reduce long-term risk from disasters, and

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

each state receives funding from allocations for Presidential Disaster Declarations. In order for a community to access these HMA funds, a community should list needed mitigation projects in this HMP update. Projects located on private or public property are eligible. Mr. Kehoe also discussed the benefit-cost ratio for investments by FEMA into specified natural hazards around the country.

Mr. Kehoe reviewed the four hazard mitigation project types: 1) Local Plans and Regulations, 2) Education and Awareness Programs, 3) Natural Systems Protection, and 4) Structure and Infrastructure Projects.

Public Participation

Mr. Kehoe prompted the participants to share what hazard problems are occurring in their community.

Mr. Michalec is on the Town of Evans agriculture and conservation committee and sits on the Erie County Climate Change Task Force. There is a concern about roadside ditches and keeping them free for flow of stormwater. The town has many town roads, state roads, and county roads and is hoping for consistent ditch practices throughout the town.

The town has pursued New York State Department of Environmental Conservation (NYSDEC) funds for tree management. There are three county parks in Evans, and the Emerald Ash Borer is causing many dead tree hazards. He asked if the county can proactively remove dead trees.

The town looks to set aside properties in the flood plain to remain as open space. The town has retained ownership of some parcels after tax foreclosure to further this goal. This policy mitigates stormwater flows and provides fishing access too. He asked if the county can also work to preserve additional floodplain open space.

Greg Butcher stated that the County Parks Recreation and Forestry Department and the Department of Public Works address the above issues.

Matthew Fischione stated that the Town of Lancaster CEO noted the importance of removing encroachments within waterways. The Stony Road Bridge (Pleasant View Dr. and Stony Rd.) was repaired, and debris removed from the creek. Public outreach is effective and better received by the public than is code enforcement. Aim to update the floodplain code and require compensatory storage. Ellicott Creek needs a clean-out of the waterway.

Debbie Smith works for the Village of Sloan and stated that 25% of Sloan's area is railyard. Mr. Kehoe stated that the HMP will address transit of hazardous materials over rail lines.

Chris Renschler stated that rail accidents occur at crossings and junctions. He can provide data to support this.

Amy Alduino asked if the HMP will examine how the freeze/thaw cycle is changing due to climate change and its impact on road and bridge structures. The HMP should look at the impacts of extreme heat and how to mitigate. The impact of invasive species is destroying certain tree species and creating large amounts of dead biomass.

MEETING NOTES

Next Steps

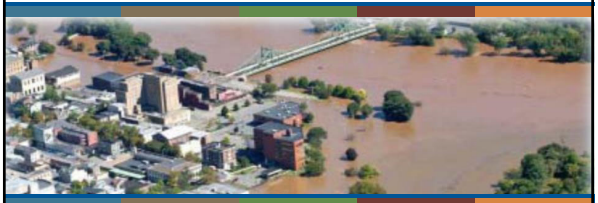
The HMP Project Team has been conducting ongoing meetings with municipal contacts. To date, the team has met with 23 municipalities to gather useful information. All of the input from tonight's meeting will be considered as the plan is assembled. Participants were requested to complete the Public Survey; the link is displayed in the PowerPoint and will be hosted on the project website. Participants were encouraged to review the project website regularly.

The webinar adjourned at 7:30 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

TETRA TECH
complex world | CLEAR SOLUTIONS™

Erie County
Hazard Mitigation Plan Update
Public Information Meeting



1

Agenda

- Welcome
- Hazard Mitigation – The Basics
- Project Overview
- Public Participation
- For More Information…

Please ask questions at any time.

2

2

Hazard Mitigation – The Basics

*Hazard Mitigation is any action taken to reduce or eliminate **long-term risk** to people and property from disasters.*

Local Plans and Regulations	• Updating building codes • Integrating risk into Master Plans
Education and Awareness Programs	• Flood insurance information • Know your risk! campaign
Natural Systems Protection	• Preserving natural floodplain functions • Protecting well recharge areas
Structure and Infrastructure Projects	• Constructing a levee • Elevating a house above the base flood level

3

3

Hazard Mitigation – The Basics

Per FEMA's 2017 National Institute of Building Sciences Report, mitigation saves $$$!

National Benefit-Cost Ratio Per Peril *BCR numbers in this study have been rounded	Federally Funded
Overall Hazard Benefit-Cost Ratio	6:1
Riverine Flood	7:1
Hurricane Surge	Too few grants
Wind	5:1
Earthquake	3:1
Wildland-Urban Interface Fire	3:1

4

4

Hazard Mitigation – The Basics

- Disaster Mitigation Act of 2000
- Hazard Mitigation Assistance

HMGP HAZARD MITIGATION GRANT PROGRAM
PDM PRE-DISASTER MITIGATION
FMA FLOOD MITIGATION ASSISTANCE

- Building Resilient Infrastructure & Communities (BRIC)

FEMA

5

5

Project Overview

- Organize resources and build the planning team
- Update the risk assessment
- Assess local mitigation capabilities
- Develop mitigation strategies
- Determine plan maintenance process
- Approval of the HMP by NYS DHSES and FEMA
- Local municipal adoption of the approved plan

Implementation!

6

6

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Public Participation

- Why doesn't our city/town/village fix _____?
- Why didn't anyone tell me that _____ (hazard) could impact me?
- Where do you see water on the roadway after heavy rains? What storm drains or bridges back up with water?
- Has Lake Erie flooding affected your community?
- How are the effects of severe winter storms mitigated in my community?

7

7

Public Participation

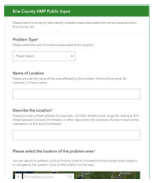
- Public Survey
  - https://www.surveymonkey.com/r/ErieCountyHMP
  - Takes less than 15 minutes to complete.
  - Gathers information from throughout Erie County to help coordinate activities and reduce the risk of injury or property damage.
  - Information will be used for planning purposes only.
  - You will be asked if you live in a floodplain - check FEMA for your property location: https://msc.fema.gov/portal/home
  - Please share survey link via social media.

8

8

Public Participation

- Problem Area Survey – where do hazards impact?
  - https://arcg.is/9bzzr



- Public Meetings
  - Risk Assessment Review Meeting – date TBD
  - Draft Review Meeting – at the end of the process

9

9

For More Information…

- Erie County HMP Website
  - Home - Erie County Hazard Mitigation Plan (HMP) Public Website (eriecountynyhmp.com)
- Erie County Department of Homeland Security and Emergency Services
  - Erie County Department of Homeland Security & Emergency Services - Home | Facebook
  - Department of Homeland Security and Emergency Services (erie.gov)
  - Erie Cty Emerg Svces (@ErieCountyESU) / Twitter
- Erie County Department of Environment & Planning
  - Erie County DEP (@ErieCoDEP) / Twitter
  - Environment & Planning (erie.gov)

10

10

Contacts

Melissa Calhoun
Melissa.Calhoun@erie.gov
(716)858-8440

Tony Subbio
tony.subbio@tetratech.com
(717) 545-3580

11

11

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE

Public Information Meeting #1

Monday, January 25, 2021 | 6:00–7:30 p.m.

1. **Welcome**
2. **Hazard Mitigation – The Basics**
3. **Project Overview**
4. **Public Participation**
5. **For More Information…**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE

Public Information Meeting #2

Thursday, January 28, 2021 | 6:00–7:30 p.m.

1. Welcome
2. Hazard Mitigation – The Basics
3. Project Overview
4. Public Participation
5. For More Information…

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Risk Assessment Review Meeting		
Date	May 19, 2021	**Time**	6:00 – 7:15 p.m.
Location	Webinar		
Attendees	Dan Castle, Deputy Commissioner, Erie County Department of Environment and Planning		
	Josh Wilson, Director of Sustainability, Erie County Department of Environment and Planning		
	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer - Special Assistant Erie County, Erie County Department of Homeland Security and Emergency Services		
	Matthew Barrett, Security Officer, Erie County Water Authority		
	RJ Nieman, Emergency Manager, Village of Depew		
	Cathie Thomas, Village of East Aurora, Administrator		
	Daniel Kowalik, Emergency Manager, Chair Village of Akron & Town of Newstead		
	Jordan Kellerman, Engineer, Town of Orchard Park		
	Richard Mrugalski, Town and Village of Orchard Park, Emergency Manager		
	Todd Catalano, Village of Springville, Disaster Coordinator		
	Liz Melock, Village of Springville, Administrator		
	Mark Banks, City of Tonawanda, Office of Emergency Management		
	James Chatham, Office of Emergency Management, Town of Tonawanda		
	Joanna Panasiewicz, Lake Erie Watershed Protection Alliance		
	Jason Tolma, Manager, National Fuel Gas		
	Judith Levan, Administrator, National Weather Service Buffalo		
	William Major, Niagara Frontier Transportation Authority		
	Kevin Clapp, Planning Manager, NYS Department of Homeland Security and Emergency Services		
	Brian Kehoe, Planner, Consultant - Tetra Tech		
	Chris Huch, Planner, Consultant - Tetra Tech		

Discussion Points

This section summarizes each discussion point addressed during the Risk Assessment Review Meeting.

Introductions

Mr. Kehoe opened the meeting. As attendees entered the virtual meeting, they were prompted to provide their name and affiliation either verbally or via the webinar chat function. Mr. Butcher then welcomed and thanked attendees.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Mr. Huch noted that the meeting will be recorded for participants who could not attend.

Risk Assessment Review

Mr. Kehoe reviewed the results of the risk assessment for the following hazards of concern, discussing past events, frequency, and impacts to life, property, and the economy.

- Coastal Erosion
- Cyber Attack
- Earthquake
- Epidemic/Pandemic
- Expansive Soils
- Extreme Temperatures
- Flood (including ice jams)
- Hazardous Materials
- Landslide
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

Comments

During the meeting, the following comments were received from participants:

- Ms. Thomas noted that East Aurora is concerned with flooding from Tannery Brook. The village had a recent sinkhole event and is working to replace a culvert.
- Mr. Chatham noted that the Town of Tonawanda has pipeline and rail concerns.
- Mr. Wilson noted that Erie County Department of Environmental Protection is completing a climate vulnerability assessment.
- Mr. Mrugalski noted that Orchard Park likely has need for backup generators at some critical facilities.
- Ms. Panasiewicz asked if hazardous material spill mapping could be overlayed with waterways in order to illustrate risk from spills.
- Mr. Barrett noted that risk to the drinking water supply from hazardous materials is low due to the volume of water flow in the Niagara River.
- Mr. Major noted that the Niagara Frontier Transportation Authority NFTA) would be looking for funding support to protect from hazardous material spills. Mr. Clapp responded that the Hazard Mitigation Grant Program (HMGP) typically funds mitigations that address non-natural hazard events. Follow-up was recommended to discuss further and identify a strategy to protect NFTA assets.

Next Steps

The following next steps were discussed at the meeting:

- Complete Worksheets (as needed)
- Mitigation Strategy Workshops – June 9, 2021
- Develop Mitigation Actions
- Complete Jurisdictional Annexes
- Complete the HMP

MEETING NOTES

The meeting wrapped up with several questions and comments from participants. Mr. Kehoe and Mr. Butcher thanked the participants.

The meeting adjourned at 7:15 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

TETRA TECH

complex world | CLEAR SOLUTIONS™

Erie County Hazard Mitigation Plan

2021 Update

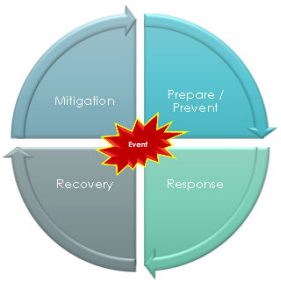
Risk Assessment Review Meeting

May 19, 2021
6:00 – 8:00 p.m.

1

Agenda

- Welcome/Introductions
- Project Status Update
- Risk Assessment
- Risk Ranking Summary
- SWOO
- Next Steps



2

Welcome/Introductions

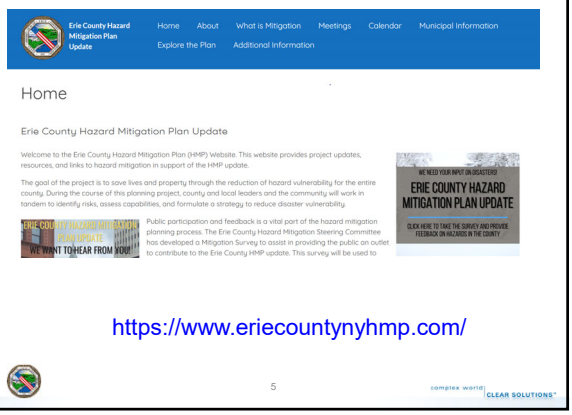
- Name
- Agency
- Mitigation Experience
- Focus and Concerns

3

Project Schedule Status Update

✓	November 2020	Steering Committee & Planning Partnership initial meetings
✓	November 2020 - April 2021	Data collection
✓	January - May 2021	Update hazard profiles
✓	May 19, 2021	Risk Assessment Presentation
❑	January - June 2021	Develop problem statements with municipalities and County
❑	June 9, 2021	Mitigation Strategy Workshops
❑	Early July 2021	Complete draft plan
❑	Mid-August 2021	Submit plan to NYS DHSES

4



https://www.eriecountynyhmp.com/

5

Risk Assessment

Hazards of Concern:

- Coastal Erosion
- Cyber Security
- Earthquake
- Expansive Soils
- Extreme Temperature
- Flood
- Hazardous Materials
- Landslide
- Pandemic
- Severe Storm
- Severe Winter Storm
- Utility Failure
- Wildfire

6

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Assessment (Continued)

What is Risk?

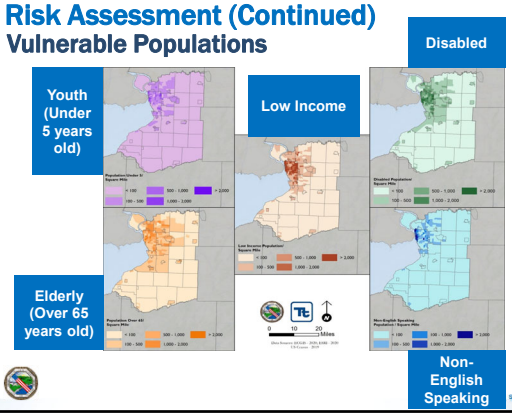
Risk is a function of:

- ✓ Hazard - source of potential danger or adverse condition
- ✓ Exposure - manmade features exposed to the hazard
- ✓ Vulnerability - damage susceptibility exposed features
- ✓ Adaptive Capacity
  - Plans/policies
  - Response/recovery
  - Financial resources

7

Risk Assessment (Continued)

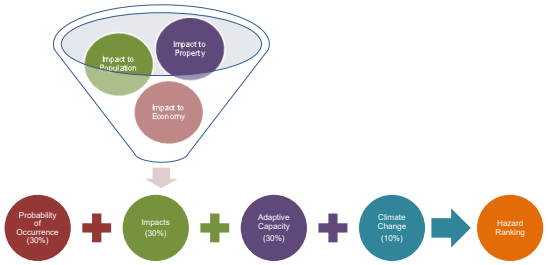
Vulnerable Populations



8

Risk Assessment (Continued)

Hazard Ranking Formula



9

Risk Assessment (Continued)

Coastal Erosion

- Recent event history:
  - Associated w/ strong storms
  - 7 recorded coastal erosion events 2000-2020
  - All located along Lake Erie
- Erosion is caused by natural and human activity.
- Town of Hamburg has the most people/buildings in designated coastal risk hazard area.
- Associated w/ strong storms
- Probability = Rare

Risk Ranking Value = Low

10

Risk Assessment (Continued)

Cyber Security

- Theft and modification of information
- Organized cyber-crime, state-sponsored hackers, and cyber espionage
- People/buildings throughout the county are exposed
- Probability = Frequent

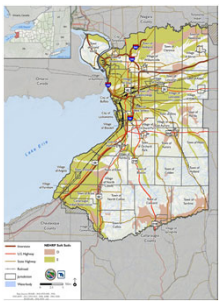
Risk Ranking Value = Medium

11

Risk Assessment (Continued)

Earthquake

- History
  - 8 smaller earthquakes epi-centered in the county since 1950
  - 1 significant seismic event in the vicinity of Erie County
- Exposure to NEHRP Soils
  - 66% countywide
  - 100% in Villages of Angola, Blasdell, Gowanda, N. Collins, and Sloan
  - 1,000s of critical facilities
- Probability - Rare



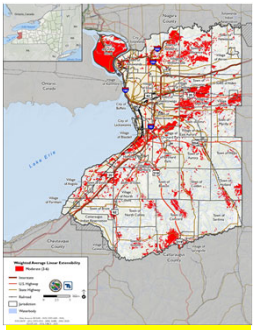
Risk Ranking Value = High

12

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Assessment (Continued)
Expansive Soils

- History
  - Town of Amherst (1987 and 2005), 3-4% of all residential structures
  - Fewer problems with new development.
  - Town of Amherst: 24,000 residents exposed; highest concentration of damage
  - >20% population exposed: V. Alden, T. Clarence, T. Grand Island, T. Hamburg, T. Lancaster, T. Orchard Park, T. West Seneca
- Probability - Rare



Risk Ranking Value = Low

13

Risk Assessment (Continued)
Extreme Temperature

- Extreme heat >10 degrees above the average high temperature that lasts for several weeks
  - A leading weather-related cause of death in USA
- Extreme cold temperatures < 0 degrees
- History
  - 5 recorded events 1999-2020
- Exposure
  - Entire county population exposed
  - Probability - Occasional

Risk Ranking Value = Medium

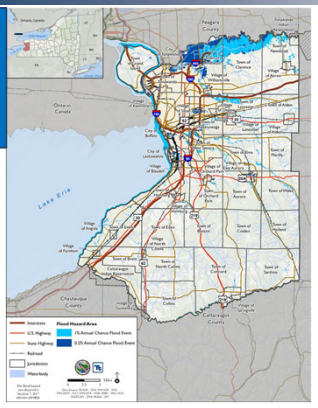
14

Risk Assessment (Continued)
Flood

- Impacts
  - $24 million in reported property damage since 1954
  - $10 million in reported crop damage
- Exposure 1-Percent Annual Chance Floodplain
  - $10.7 billion building stock replacement value
  - 496 critical facilities (most are bridges)
  - 40,750 tons of debris

15

FEMA Flood Hazard Areas



>1% buildings exposed – 1% annual chance flood

1. T Amherst
2. T Clarence
3. T E. Aurora
4. V Gowanda
5. T Grand Island
6. V Gowanda
7. T/V Lancaster
8. T Newstead
9. T Marilla
10. T Williamsville

16

Risk Assessment (Continued)
Flood

Residents exposed to 1-percent annual chance flood area: 9,633

1.1% of total population

Flood History

94 events (1950-2020)
7 FEMA flood-related declarations (1954-2019)

NFIP countywide

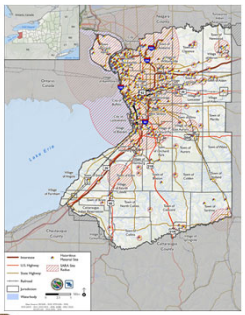
2,074 Policies
2,526 Claims
$12,430,926 Payments

NATIONAL FLOOD INSURANCE PROGRAM

Hazard Risk Rank = Low

17

Risk Assessment (Continued)
Hazardous Materials



18

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Assessment (Continued)
Hazardous Materials

Hazardous spill events 1974-2020: 1494

Listed on EPA Toxic Release Inventory: 60

Probability of annual occurrence: 100%

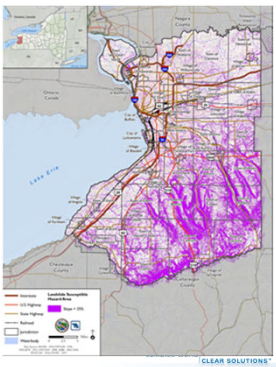
Hazard Risk Rank = Low

19

19

Risk Assessment (Continued)
Landslide

- History
  - 11 recorded landslide incidents (1837-1989)
  - None since 1996
- Frequent slumping along
  - Buffalo Creek (E. Aurora)
  - Springville/Route 39 (Sardinia)
  - Scajaquada Creek (Cheektowaga)
  - Cayuga Creek (Lancaster)



20

Risk Assessment (Continued)
Landslide

- Landslide hazard areas countywide
  - 33,525 people exposed (3.7% county total)
  - 15,416 buildings
  - $10 billion building replacement value
  - 567 critical facilities (175 bridges)
- Town of Holland – 25% of population in the landslide-susceptible hazard area

Hazard Risk Rank = Low

21

Risk Assessment (Continued)
Pandemic

- Past outbreaks in USA
  - Influenza (annual)
  - Asian Flu (1957-1958)
  - West Nile Virus (2000)
  - Swine Flu (2009-2010)
  - Ebola (2014)
- Predicting future occurrences is difficult
- Climate changes - Warmer temperatures and changing rainfall patterns will affect outbreaks
- Exposure
  - Entire County is vulnerable
  - Highest vulnerability = dense populations

22

Risk Assessment (Continued)
Pandemic - COVID-19

Week Ending	New Cases in the Past 7 Days	Total New Cases in the Past 7 Days per 100,000 Persons
4/10/2021	3,397	369.6
4/17/2021	3,300	359.1
4/24/2021	2,279	248.0
5/1/2021	1,686	183.5
5/8/2021	1,079	117.4
5/15/2021	738	80.3

Risk Ranking Value = Medium

23

23

Risk Assessment (Continued)
Severe Storms

- Include thunderstorm, lightning, hailstorm, windstorm, tornado, hurricanes/tropical storms
- Climate change likely to cause more severe and more frequent severe storms.

24 Severe Storm Events where damage >$25,000 (2015-2020)

Federally Declared Severe Storm Events (1954-2019): 7

$10 Million Crop Damages (2015-2020)

Risk Ranking Value= High

Probability of annual occurrence: 100%

24

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Assessment (Continued)
Severe Winter Storms

- Include blizzards, ice storms, snowstorms, sleet, freezing rain
- Entire county is vulnerable
  - Traffic accidents
  - Overexertion
  - Hypothermia
  - Access for emergency vehicles

25

Risk Assessment (Continued)
Severe Winter Storms

11
Winter Storms where damage > $25,000 (2015-2020)

$11 billion
Estimated Potential Loss

9
FEMA Declarations (1954 – 2020)

100%
Probability of annual occurrence

Risk Ranking Value= High

26

Risk Assessment (Continued)
Utility Failure

- History
  - Primarily caused by other hazards
  - 1 Presidential Disaster Declaration – Halloween 2019
  - 8 power failure events since 2015.
- Impacts
  - HVAC failure
  - Communications failure
  - Food spoilage
  - Basement flooding
  - Carbon monoxide exposure from generators
  - Individuals dependent on medical equipment
  - Access to potable water

27

Risk Assessment (Continued)
Utility Failure

- High cost to government and community services
- Probability = Frequent minor failures,
  Occasional Major failure

Risk Ranking Value= High

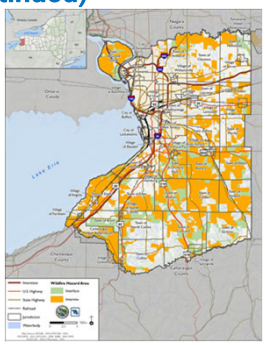
28

Risk Assessment (Continued)
Wildfire

11%
Wildfire Urban intermix

$36.7 Billion
Building Replacement value

33%
Wildfire Interface



29

Risk Assessment (Continued)
Wildfire

- Exposure to the Wildland-Urban Interface (WUI)
  - 154,141 persons (16.8% of county)
  - 70,429 buildings
  - 16.5% of total building value
- 378 critical facilities in the WUI
- Town of Wales has the most (32) critical facilities in the WUI

Risk Ranking Value= Medium

30

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Ranking Summary - countywide

Hazard of Concern	Probability x 30%	Total Impact x 30%	Adaptive Capacity x 30%	Changing Future Conditions x 10%	Total Risk Ranking Value
Coastal Erosion	0	3	2	1	Low
Cyber Attack	0.9	3	2	3	Medium
Earthquake	0.3	9	6	1	High
Expansive Soils	0.3	3	2	2	Low
Extreme Temperature	0.3	9	2	1	Medium
Flood	0.9	3	2	1	Low
Hazardous Materials	0.9	3	2	2	Low
Landslide	0	3	2	1	Low
Pandemic	0	9	2	3	Medium
Severe Storm	0.9	9	2	1	High
Severe Winter Storm	0.9	9	2	1	High
Utility Failure	0.9	6	4	2	High
Wildfire	0.6	6	4	2	Medium

Low
Medium
High

31

Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

- **Strengths** – what mitigation actions does our town/village/city already do?
- **Weaknesses** – what could we do better?
- **Obstacles** – what impedes us from taking mitigation action? What is a challenge to overcome?
- **Opportunities** – used to develop mitigation strategies

32

SWOO

Hazard	
Strengths	Weaknesses
What does the county and its communities do well in terms of: ➢ Plans and Regulations • Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➢ Structure and Infrastructure Projects ➢ Natural Systems Protection ➢ Education and Awareness Programs ➢ Preparedness ➢ Others?	What can the county and its communities do better or what are the gaps in terms of: ➢ Plans and Regulations • Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➢ Structure and Infrastructure Projects ➢ Natural Systems Protection ➢ Education and Awareness Programs ➢ Preparedness ➢ Others?

33

SWOO

Hazard	
Obstacles	Opportunities
What is preventing the county and its communities to implement: ➢ Plans and Regulations ➢ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➢ Structure and Infrastructure Projects ➢ Natural Systems Protection ➢ Education and Awareness Programs ➢ Preparedness ➢ Others?	What can the county and its communities implement in terms of: ➢ Plans and Regulations ➢ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➢ Structure and Infrastructure Projects ➢ Natural Systems Protection ➢ Education and Awareness Programs ➢ Preparedness ➢ Others?

34

SWOO

Hazard: Flood	
S	Minimal exposure to flood risk
W	Silt and debris buildup in streams can lead to localized flooding
Ob	Funding for culvert and catch basin maintenance
Opps	Installing stream gages

Hazard: Severe Storms	
S	Tree trimming programs are in place
W	Aging infrastructure; lack of underground utilities
Ob	Cost to retrofit existing utility infrastructure
Opps	Underground utilities; enhance public outreach program

Hazard: Severe Winter Storm	
S	Municipalities have the resources and experience to deal with winter weather
W	Aging equipment
Ob	Funding; limited staff for prolonged events
Opps	Shared services

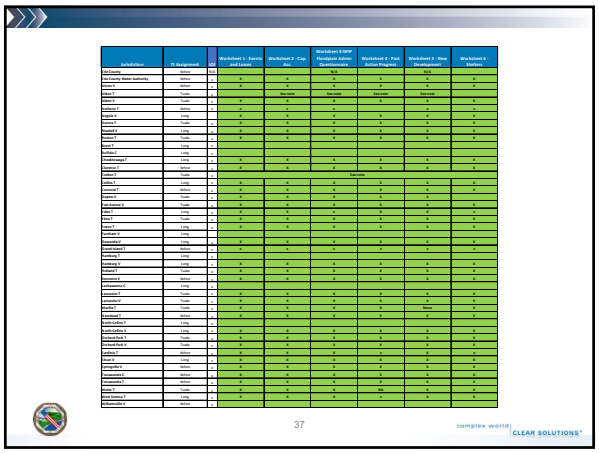
35

Next Steps

1. Complete Worksheets (as needed)
2. Mitigation Strategy Workshops – June 9, 2021
3. Develop Mitigation Actions
4. Complete Jurisdictional Annexes
5. Complete the Hazard Mitigation Plan

36

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard



Jurisdiction	Yr Assignment		Worksheet 1 - Events and Losses	Worksheet 2 - Cap Ass	Worksheet 3 NFIP Floodplain Admin Questionnaire	Worksheet 4 - Past Action Progress	Worksheet 5 - New Development	Worksheet 6 Shelters
Erie County	Yellow	N/A	x	x	x	x	N/A	x
Erie County Water Authority	Yellow	x	x	x	x	x	x	x
Town 3	Yellow	x	x	x	x	x	x	x
Village 7	Yellow	x		See note	See note	See note	See note	x
Village 8	Yellow	x	x	x	x	x	x	x
Tonawanda 7	Yellow	x	x	x	x	x	x	x
Cheektowaga 9	Yellow	x	x	x	x	x	x	x
Lancaster 3	Yellow	x	x	x	x	x	x	x
Town 7	Yellow	x	x	x	x	x	x	x
Village 7	Yellow	x						
Buffalo 2	Yellow	x						
Cheektowaga 7	Yellow	x	x	x	x	x	x	x
Depew 7	Yellow	x	x	x	x	x	x	x
Hilbert 7	Yellow	x			See note			
Collins 7	Yellow	x	x	x	x	x	x	x
Concord 7	Yellow	x	x	x	x	x	x	x
Hamburg 9	Yellow	x	x	x	x	x	x	x
Alden 7	Yellow	x	x	x	x	x	x	x
Elma 7	Yellow	x	x	x	x	x	x	x
Evans 7	Yellow	x	x	x	x	x	x	x
Eden 7	Yellow	x						
Tonawanda 9	Yellow	x	x	x	x	x	x	x
Grand Island 7	Yellow	x	x	x	x	x	x	x
Lancaster 7	Yellow	x						
Lancaster 8	Yellow	x	x	x	x	x	x	x
Newstead 7	Yellow	x	x	x	x	x	x	x
Akron 7	Yellow	x	x	x	x	x	x	x
Wales 7	Yellow	x	x	x	x	x	x	x
Tonawanda 8	Yellow	x	x	x	x	x	x	x
Grand Island 8	Yellow	x	x	x	x	x	x	x
Clarence 7	Yellow	x	x	x	x	x	x	x
Clarence 8	Yellow	x	x	x	x	x	x	x
Amherst 7	Yellow	x	x	x	x	x	x	x
Amherst 8	Yellow	x	x	x	x	x	x	x
Williamsville 7	Yellow	x	x	x	x	x	x	x
Williamsville 8	Yellow	x	x	x	x	x	x	x
East Aurora 7	Yellow	x	x	x	x	x	x	x
Orchard Park 7	Yellow	x	x	x	x	x	x	x
Orchard Park 8	Yellow	x	x	x	x	x	x	x
Hamburg 7	Yellow	x	x	x	x	x	x	x
Hamburg 8	Yellow	x	x	x	x	x	x	x
Lancaster 9	Yellow	x	x	x	x	x	x	x
Newstead 8	Yellow	x	x	x	x	x	x	x
North Collins 7	Yellow	x	x	x	x	x	x	x
North Collins 8	Yellow	x	x	x	x	x	x	x
Orchard Park 9	Yellow	x	x	x	x	x	x	x
Eden 8	Yellow	x	x	x	x	x	x	x
Boston 7	Yellow	x	x	x	x	x	x	x
Brant 7	Yellow	x	x	x	x	x	x	x
Evans 8	Yellow	x	x	x	x	x	x	x
Farnham 7	Yellow	x	x	x	x	x	x	x
Hamburg 9	Yellow	x	x	x	x	x	x	x
Hamburg 10	Yellow	x	x	x	x	x	x	x
Lancaster 10	Yellow	x	x	x	x	x	x	x
Newstead 9	Yellow	x	x	x	x	x	x	x
North Collins 9	Yellow	x	x	x	x	x	x	x
Orchard Park 10	Yellow	x	x	x	x	x	x	x
Eden 9	Yellow	x	x	x	x	x	x	x
Farnham 8	Yellow	x	x	x	x	x	x	x
Hamburg 11	Yellow	x	x	x	x	x	x	x
Lancaster 11	Yellow	x	x	x	x	x	x	x
Newstead 10	Yellow	x	x	x	x	x	x	x
North Collins 10	Yellow	x	x	x	x	x	x	x
Orchard Park 11	Yellow	x	x	x	x	x	x	x
Eden 10	Yellow	x	x	x	x	x	x	x
Farnham 9	Yellow	x	x	x	x	x	x	x
Hamburg 12	Yellow	x	x	x	x	x	x	x
Lancaster 12	Yellow	x	x	x	x	x	x	x
Newstead 11	Yellow	x	x	x	x	x	x	x
North Collins 11	Yellow	x	x	x	x	x	x	x
Orchard Park 12	Yellow	x	x	x	x	x	x	x
Eden 11	Yellow	x	x	x	x	x	x	x
Farnham 10	Yellow	x	x	x	x	x	x	x
Hamburg 13	Yellow	x	x	x	x	x	x	x
Lancaster 13	Yellow	x	x	x	x	x	x	x
Newstead 12	Yellow	x	x	x	x	x	x	x
North Collins 12	Yellow	x	x	x	x	x	x	x
Orchard Park 13	Yellow	x	x	x	x	x	x	x
Eden 12	Yellow	x	x	x	x	x	x	x
Farnham 11	Yellow	x	x	x	x	x	x	x
Hamburg 14	Yellow	x	x	x	x	x	x	x
Lancaster 14	Yellow	x	x	x	x	x	x	x
Newstead 13	Yellow	x	x	x	x	x	x	x
North Collins 13	Yellow	x	x	x	x	x	x	x
Orchard Park 14	Yellow	x	x	x	x	x	x	x
Eden 13	Yellow	x	x	x	x	x	x	x
Farnham 12	Yellow	x	x	x	x	x	x	x
Hamburg 15	Yellow	x	x	x	x	x	x	x
Lancaster 15	Yellow	x	x	x	x	x	x	x
Newstead 14	Yellow	x	x	x	x	x	x	x
North Collins 14	Yellow	x	x	x	x	x	x	x
Orchard Park 15	Yellow	x	x	x	x	x	x	x
Eden 14	Yellow	x	x	x	x	x	x	x
Farnham 13	Yellow	x	x	x	x	x	x	x
Hamburg 16	Yellow	x	x	x	x	x	x	x
Lancaster 16	Yellow	x	x	x	x	x	x	x
Newstead 15	Yellow	x	x	x	x	x	x	x
North Collins 15	Yellow	x	x	x	x	x	x	x
Orchard Park 16	Yellow	x	x	x	x	x	x	x
Eden 15	Yellow	x	x	x	x	x	x	x
Farnham 14	Yellow	x	x	x	x	x	x	x
Hamburg 17	Yellow	x	x	x	x	x	x	x
Lancaster 17	Yellow	x	x	x	x	x	x	x
Newstead 16	Yellow	x	x	x	x	x	x	x
North Collins 16	Yellow	x	x	x	x	x	x	x
Orchard Park 17	Yellow	x	x	x	x	x	x	x
Eden 16	Yellow	x	x	x	x	x	x	x
Farnham 15	Yellow	x	x	x	x	x	x	x
Hamburg 18	Yellow	x	x	x	x	x	x	x
Lancaster 18	Yellow	x	x	x	x	x	x	x
Newstead 17	Yellow	x	x	x	x	x	x	x
North Collins 17	Yellow	x	x	x	x	x	x	x
Orchard Park 18	Yellow	x	x	x	x	x	x	x
Eden 17	Yellow	x	x	x	x	x	x	x
Farnham 16	Yellow	x	x	x	x	x	x	x
Hamburg 19	Yellow	x	x	x	x	x	x	x
Lancaster 19	Yellow	x	x	x	x	x	x	x
Newstead 18	Yellow	x	x	x	x	x	x	x
North Collins 18	Yellow	x	x	x	x	x	x	x
Orchard Park 19	Yellow	x	x	x	x	x	x	x
Eden 18	Yellow	x	x	x	x	x	x	x
Farnham 17	Yellow	x	x	x	x	x	x	x
Hamburg 20	Yellow	x	x	x	x	x	x	x
Lancaster 20	Yellow	x	x	x	x	x	x	x
Newstead 19	Yellow	x	x	x	x	x	x	x
North Collins 19	Yellow	x	x	x	x	x	x	x
Orchard Park 20	Yellow	x	x	x	x	x	x	x
Eden 19	Yellow	x	x	x	x	x	x	x
Farnham 18	Yellow	x	x	x	x	x	x	x
Hamburg 21	Yellow	x	x	x	x	x	x	x
Lancaster 21	Yellow	x	x	x	x	x	x	x
Newstead 20	Yellow	x	x	x	x	x	x	x
North Collins 20	Yellow	x	x	x	x	x	x	x
Orchard Park 21	Yellow	x	x	x	x	x	x	x
Eden 20	Yellow	x	x	x	x	x	x	x
Farnham 19	Yellow	x	x	x	x	x	x	x
Hamburg 22	Yellow	x	x	x	x	x	x	x
Lancaster 22	Yellow	x	x	x	x	x	x	x
Newstead 21	Yellow	x	x	x	x	x	x	x
North Collins 21	Yellow	x	x	x	x	x	x	x
Orchard Park 22	Yellow	x	x	x	x	x	x	x
Eden 21	Yellow	x	x	x	x	x	x	x
Farnham 20	Yellow	x	x	x	x	x	x	x
Hamburg 23	Yellow	x	x	x	x	x	x	x
Lancaster 23	Yellow	x	x	x	x	x	x	x
Newstead 22	Yellow	x	x	x	x	x	x	x
North Collins 22	Yellow	x	x	x	x	x	x	x
Orchard Park 23	Yellow	x	x	x	x	x	x	x
Eden 22	Yellow	x	x	x	x	x	x	x
Farnham 21	Yellow	x	x	x	x	x	x	x
Hamburg 24	Yellow	x	x	x	x	x	x	x
Lancaster 24	Yellow	x	x	x	x	x	x	x
Newstead 23	Yellow	x	x	x	x	x	x	x
North Collins 23	Yellow	x	x	x	x	x	x	x
Orchard Park 24	Yellow	x	x	x	x	x	x	x
Eden 23	Yellow	x	x	x	x	x	x	x
Farnham 22	Yellow	x	x	x	x	x	x	x
Hamburg 25	Yellow	x	x	x	x	x	x	x
Lancaster 25	Yellow	x	x	x	x	x	x	x
Newstead 24	Yellow	x	x	x	x	x	x	x
North Collins 24	Yellow	x	x	x	x	x	x	x
Orchard Park 25	Yellow	x	x	x	x	x	x	x
Eden 24	Yellow	x	x	x	x	x	x	x
Farnham 23	Yellow	x	x	x	x	x	x	x
Hamburg 26	Yellow	x	x	x	x	x	x	x
Lancaster 26	Yellow	x	x	x	x	x	x	x
Newstead 25	Yellow	x	x	x	x	x	x	x
North Collins 25	Yellow	x	x	x	x	x	x	x
Orchard Park 26	Yellow	x	x	x	x	x	x	x
Eden 25	Yellow	x	x	x	x	x	x	x
Farnham 24	Yellow	x	x	x	x	x	x	x
Hamburg 27	Yellow	x	x	x	x	x	x	x
Lancaster 27	Yellow	x	x	x	x	x	x	x
Newstead 26	Yellow	x	x	x	x	x	x	x
North Collins 26	Yellow	x	x	x	x	x	x	x
Orchard Park 27	Yellow	x	x	x	x	x	x	x
Eden 26	Yellow	x	x	x	x	x	x	x
Farnham 25	Yellow	x	x	x	x	x	x	x
Hamburg 28	Yellow	x	x	x	x	x	x	x
Lancaster 28	Yellow	x	x	x	x	x	x	x
Newstead 27	Yellow	x	x	x	x	x	x	x
North Collins 27	Yellow	x	x	x	x	x	x	x
Orchard Park 28	Yellow	x	x	x	x	x	x	x
Eden 27	Yellow	x	x	x	x	x	x	x
Farnham 26	Yellow	x	x	x	x	x	x	x
Hamburg 29	Yellow	x	x	x	x	x	x	x
Lancaster 29	Yellow	x	x	x	x	x	x	x
Newstead 28	Yellow	x	x	x	x	x	x	x
North Collins 28	Yellow	x	x	x	x	x	x	x
Orchard Park 29	Yellow	x	x	x	x	x	x	x
Eden 28	Yellow	x	x	x	x	x	x	x
Farnham 27	Yellow	x	x	x	x	x	x	x
Hamburg 30	Yellow	x	x	x	x	x	x	x
Lancaster 30	Yellow	x	x	x	x	x	x	x
Newstead 29	Yellow	x	x	x	x	x	x	x
North Collins 29	Yellow	x	x	x	x	x	x	x
Orchard Park 30	Yellow	x	x	x	x	x	x	x
Eden 29	Yellow	x	x	x	x	x	x	x
Farnham 28	Yellow	x	x	x	x	x	x	x
Hamburg 31	Yellow	x	x	x	x	x	x	x
Lancaster 31	Yellow	x	x	x	x	x	x	x
Newstead 30	Yellow	x	x	x	x	x	x	x
North Collins 30	Yellow	x	x	x	x	x	x	x
Orchard Park 31	Yellow	x	x	x	x	x	x	x
Eden 30	Yellow	x	x	x	x	x	x	x
Farnham 29	Yellow	x	x	x	x	x	x	x
Hamburg 32	Yellow	x	x	x	x	x	x	x
Lancaster 32	Yellow	x	x	x	x	x	x	x
Newstead 31	Yellow	x	x	x	x	x	x	x
North Collins 31	Yellow	x	x	x	x	x	x	x
Orchard Park 32	Yellow	x	x	x	x	x	x	x
Eden 31	Yellow	x	x	x	x	x	x	x
Farnham 30	Yellow	x	x	x	x	x	x	x
Hamburg 33	Yellow	x	x	x	x	x	x	x
Lancaster 33	Yellow	x	x	x	x	x	x	x
Newstead 32	Yellow	x	x	x	x	x	x	x
North Collins 32	Yellow	x	x	x	x	x	x	x
Orchard Park 33	Yellow	x	x	x	x	x	x	x
Eden 32	Yellow	x	x	x	x	x	x	x
Farnham 31	Yellow	x	x	x	x	x	x	x
Hamburg 34	Yellow	x	x	x	x	x	x	x
Lancaster 34	Yellow	x	x	x	x	x	x	x
Newstead 33	Yellow	x	x	x	x	x	x	x
North Collins 33	Yellow	x	x	x	x	x	x	x
Orchard Park 34	Yellow	x	x	x	x	x	x	x
Eden 33	Yellow	x	x	x	x	x	x	x
Farnham 32	Yellow	x	x	x	x	x	x	x
Hamburg 35	Yellow	x	x	x	x	x	x	x
Lancaster 35	Yellow	x	x	x	x	x	x	x
Newstead 34	Yellow	x	x	x	x	x	x	x
North Collins 34	Yellow	x	x	x	x	x	x	x
Orchard Park 35	Yellow	x	x	x	x	x	x	x
Eden 34	Yellow	x	x	x	x	x	x	x
Farnham 33	Yellow	x	x	x	x	x	x	x
Hamburg 36	Yellow	x	x	x	x	x	x	x
Lancaster 36	Yellow	x	x	x	x	x	x	x
Newstead 35	Yellow	x	x	x	x	x	x	x
North Collins 35	Yellow	x	x	x	x	x	x	x
Orchard Park 36	Yellow	x	x	x	x	x	x	x
Eden 35	Yellow	x	x	x	x	x	x	x
Farnham 34	Yellow	x	x	x	x	x	x	x
Hamburg 37	Yellow	x	x	x	x	x	x	x
Lancaster 37	Yellow	x	x	x	x	x	x	x
Newstead 36	Yellow	x	x	x	x	x	x	x
North Collins 36	Yellow	x	x	x	x	x	x	x
Orchard Park 37	Yellow	x	x	x	x	x	x	x
Eden 36	Yellow	x	x	x	x	x	x	x
Farnham 35	Yellow	x	x	x	x	x	x	x
Hamburg 38	Yellow	x	x	x	x	x	x	x
Lancaster 38	Yellow	x	x	x	x	x	x	x
Newstead 37	Yellow	x	x	x	x	x	x	x
North Collins 37	Yellow	x	x	x	x	x	x	x
Orchard Park 38	Yellow	x	x	x	x	x	x	x
Eden 37	Yellow	x	x	x	x	x	x	x
Farnham 36	Yellow	x	x	x	x	x	x	x
Hamburg 39	Yellow	x	x	x	x	x	x	x
Lancaster 39	Yellow	x	x	x	x	x	x	x
Newstead 38	Yellow	x	x	x	x	x	x	x
North Collins 38	Yellow	x	x	x	x	x	x	x
Orchard Park 39	Yellow	x	x	x	x	x	x	x
Eden 38	Yellow	x	x	x	x	x	x	x
Farnham 37	Yellow	x	x	x	x	x	x	x
Hamburg 40	Yellow	x	x	x	x	x	x	x
Lancaster 40	Yellow	x	x	x	x	x	x	x
Newstead 39	Yellow	x	x	x	x	x	x	x
North Collins 39	Yellow	x	x	x	x	x	x	x
Orchard Park 40	Yellow	x	x	x	x	x	x	x
Eden 39	Yellow	x	x	x	x	x	x	x
Farnham 38	Yellow	x	x	x	x	x	x	x
Hamburg 41	Yellow	x	x	x	x	x	x	x
Lancaster 41	Yellow	x	x	x	x	x	x	x
Newstead 40	Yellow	x	x	x	x	x	x	x
North Collins 40	Yellow	x	x	x	x	x	x	x
Orchard Park 41	Yellow	x	x	x	x	x	x	x
Eden 40	Yellow	x	x	x	x	x	x	x
Farnham 39	Yellow	x	x	x	x	x	x	x
Hamburg 42	Yellow	x	x	x	x	x	x	x
Lancaster 42	Yellow	x	x	x	x	x	x	x
Newstead 41	Yellow	x	x	x	x	x	x	x
North Collins 41	Yellow	x	x	x	x	x	x	x
Orchard Park 42	Yellow	x	x	x	x	x	x	x
Eden 41	Yellow	x	x	x	x	x	x	x
Farnham 40	Yellow	x	x	x	x	x	x	x
Hamburg 43	Yellow	x	x	x	x	x	x	x
Lancaster 43	Yellow	x	x	x	x	x	x	x
Newstead 42	Yellow	x	x	x	x	x	x	x
North Collins 42	Yellow	x	x	x	x	x	x	x
Orchard Park 43	Yellow	x	x	x	x	x	x	x
Eden 42	Yellow	x	x	x	x	x	x	x
Farnham 41	Yellow	x	x	x	x	x	x	x
Hamburg 44	Yellow	x	x	x	x	x	x	x
Lancaster 44	Yellow	x	x	x	x	x	x	x
Newstead 43	Yellow	x	x	x	x	x	x	x
North Collins 43	Yellow	x	x	x	x	x	x	x
Orchard Park 44	Yellow	x	x	x	x	x	x	x
Eden 43	Yellow	x	x	x	x	x	x	x
Farnham 42	Yellow	x	x	x	x	x	x	x
Hamburg 45	Yellow	x	x	x	x	x	x	x
Lancaster 45	Yellow	x	x	x	x	x	x	x
Newstead 44	Yellow	x	x	x	x	x	x	x
North Collins 44	Yellow	x	x	x	x	x	x	x
Orchard Park 45	Yellow	x	x	x	x	x	x	x
Eden 44	Yellow	x	x	x	x	x	x	x
Farnham 43	Yellow	x	x	x	x	x	x	x
Hamburg 46	Yellow	x	x	x	x	x	x	x
Lancaster 46	Yellow	x	x	x	x	x	x	x
Newstead 45	Yellow	x	x	x	x	x	x	x
North Collins 45	Yellow	x	x	x	x	x	x	x
Orchard Park 46	Yellow	x	x	x	x	x	x	x
Eden 45	Yellow	x	x	x	x	x	x	x
Farnham 44	Yellow	x	x	x	x	x	x	x
Hamburg 47	Yellow	x	x	x	x	x	x	x
Lancaster 47	Yellow	x	x	x	x	x	x	x
Newstead 46	Yellow	x	x	x	x	x	x	x
North Collins 46	Yellow	x	x	x	x	x	x	x
Orchard Park 47	Yellow	x	x	x	x	x	x	x
Eden 46	Yellow	x	x	x	x	x	x	x
Farnham 45	Yellow	x	x	x	x	x	x	x
Hamburg 48	Yellow	x	x	x	x	x	x	x
Lancaster 48	Yellow	x	x	x	x	x	x	x
Newstead 47	Yellow	x	x	x	x	x	x	x
North Collins 47	Yellow	x	x	x	x	x	x	x
Orchard Park 48	Yellow	x	x	x	x	x	x	x
Eden 47	Yellow	x	x	x	x	x	x	x
Farnham 46	Yellow	x	x	x	x	x	x	x
Hamburg 49	Yellow	x	x	x	x	x	x	x
Lancaster 49	Yellow	x	x	x	x	x	x	x
Newstead 48	Yellow	x	x	x	x	x	x	x
North Collins 48	Yellow	x	x	x	x	x	x	x
Orchard Park 49	Yellow	x	x	x	x	x	x	x
Eden 48	Yellow	x	x	x	x	x	x	x
Farnham 47	Yellow	x	x	x	x	x	x	x
Hamburg 50	Yellow	x	x	x	x	x	x	x
Lancaster 50	Yellow	x	x	x	x	x	x	x
Newstead 49	Yellow	x	x	x	x	x	x	x
North Collins 49	Yellow	x	x	x	x	x	x	x
Orchard Park 50	Yellow	x	x	x	x	x	x	x
Eden 49	Yellow	x	x	x	x	x	x	x
Farnham 48	Yellow	x	x	x	x	x	x	x
Hamburg 51	Yellow	x	x	x	x	x	x	x
Lancaster 51	Yellow	x	x	x	x	x	x	x
Newstead 50	Yellow	x	x	x	x	x	x	x
North Collins 50	Yellow	x	x	x	x	x	x	x
Orchard Park 51	Yellow	x	x	x	x	x	x	x
Eden 50	Yellow	x	x	x	x	x	x	x
Farnham 49	Yellow	x	x	x	x	x	x	x
Hamburg 52	Yellow	x	x	x	x	x	x	x
Lancaster 52	Yellow	x	x	x	x	x	x	x
Newstead 51	Yellow	x	x	x	x	x	x	x
North Collins 51	Yellow	x	x	x	x	x	x	x
Orchard Park 52	Yellow	x	x	x	x	x	x	x
Eden 51	Yellow	x	x	x	x	x	x	x
Farnham 50	Yellow	x	x	x	x	x	x	x
Hamburg 53	Yellow	x	x	x	x	x	x	x
Lancaster 53	Yellow	x	x	x	x	x	x	x
Newstead 52	Yellow	x	x	x	x	x	x	x
North Collins 52	Yellow	x	x	x	x	x	x	x
Orchard Park 53	Yellow	x	x	x	x	x	x	x
Eden 52	Yellow	x	x	x	x	x	x	x
Farnham 51	Yellow	x	x	x	x	x	x	x
Hamburg 54	Yellow	x	x	x	x	x	x	x
Lancaster 54	Yellow	x	x	x	x	x	x	x
Newstead 53	Yellow	x	x	x	x	x	x	x
North Collins 53	Yellow	x	x	x	x	x	x	x
Orchard Park 54	Yellow	x	x	x	x	x	x	x
Eden 53	Yellow	x	x	x	x	x	x	x
Farnham 52	Yellow	x	x	x	x	x	x	x
Hamburg 55	Yellow	x	x	x	x	x	x	x
Lancaster 55	Yellow	x	x	x	x	x	x	x
Newstead 54	Yellow	x	x	x	x	x	x	x
North Collins 54	Yellow	x	x	x	x	x	x	x
Orchard Park 55	Yellow	x	x	x	x	x	x	x
Eden 54	Yellow	x	x	x	x	x	x	x
Farnham 53	Yellow	x	x	x	x	x	x	x
Hamburg 56	Yellow	x	x	x	x	x	x	x
Lancaster 56	Yellow	x	x	x	x	x	x	x
Newstead 55	Yellow	x	x	x	x	x	x	x
North Collins 55	Yellow	x	x	x	x	x	x	x
Orchard Park 56	Yellow	x	x	x	x	x	x	x
Eden 55	Yellow	x	x	x	x	x	x	x
Farnham 54	Yellow	x	x	x	x	x	x	x
Hamburg 57	Yellow	x	x	x	x	x	x	x
Lancaster 57	Yellow	x	x	x	x	x	x	x
Newstead 56	Yellow	x	x	x	x	x	x	x
North Collins 56	Yellow	x	x	x	x	x	x	x
Orchard Park 57	Yellow	x	x	x	x	x	x	x
Eden 56	Yellow	x	x	x	x	x	x	x
Farnham 55	Yellow	x	x	x	x	x	x	x
Hamburg 58	Yellow	x	x	x	x	x	x	x
Lancaster 58	Yellow	x	x	x	x	x	x	x
Newstead 57	Yellow	x	x	x	x	x	x	x
North Collins 57	Yellow	x	x	x	x	x	x	x
Orchard Park 58	Yellow	x	x	x	x	x	x	x
Eden 57	Yellow	x	x	x	x	x	x	x
Farnham 56	Yellow	x	x	x	x	x	x	x
Hamburg 59	Yellow	x	x	x	x	x	x	x
Lancaster 59	Yellow	x	x	x	x	x	x	x
Newstead 58	Yellow	x	x	x	x	x	x	x
North Collins 58	Yellow	x	x	x	x	x	x	x
Orchard Park 59	Yellow	x	x	x	x	x	x	x
Eden 58	Yellow	x	x	x	x	x	x	x
Farnham 57	Yellow	x	x	x	x	x	x	x
Hamburg 60	Yellow	x	x	x	x	x	x	x
Lancaster 60	Yellow	x	x	x	x	x	x	x
Newstead 59	Yellow	x	x	x	x	x	x	x
North Collins 59	Yellow	x	x	x	x	x	x	x
Orchard Park 60	Yellow	x	x	x	x	x	x	x
Eden 59	Yellow	x	x	x	x	x	x	x
Farnham 58	Yellow	x	x	x	x	x	x	x
Hamburg 61	Yellow	x	x	x	x	x	x	x
Lancaster 61	Yellow	x	x	x	x	x	x	x
Newstead 60	Yellow	x	x	x	x	x	x	x
North Collins 60	Yellow	x	x	x	x	x	x	x
Orchard Park 61	Yellow	x	x	x	x	x	x	x
Eden 60	Yellow	x	x	x	x	x	x	x
Farnham 59	Yellow	x	x	x	x	x	x	x
Hamburg 62	Yellow	x	x	x	x	x	x	x
Lancaster 62	Yellow	x	x	x	x	x	x	x
Newstead 61	Yellow	x	x	x	x	x	x	x
North Collins 61	Yellow	x	x	x	x	x	x	x
Orchard Park 62	Yellow	x	x	x	x	x	x	x
Eden 61	Yellow	x	x	x	x	x	x	x
Farnham 60	Yellow	x	x	x	x	x	x	x
Hamburg 63	Yellow	x	x	x	x	x	x	x
Lancaster 63	Yellow	x	x	x	x	x	x	x
Newstead 62	Yellow	x	x	x	x	x	x	x
North Collins 62	Yellow	x	x	x	x	x	x	x
Orchard Park 63	Yellow	x	x	x	x	x	x	x
Eden 62	Yellow	x	x	x	x	x	x	x
Farnham 61	Yellow	x	x	x	x	x	x	x
Hamburg 64	Yellow	x	x	x	x	x	x	x
Lancaster 64	Yellow	x	x	x	x	x	x	x
Newstead 63	Yellow	x	x	x	x	x	x	x
North Collins 63	Yellow	x	x	x	x	x	x	x
Orchard Park 64	Yellow	x	x	x	x	x	x	x
Eden 63	Yellow	x	x	x	x	x	x	x
Farnham 62	Yellow	x	x	x	x	x	x	x
Hamburg 65	Yellow	x	x	x	x	x	x	x
Lancaster 65	Yellow	x	x	x	x	x	x	x
Newstead 64	Yellow	x	x	x	x	x	x	x
North Collins 64	Yellow	x	x	x	x	x	x	x
Orchard Park 65	Yellow	x	x	x	x	x	x	x
Eden 64	Yellow	x	x	x	x	x	x	x
Farnham 63	Yellow	x	x	x	x	x	x	x
Hamburg 66	Yellow	x	x	x	x	x	x	x
Lancaster 66	Yellow	x	x	x	x	x	x	x
Newstead 65	Yellow	x	x	x	x	x	x	x
North Collins 65	Yellow	x	x	x	x	x	x	x
Orchard Park 66	Yellow	x	x	x	x	x	x	x
Eden 65	Yellow	x	x	x	x	x	x	x
Farnham 64	Yellow	x	x	x	x	x	x	x
Hamburg 67	Yellow	x	x	x	x	x	x	x
Lancaster 67	Yellow	x	x	x	x	x	x	x
Newstead 66	Yellow	x	x	x	x	x	x	x
North Collins 66	Yellow	x	x	x	x	x	x	x
Orchard Park 67	Yellow	x	x	x	x	x	x	x
Eden 66	Yellow	x	x	x	x	x	x	x
Farnham 65	Yellow	x	x	x	x	x	x	x
Hamburg 68	Yellow	x	x	x	x	x	x	x
Lancaster 68	Yellow	x	x	x	x	x	x	x
Newstead 67	Yellow	x	x	x	x	x	x	x
North Collins 67	Yellow	x	x	x	x	x	x	x
Orchard Park 68	Yellow	x	x	x	x	x	x	x
Eden 67	Yellow	x	x	x	x	x	x	x
Farnham 66	Yellow	x	x	x	x	x	x	x
Hamburg 69	Yellow	x	x	x	x	x	x	x
Lancaster 69	Yellow	x	x	x	x	x	x	x
Newstead 68	Yellow	x	x	x	x	x	x	x
North Collins 68	Yellow	x	x	x	x	x	x	x
Orchard Park 69	Yellow	x	x	x	x	x	x	x
Eden 68	Yellow	x	x	x	x	x	x	x
Farnham 67	Yellow	x	x	x	x	x	x	x
Hamburg 70	Yellow	x	x	x	x	x	x	x
Lancaster 70	Yellow	x	x	x	x	x	x	x
Newstead 69	Yellow	x	x	x	x	x	x	x
North Collins 69	Yellow	x	x	x	x	x	x	x
Orchard Park 70	Yellow	x	x	x	x	x	x	x
Eden 69	Yellow	x	x	x	x	x	x	x
Farnham 68	Yellow	x	x	x	x	x	x	x
Hamburg 71	Yellow	x	x	x	x	x	x	x
Lancaster 71	Yellow	x	x	x	x	x	x	x
Newstead 70	Yellow	x	x	x	x	x	x	x
North Collins 70	Yellow	x	x	x	x	x	x	x
Orchard Park 71	Yellow	x	x	x	x	x	x	x
Eden 70	Yellow	x	x	x	x	x	x	x
Farnham 69	Yellow	x	x	x	x	x	x	x
Hamburg 72	Yellow	x	x	x	x	x	x	x
Lancaster 72	Yellow	x	x	x	x	x	x	x
Newstead 71	Yellow	x	x	x	x	x	x	x
North Collins 71	Yellow	x	x	x	x	x	x	x
Orchard Park 72	Yellow	x	x	x	x	x	x	x
Eden 71	Yellow	x	x	x	x	x	x	x
Farnham 70	Yellow	x	x	x	x	x	x	x
Hamburg 73	Yellow	x	x	x	x	x	x	x
Lancaster 73	Yellow	x	x	x	x	x	x	x
Newstead 72	Yellow	x	x	x	x	x	x	x
North Collins 72	Yellow	x	x	x	x	x	x	x
Orchard Park 73	Yellow	x	x	x	x	x	x	x
Eden 72	Yellow	x	x	x	x	x	x	x
Farnham 71	Yellow	x	x	x	x	x	x	x
Hamburg 74	Yellow	x	x	x	x	x	x	x
Lancaster 74	Yellow	x	x	x	x	x	x	x
Newstead 73	Yellow	x	x	x	x	x	x	x
North Collins 73	Yellow	x	x	x	x	x	x	x
Orchard Park 74	Yellow	x	x	x	x	x	x	x
Eden 73	Yellow	x	x	x	x	x	x	x
Farnham 72	Yellow	x	x	x	x	x	x	x
Hamburg 75	Yellow	x	x	x	x	x	x	x
Lancaster 75	Yellow	x	x	x	x	x	x	x
Newstead 74	Yellow	x	x	x	x	x	x	x
North Collins 74	Yellow	x	x	x	x	x	x	x
Orchard Park 75	Yellow	x	x	x	x	x	x	x
Eden 74	Yellow	x	x	x	x	x	x	x
Farnham 73	Yellow	x	x	x	x	x	x	x
Hamburg 76	Yellow	x	x	x	x	x	x	x
Lancaster 76	Yellow	x	x	x	x	x	x	x
Newstead 75	Yellow	x	x	x	x	x	x	x
North Collins 75	Yellow	x	x	x	x	x	x	x
Orchard Park 76	Yellow	x	x	x	x	x	x	x
Eden 75	Yellow	x	x	x	x	x	x	x
Farnham 74	Yellow	x	x	x	x	x	x	x
Hamburg 77	Yellow	x	x	x	x	x	x	x
Lancaster 77	Yellow	x	x	x	x	x	x	x
Newstead 76	Yellow	x	x	x	x	x	x	x
North Collins 76	Yellow	x	x	x	x	x	x	x
Orchard Park 77	Yellow	x	x	x	x	x	x	x
Eden 76	Yellow	x	x	x	x	x	x	x
Farnham 75	Yellow	x	x	x	x	x	x	x
Hamburg 78	Yellow	x	x	x	x	x	x	x
Lancaster 78	Yellow	x	x	x	x	x	x	x
Newstead 77	Yellow	x	x	x	x	x	x	x
North Collins 77	Yellow	x	x	x	x	x	x	x
Orchard Park 78	Yellow	x	x	x	x	x	x	x
Eden 77	Yellow	x	x	x	x	x	x	x
Farnham 76	Yellow	x	x	x	x	x	x	x
Hamburg 79	Yellow	x	x	x	x	x	x	x
Lancaster 79	Yellow	x	x	x	x	x	x	x
Newstead 78	Yellow	x

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Risk Assessment Review Meeting

Wednesday, May 19, 2021 | 6:00 – 8:00 p.m.

1. **Welcome/Introductions**
2. **Project Schedule Status Update**
3. **Risk Assessment**
   a. Coastal Erosion
   b. Cyber Security
   c. Earthquake
   d. Expansive Soils
   e. Extreme Temperature
   f. Flood
   g. Hazardous Materials
   h. Landslide
   i. Pandemic
   j. Severe Storms
   k. Severe Winter Storms
   l. Utility Failure
   m. Wildfire
4. **Risk Ranking Summary**
5. **Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)**
6. **Next Steps**
   a. Complete Worksheets (as needed)
   b. Mitigation Strategy Workshops – June 9, 2021
   c. Develop Mitigation Actions
   d. Complete Jurisdictional Annexes

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Risk Ranking Score – Countywide

Hazard of Concern	Prob.	Pop.	Built Env.	Econ.	Adapt Cap.	Future Cond.	Risk Ranking Value
Coastal Erosion	0	1	1	1	1	2	**Low**
Cyber Attack	3	1	1	1	2	1	**Medium**
Earthquake	1	3	3	1	1	1	**High**
Expansive Soils	1	3	1	1	1	3	**Low**
Extreme Temperature	1	1	1	2	1	1	**Medium**
Flood	3	1	1	1	2	3	**Low**
Hazardous Materials	3	1	1	2	1	1	**Low**
Landslide	0	1	1	1	1	1	**Low**
Pandemic	0	3	1	3	1	2	**Medium**
Severe Storms	3	3	1	1	1	2	**High**
Severe Winter Storms	3	3	1	1	1	2	**High**
Utility Failure	3	2	2	2	1	2	**High**
Wildfire	2	2	3	2	1	3	**Medium**

Notes:

Prob. = Probability

Pop. = Impact on the population (Higher numbers reflect a higher percentage of the population at risk.)

Built Env. = Impact on the built environment (Higher numbers reflect a higher percentage of the property value in the county at risk.)

Econ. = Impact on the economy (Higher numbers reflect higher loss estimates.)

Adapt. Cap. = Adaptive capacity (Higher numbers reflect less capability to address hazard impacts.)

Future Cond. = Impact of future conditions on the hazard (Higher numbers indicate higher future risk from the hazard.)

Attachment: 31-Appendix-C-Meeting-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

To update the actions and initiatives for your mitigation strategy, please consider the questions below. Suggested actions will be developed based on Erie County's needs and capabilities, or will be carried over from the previous hazard mitigation plan (HMP) update based on the responses given in Worksheet 4. Some questions may not apply to your municipality.

1. Which properties in your jurisdiction are most vulnerable to flood events and would have the greatest need for retrofitting or other flood hazard mitigation measures? Specific property addresses do not need to be listed (to ensure residential privacy), but names of streets or neighborhoods can be included.

2. What public outreach and education actions would you be most interested in implementing? Circle all that apply.
   A. Provide general hazard risk preparedness and mitigation and related National Flood Insurance Program (NFIP) information in regular newsletters and mailings.
   B. Provide hazard risk and risk-reduction information through social media channels and e-mail blast systems.
   C. Post flyers and other readily available NFIP informational materials at the municipal hall or distribute at regular civic meetings.
   D. Develop and maintain a hazard risk management webpage on the municipal website where information and mapping can be posted.
   E. Encourage private business owners and managers of infrastructure that provide critical services in post-disaster situations to develop Continuity of Operations Plans or Business Continuity Plans.
   F. Enhance public outreach to residents in NFIP floodplain areas, which may include distributing periodic articles and including handouts in the annual newsletter, to inform residents of annual grant opportunities.
   G. Other:

3. Which critical facilities still need or would benefit from a backup generator or redundant power supply?

4. Which critical facilities have been damaged by flood events and require floodproofing or relocation?

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

5. Which roads would benefit from mitigation or structural projects to reduce vulnerability to flood or stormwater incidents? Also, please specify the types of projects that would most help a high-risk road (for example, new/expanded culvert, road elevation, repaving, etc.), if this information is available.

6. What areas in the municipality are still in need of stormwater rehabilitation and upgrades?

7. Where do trees or vegetation need to be trimmed away from power or communications wires?

8. Which properties in your jurisdiction are most vulnerable to landslide events and would have the greatest need for retrofitting or other landslide hazard mitigation measures? Specific property addresses do not need to be listed (to ensure residential privacy), but names of streets or neighborhoods can be included.

9. Has internet connectivity in your community been adequate to support people working and learning from home during the COVID-19 pandemic?

10. Which properties in your jurisdiction are most vulnerable to wildfire events and would have the greatest need for hazard mitigation measures? Specific property addresses do not need to be listed (to ensure residential privacy), but names of streets or neighborhoods can be included.

11. What other mitigation projects are you interested in? Also, list current projects your municipality is targeting for completion during the next 5 years. Please provide as much detail as possible.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Mitigation Strategy Workshop #1		
Date	June 9, 2021	**Time**	9:00 – 10:15 a.m.
Location	Webinar		
Attendees	Dan Castle, Deputy Commissioner, Erie County Department of Environment and Planning		
	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer - Special Assistant Erie County, Erie County Department of Homeland Security and Emergency Services		
	Amy Alduino, Recycling Coordinator, Erie County Department of Environment and Planning		
	Joanna Panasiewicz, Watershed Coordinator, Erie County Department of Environment and Planning		
	Jonathan DePlanche, Senior Civil Engineer, Erie County Department of Public Works Division of Highways		
	Matthew W. Barrett, Security Officer, Erie County Water Authority		
	Elizabeth Cassidy, Code Enforcement, Town of Aurora		
	Michael Borth, Code Enforcement Officer, Village of Akron		
	Jayne DeTine, Clerk, Village of Akron		
	Jim Zymanek, Director, Emergency Services, Town of Amherst, Village of Williamsville		
	Mike Mazurowski, Emergency Manager, Town of Cheektowaga		
	Clyde Drake, Supervisor, Town of Concord		
	Cathie Thomas, Village Administrator, Village of East Aurora		
	Nicholas Pikul, Deputy Emergency Manager, Town of Hamburg		
	Geoffrey Hack, Emergency Manager, Town of Holland		
	Ronald Rozler, Disaster Coordinator, Town of Lancaster		
	Dave Cummings, Supervisor, Town of Newstead		
	Dawn Izydorczak, Clerk, Town of Newstead		
	Jordan Kellerman, Assistant Emergency Manager, Town of Orchard Park		
	Todd Catalano, Emergency Manager, Village of Springville		
	Bill Krebs, Mayor, Village of Springville		
	Liz Melock, Village Administrator, Village of Springville		
	Mark Banks, Director, OEM, City of Tonawanda		
	Chuck Stuart, Fire Chief, City of Tonawanda		
	James Chatham, Emergency Services Coordinator, Town of Tonawanda		
	Robert Lutz, Emergency Services Coordinator, Town of Tonawanda		
	James Unger, Patrol Captain/Public Information Officer, West Seneca Police Department		

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

	Kevin Clapp, Planning Manager, Mitigation Programs, NYS Division of Homeland Security & Emergency Services
	Brian Kehoe, Planner, Tetra Tech
	Tony Subbio, Project Manager, Tetra Tech
	Chris Huch, Planner, Tetra Tech

Purpose

The purpose of the Mitigation Strategy Workshop was to work with the jurisdictional participants of the Erie County HMP to identify problems and potential mitigation actions to include in their jurisdictional annexes.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Welcome and Opening Remarks

Mr. Butcher thanked participants for attending the meeting and participating in the planning process. Mr. Subbio and Mr. Huch welcomed attendees. Mr. Huch described the purpose of the meeting, which was to review the hazard mitigation planning process and develop mitigation strategies.

Hazard Mitigation Review

Mr. Huch provided a brief review of the concepts of hazard mitigation.

Developing Mitigation Strategies

Mr. Huch reviewed the hazards of concern and discussed different methods of risk reduction. Mr. Huch then reviewed the NYS requirements for updating the mitigation strategy. Each jurisdiction will need to meet the following requirements:

- Each jurisdiction must develop at least two Mitigation Action Development worksheets.
- Repetitive and Severe Repetitive Loss Properties need an action with specific details (street or neighborhood names).
- Critical facilities need to be protected to the 500-year flood event (0.2% annual chance) or worst-case scenario.
- Evacuation routes and shelters must be made viable.
- Temporary and permanent housing locations must be identified.
- Proposed actions must have specific information when discussing the problem and solution and identify information such as:
    - Project lead
    - Estimated cost
    - Timeline
    - Whether the action involves a critical facility

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Mr. Huch explained that mitigation actions must have a clear connection to the risk and capability assessments. Mr. Huch reviewed the types of mitigation actions that should be considered:

- Structure and Infrastructure Projects
- Local Plans and Regulations
- Natural Systems Protection Projects
- Education and Awareness Programs

Mr. Huch explained to participants that carryover actions must be updated to be made more specific. Mr. Huch provided examples on how to update carryover actions to meet the current standards of the HMP planning process.

Fill Out and Return the Mitigation Action Development Worksheet

Mr. Huch explained how participants should fill out the Mitigation Action Development Worksheet. The worksheet is designed to gather as much information as possible from municipal participants so Tetra Tech planners can develop mitigation actions for municipal review and input. The worksheet is to be filled out and returned to the county and Tetra Tech after the municipality completes it.

Mr. Huch reviewed the proposed action table and action worksheet and detailed the information necessary to complete each. Mr. Huch reviewed how municipal representatives should make use of problem statements emailed to them by their Tetra Tech planners, identify additional problem areas, and brainstorm potential mitigation actions.

Mr. Clapp described the value of developing viable, fundable mitigation actions/strategies and generating a “wish list” of projects to protect the community. Each community should watch for funding announcements on the NYS DHSES website. Applications for FEMA’s Hazard Mitigation Grant Program are available through NYS DHSES until June 11. It is also expected that funding will be announced in August 2021 for the Building Resilient Infrastructure and Communities grant.

Mr. Lutz asked if the proposed action table would be sent out to attendees. Mr. Huch replied that it could, but that all relevant information is captured in the Action Worksheet.

Next Steps

The following next steps were discussed at the meetings:

- Participants were asked to return their Mitigation Action Development Worksheets to Mr. Subbio by June 16, 2021.
- Municipalities will work with their assigned Tetra Tech planners to complete development of their annexes and mitigation actions.
- All actions and annexes are required to be completed by June 23, 2021.

The meeting adjourned at 10:15 a.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Mitigation Strategy Workshop #2		
Date	June 9, 2021	**Time**	6:00 – 7:15 p.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Commissioner, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer - Special Assistant Erie County, Erie County Department of Homeland Security and Emergency Services		
	Kenneth Martin, Supervisor, Town of Collins		
	Clyde Drake, Supervisor, Town of Concord		
	Mike Willibey, Emergency Manager, Town of Concord		
	Brian Burgstahler, Emergency Manager Town of Eden		
	Danil Kowalik, Emergency Manager, Town of Newstead		
	Kevin Clapp, Planning Manager, Mitigation Programs, NYS Division of Homeland Security & Emergency Services		
	Brian Kehoe, Planner, Tetra Tech		
	Tony Subbio, Project Manager, Tetra Tech		
	Chris Huch, Planner, Tetra Tech		

Purpose

The purpose of the Mitigation Strategy Workshop was to work with the jurisdictional participants of the Erie County HMP to identify problems and potential mitigation actions to include in their jurisdictional annexes.

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Welcome and Opening Remarks

Mr. Butcher thanked participants for attending the meeting and participating in the planning process. Mr. Subbio and Mr. Huch welcomed attendees. Mr. Huch described the purpose of the meeting, which was to review the hazard mitigation planning process and develop mitigation strategies.

Hazard Mitigation Review

Mr. Huch provided a brief review of the concepts of hazard mitigation.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Developing Mitigation Strategies

Mr. Huch reviewed the hazards of concern and discussed different methods of risk reduction. Mr. Huch then reviewed the NYS requirements for updating the mitigation strategy. Each jurisdiction will need to meet the following requirements:

- Each jurisdiction must develop at least two Mitigation Action Development worksheets.
- Repetitive and Severe Repetitive Loss Properties need an action with specific details (street or neighborhood names).
- Critical facilities need to be protected to the 500-year flood event (0.2% annual chance) or worst-case scenario.
- Evacuation routes and shelters must be made viable.
- Temporary and permanent housing locations must be identified.
- Proposed actions must have specific information when discussing the problem and solution and identify information such as:
    - Project lead
    - Estimated cost
    - Timeline
    - Whether the action involves a critical facility

Mr. Huch explained that mitigation actions must have a clear connection to the risk and capability assessments. Mr. Huch reviewed the types of mitigation actions that should be considered:

- Structure and Infrastructure Projects
- Local Plans and Regulations
- Natural Systems Protection Projects
- Education and Awareness Programs

Mr. Huch explained to participants that carryover actions must be updated to be made more specific. Mr. Huch provided examples on how to update carryover actions to meet the current standards of the HMP planning process.

Fill Out and Return the Mitigation Action Development Worksheet

Mr. Huch explained how participants should fill out the Mitigation Action Development Worksheet. The worksheet is designed to gather as much information as possible from municipal participants so Tetra Tech planners can develop mitigation actions for municipal review and input. The worksheet is to be filled out and returned to the county and Tetra Tech after the municipality completes it.

Mr. Huch reviewed the proposed action table and action worksheet and detailed the information necessary to complete each. Mr. Huch reviewed how municipal representatives should make use of problem statements emailed to them by their Tetra Tech planners, identify additional problem areas, and brainstorm potential mitigation actions.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Mr. Clapp described the value of developing viable, fundable mitigation actions/strategies and generating a "wish list" of projects to protect the community. Each community should watch for funding announcements on the NYS DHSES website. Applications for Hazard Mitigation Grant Program funding are available through NYS DHSES until June 11. It is also expected that funding will be announced in August 2021 for the Building Resilient Infrastructure and Communities grant.

Next Steps

The following next steps were discussed at the meetings:

- Participants were asked to return their Mitigation Action Development Worksheets to Mr. Subbio by June 16, 2021.
- Municipalities will work with their assigned Tetra Tech planners to complete development of their annexes and mitigation actions.
- All actions and annexes are required to be completed by June 23, 2021.

The meeting adjourned at 7:15 p.m.

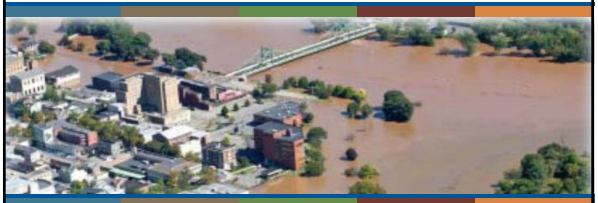
Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

TETRA TECH
complex world | CLEAR SOLUTIONS™

Erie County

Hazard Mitigation Plan Update
Mitigation Strategy Workshop

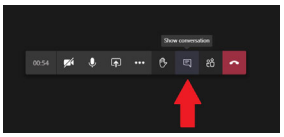
June 9, 2021 9:00 – 11:00 a.m. & 6:00 – 8:00 p.m.



1

Welcome

- If you are attending the webinar on your computer, please add your name, title, and organization(s) to the chat window.
  - Bring your mouse to the lower part of the screen until a set of buttons appears.
  - Click **Show conversation**.



2

Today's Topics

- Introductions
- Hazard Mitigation Explained
- Develop Mitigation Strategies
- Develop Actions and Action Worksheets
- Integrate Mitigation Activities
- Next Steps

3

3

What Is Hazard Mitigation?

Sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

"…provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability…" (CFR).

4

4

Mitigation Works!

The nation saves **$6** for every **$1** spent through mitigation grants funded via select federal agencies.

National Benefit-Cost Ratio (BCR) Per Peril *BCR numbers in this study have been rounded	Beyond Code Requirements	Federally Funded
Overall Hazard Benefit-Cost Ratio	$4:1	$6:1
Riverine Flood	$5:1	$7:1
Hurricane Surge	$7:1	Too few grants
Wind	$5:1	$5:1
Earthquake	$4:1	$3:1
Wildland-Urban Interface Fire	$4:1	$3:1

5

5

Hazard Mitigation Components

3 KEY COMPONENTS THAT CONTRIBUTE TO NATURAL HAZARD MITIGATION PLANNING

6

6

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

TETRA TECH

Mitigation Strategy

7

7

2021 HMP Hazards of Concern

Coastal Erosion
Cyber Security
Earthquake
Expansive Soils
Extreme Temperature
Flood
Hazardous Materials
Landslide
Pandemic
Severe Storm
Severe Winter Storm
Utility Failure
Wildfire

8

8

Risk Reduction

To reduce risk:

- ***Manipulate the hazard***:
  - Structural flood control
- ***Reduce/eliminate exposure***:
  - Property acquisition
- ***Reduce vulnerability***:
  - Retrofit
- ***Increase capability***:
  - funding, preparation, technical assistance, planning, enforcement

9

9

NYS & FEMA Requirements for Mitigation Strategy Update

- Develop *at least two Action Worksheets*.
- *Address Repetitive and Severe Repetitive Loss Properties* - need an action with specific details (street or neighborhood names).
- Identify critical facilities, assess vulnerabilities and ensure protection to the 500-year flood event or worst-case scenario.
  - If already protected, we must note how.
  - *If not protected, a mitigation action must be developed.*
- Plan for climate change and propose actions to address.

10

10

NYS Requirements: Mitigation Strategy

- MUST identify evacuation routes and shelters in the plan.
  - Identify actions to make evacuation routes and shelters viable, if not already.
- MUST identify temporary housing and permanent housing locations in the plan.
  - Identify actions to develop these locations, even if outside of jurisdictional boundaries.

11

11

NYS Requirements: Mitigation Strategy

- Proposed actions MUST have specific information identified, including:
  - Project lead
  - Estimated cost
  - Timeline
  - Whether the action involves a critical facility
  - Etc.
- All of these required items are identified within the proposed action table. Each cell of the table MUST be filled out!

12

12

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Connection to the Mitigation Strategy

- Need a clear connection between vulnerability and proposed mitigation actions.
- Capability assessment provides insight into challenges/opportunities for the mitigation strategy as well.
- Provides the factual basis for activities proposed in the mitigation strategy.

Risk and Capability Assessments → Mitigation Strategy

13

13

Connection to the Mitigation Strategy

- More specific actions:
  - Specific projects, in specific locations, in a specific timeframe
- Diverse actions:
  - Focus on highest ranked hazards but also look to address other hazards
  - Include a variety in the types of actions

14

14

FEMA Mitigation Action Types

Plans and regulations include government authorities, policies, or codes that encourage risk reduction, such as building codes and state planning regulations. This may also include planning studies.

Structure and infrastructure projects involve modifying existing structures and infrastructure or constructing new structures to reduce the impact of hazards.

Natural systems protection projects minimize losses while also preserving or restoring the function of natural systems.

Education and awareness programs include long-term, sustained programs to inform and educate citizens and stakeholders about hazards and mitigation options. This category could also include training.

15

15

Update the Mitigation Strategy

- Review your Goals and Objectives.
- Start with Problems (many identified in your Problem Statements/worksheets):
  - Areas that have been impacted
  - Recurring issues
  - Critical/lifeline facilities in the floodplain
  - RL/SRL properties need mitigating
  - Lack of identified locations for temporary housing and permanent housing (outside of the floodplain)

16

16

Update the Mitigation Strategy

- Identify new mitigation actions/projects.
- Modify carry-over projects from the 2015 HMP.
  - Be more specific or address different aspect of original problem.

17

17

TETRA TECH

Make Previous Actions More Specific

18

18

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Previous Problem/Action (2015 HMP)

- Problem: Critical facilities require backup power.
- Solution: Acquire backup power for critical facilities.

19

19

Improved Problem and Action

- Problem: Town Hall lacks a backup power source. The Town Hall houses the Emergency Operations Center and can also serve as a backup shelter. Lack of power results in a breakdown of continuity of operations and prevents the Town Hall from providing critical services during a hazard event.
- Solution: The Town Engineer will work with the Office of Emergency Management to research and purchase the appropriately sized backup generator for the Town Hall. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.

20

20

EVEN MORE Improved Problem and Action

- Problem: Town Hall lacks a backup power source. The Town Hall houses the Emergency Operations Center and also can serve as a backup shelter for approximately 100 people. Lack of power results in a breakdown of continuity of operations and prevents the Town Hall from providing critical services during a hazard event.
- Solution: The Town Engineer will work with the Office of Emergency Management to research and purchase a 75 kW generator for the Town Hall. The DPW will install the backup generator on the roof of the Town Hall, install necessary electrical components, and be responsible for testing and upkeep of the generator after installation.

21

21

Previous Problem and Action

- Problem: Falling trees result in power outages.
- Solution: Complete tree trimming.

22

22

Improved Problem and Action

- Problem: High-hazard trees pose a risk for falling on private property and utilities during storm events. The town does not have a program in place to monitor and inspect trees and identify trees that need to be trimmed or removed.
- Solution: The town will develop a vegetation management program. This program will include routine inspections of trees in the municipal rights-of-way, identify trees that are in need of trimming or removal, and conduct the trimming and removal. This will help reduce tree damage, road closures, and power outages during severe weather events. A majority of the tree work will be conducted by the Highway Department; however, outside contractors might be used if removal is beyond the Highway Department's capability.

23

23

TETRA TECH

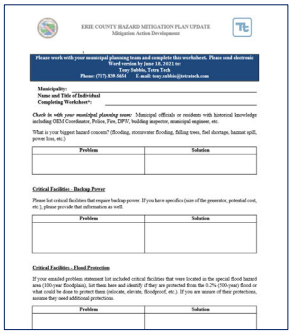
Mitigation Development Worksheet

24

24

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Tetra Tech emailed *Problem Statements* to help fill out your *Mitigation Development Worksheet & Action Worksheets*


ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Mitigation Action Development

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by June 10, 2022 to:
Tony Dobbin, Tetra Tech
Phone: (717) 430-2651 E-mail: tony.dobbin@tetratech.com

Municipality:
Name and Title of Individual Completing Worksheet*:

*Check in with your municipal planning team: Municipal officials or residents with historical knowledge including OEM Coordinator, Police, Fire, DPW, building inspector, municipal engineer, etc.

What is your biggest hazard concern? (flooding, stormwater flooding, falling trees, fuel shortage, hazmat spill, power loss, etc.)

Problem	Solution

Critical Facilities - Backup Power

Please list critical facilities that require backup power. If you have specifics (size of the generator, potential cost, etc.), please provide that information as well.

Problem	Solution

Critical Facilities - Flood Protection

If your emailed problem statement list included critical facilities that were located in the special flood hazard area (100-year floodplain), list them here and identify if they are protected from the 0.2% (500-year) flood or what could be done to protect them (relocate, elevate, floodproof, etc.). If you are unsure of their protections, assume they need additional protection.

Problem	Solution

25

25

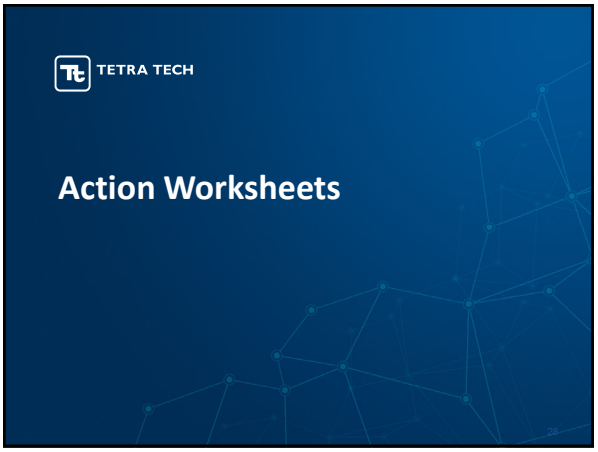
26

Proposed Action Table

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Prior Facility (Yes/No)	HMP Status	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Alternative	DEC Category
2020-Muni-001				Problem: Solution:										
2020-Muni-002				Problem: Solution:										
2020-Muni-003				Problem: Solution:										
2020-Muni-004				Problem: Solution:										
2020-Muni-005				Problem: Solution:										

27

27



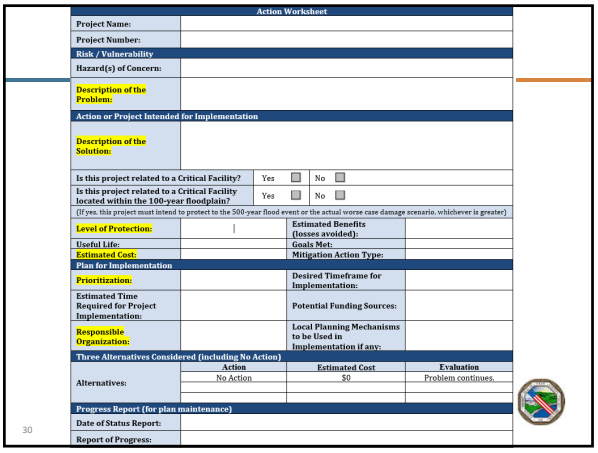
28

Action Worksheets

- Each jurisdiction must develop at least two Action Worksheets.
- Jurisdictions should also develop additional Action Worksheets for projects you plan to apply for FEMA funding support for within the next five years.
- Not every action requires an Action Worksheet to be developed, but the same sort of information about those actions is still needed in the Proposed Actions table of the annex.

29

29



Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		Estimated Benefits (losses avoided):	
Useful Life:		Goals Met:	
Estimated Cost:		Mitigation Action Type:	
Plan for Implementation			
Prioritization:		Desired Timeframe for Implementation:	
Estimated Time Required for Project Implementation:		Potential Funding Sources:	
Responsible Organization:		Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	$0	Problem continues.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			

30

30

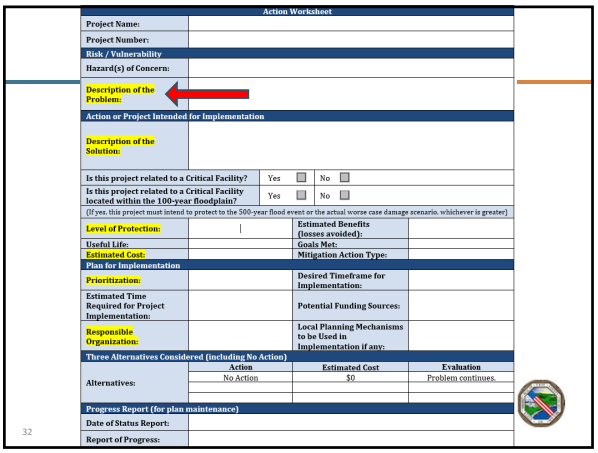
Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Action Worksheet

- Complete the highlighted areas.
- Areas not highlighted will be completed by Tetra Tech staff.

31

31



Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		Estimated Benefits (losses avoided):	
Useful Life:		Goals Met:	
Estimated Cost:		Mitigation Action Type:	
Plan for Implementation			
Prioritization:		Desired Timeframe for Implementation:	
Estimated Time Required for Project Implementation:		Potential Funding Sources:	
Responsible Organization:		Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	$0	Problem continues.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			

32

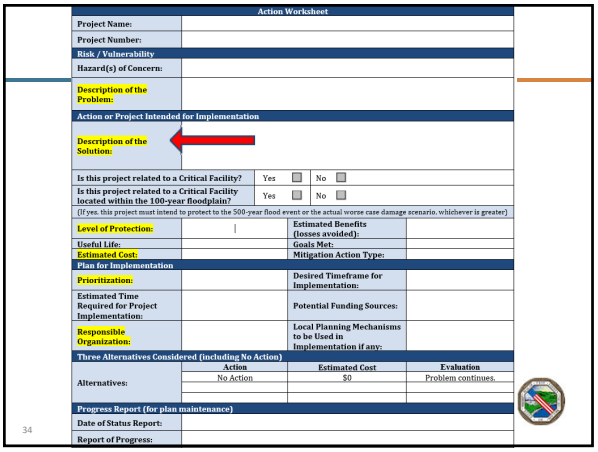
32

Action Worksheet

- Description of the Problem
  - What is the problem?
  - What is the risk?
  - Where is the problem occurring?
  - Who is the problem impacting?
  - Have there been past damages?
  - How frequently does the problem occur?

33

33



Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		Estimated Benefits (losses avoided):	
Useful Life:		Goals Met:	
Estimated Cost:		Mitigation Action Type:	
Plan for Implementation			
Prioritization:		Desired Timeframe for Implementation:	
Estimated Time Required for Project Implementation:		Potential Funding Sources:	
Responsible Organization:		Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	$0	Problem continues.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			

34

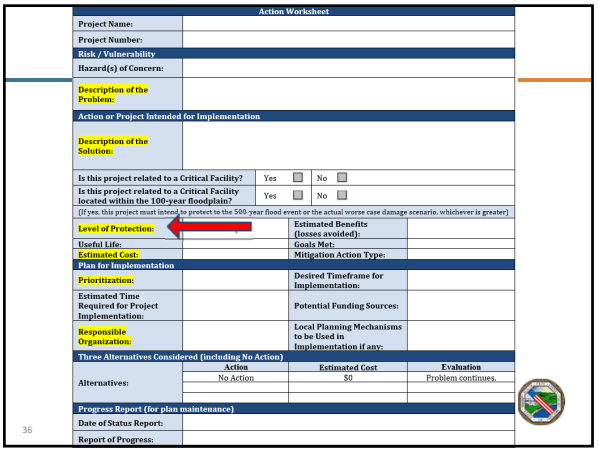
34

Action Worksheet

- Description of the Solution
  - How do you propose to solve or mitigate the problem?
  - What are the design specifications?
    - Height and length of a floodwall
    - kW for backup generators
    - Number of structures to be bought out or elevated
    - Etc.
  - Who is responsible for what aspects of the project?

35

35



Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		Estimated Benefits (losses avoided):	
Useful Life:		Goals Met:	
Estimated Cost:		Mitigation Action Type:	
Plan for Implementation			
Prioritization:		Desired Timeframe for Implementation:	
Estimated Time Required for Project Implementation:		Potential Funding Sources:	
Responsible Organization:		Local Planning Mechanisms to be Used in Implementation if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	$0	Problem continues.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			

36

36

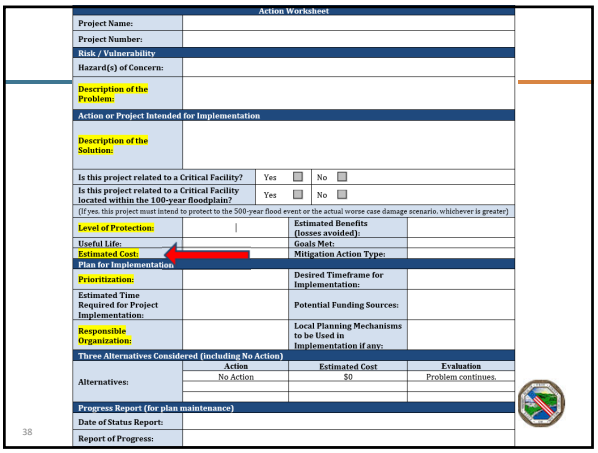
Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Action Worksheet

- Level of Protection
  - What level event is the project being designed to protect to?
    - For flood protection: 1% flood (100-year flood), 0.2% flood (500-year flood)
    - For stormwater improvements: 5-year rain events, 10-year rain events
  - If not a specific level, include brief description of what protections are.
    - For generators: Prevents power loss

37

37



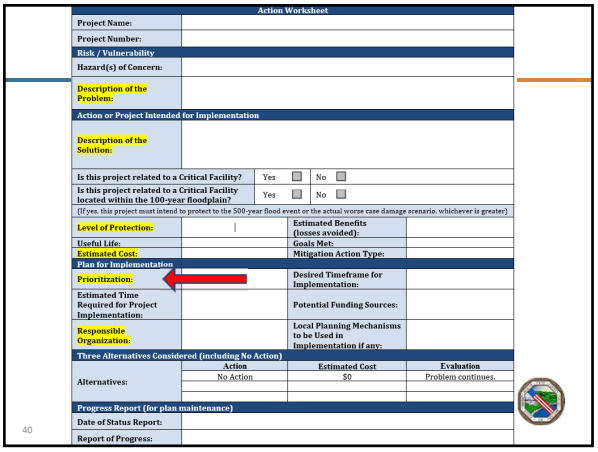
38

Action Worksheet

- Estimated cost
  - What will the project cost?
  - If project includes phases or components, what will each phase or component cost?
    - New generator: $25K, elevation platform for generator: $1K

39

39



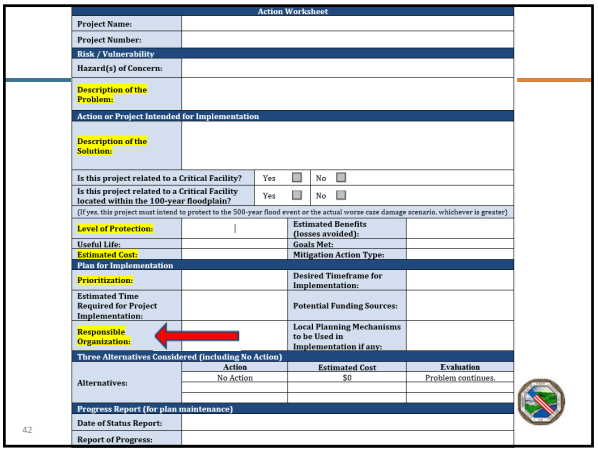
40

Action Worksheet

- Prioritization
  - High, Medium, or Low
  - Use the second page of the Action Worksheet to evaluate each action and assist in the determination of priority (to be discussed shortly).

41

41



42

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Action Worksheet

- Responsible Organization
  - Identify the lead organization/department/individual for the project.
  - Identify any supporting organizations/departments/ individuals for the project.

43

43

Evaluation of Actions

Evaluation and Prioritization		
Project Name:		
Project Number:		
Criteria	Numeric Rank (1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

44

44

Prioritization of Actions

- Consider the benefits and costs.
- Consider the implementation timeline.
- Consider the areas/problems of greatest need.
- Consider the funding sources.
- High/Medium/Low priority.

45

45

Schedule Review and Next Steps

- Return your Mitigation Development Worksheet by **June 16**.
- Work with your assigned Tetra Tech planner to complete your annex and the development of your actions.
- All annexes and actions must be complete by **June 23**.
- Targeting posting of the draft plan July 9.

46

46

For More Information…

- Erie County HMP Website
  - Home - Erie County Hazard Mitigation Plan (HMP) Public Website (eriecountynyhmp.com)
- Erie County Department of Homeland Security and Emergency Services
  - Erie County Department of Homeland Security & Emergency Services - Home | Facebook
  - Department of Homeland Security and Emergency Services (erie.gov)
  - Erie Cty Emerg Svces (@ErieCountyESU) / Twitter
- Erie County Department of Environment & Planning
  - Erie County DEP (@ErieCoDEP) / Twitter
  - Environment & Planning (erie.gov)

47

47

Contacts

Gregory Butcher, Deputy Comm.
gregory.butcher@erie.gov
(585) 716-858-6578

Tony Subbio, Project Manager
tony.subbio@tetratech.com
(717) 545-3580

Brian Kehoe
brian.kehoe@tetratech.com
(585) 354-4216

48

48

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop

Wednesday, June 9, 2021 | 9:00 – 11:00 a.m. & 6:00 – 8:00 p.m.

1. **Welcome and Opening Remarks**
2. **Hazard Mitigation Review**
3. **Developing Mitigation Strategies**
   a. NYS Requirements
   b. Areas of Focus
   c. Types of Mitigation Actions
4. **Making Previous Actions More Specific**
5. **Fill Out and Return Your Mitigation Development Worksheet**
6. **Proposed Action Tables**
7. **Action Worksheets**
8. **Questions**
9. **Next Steps**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE
Mitigation Action Development

Please work with your municipal planning team and complete this worksheet. Please send electronic Word version by June 18, 2021 to:
Tony Subbio, Tetra Tech
Phone: (717)-839-5654 E-mail: tony.subbio@tetratech.com

Municipality: _____
Name and Title of Individual Completing Worksheet*: _____

Check in with your municipal planning team: Municipal officials or residents with historical knowledge, including OEM Coordinator, Police, Fire, DPW, building inspector, municipal engineer, etc.

What is your biggest hazard concern? (flooding, stormwater flooding, falling trees, fuel shortage, hazmat spill, power loss, etc.)

Problem	Solution

Critical Facilities - Backup Power

Please list critical facilities that require backup power. If you have specifics (size of the generator, potential cost, etc.), please provide that information as well.

Problem	Solution

Critical Facilities - Flood Protection

If your emailed problem statement list included critical facilities that were located in the special flood hazard area (100-year floodplain), list them here and identify if they are protected from the 0.2% (500-year) flood or what could be done to protect them (relocate, elevate, floodproof, etc.). If you are unsure of their protections, assume they need additional protections.

Problem	Solution

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Culverts - Undersized/In Need of Upgrade

Please indicate the location (Street? Stream/river?) of any culverts in your community that are undersized or are damaged from past flood events.

Problem	Solution

Flood Protection – Elevation or Buyout

Please identify homes or neighborhoods that would benefit from elevation or buyout to prevent future flood damages.

Problem	Solution

Infrastructure Protection

Please identify roads and other infrastructure that needs protection from flooding, storms, etc. Indicate what the protection measures are (elevate roadway, harden infrastructure, etc.)

Problem	Solution

Other Projects

Please identify other projects that you have in mind after reviewing your problem statements, past actions, risk assessment results, and mitigation catalog.

Problem	Solution

Action Worksheet			
Project Name:			
Project Number:			
Risk / Vulnerability			
Hazard(s) of Concern:			
Description of the Problem:			
Action or Project Intended for Implementation			
Description of the Solution:			
Is this project related to a Critical Facility?	Yes ☐	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:		**Estimated Benefits (losses avoided):**	
Useful Life:		**Goals Met:**	
Estimated Cost:		**Mitigation Action Type:**	
Plan for Implementation			
Prioritization:		**Desired Timeframe for Implementation:**	
Estimated Time Required for Project Implementation:		**Potential Funding Sources:**	
Responsible Organization:		**Local Planning Mechanisms to be Used in Implementation if any:**	

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Evaluation and Prioritization		
Project Name:		
Project Number:		
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Guidance to Complete the Mitigation Action Worksheet

The following provides additional guidance on how to complete the Mitigation Action Worksheet. Please note that NYS DHSES requires a minimum of two proposed mitigation activities; one of which cannot be a generator.

- If you have NFIP repetitive or severe repetitive flood loss properties, you must include a specific project to mitigate including the general location (neighborhood name, area of town – do not include specific addresses), type of mitigation (acquisition, elevation), details regarding outreach to homeowners and schedule for implementation.

- If you have critical facilities or lifelines in the floodplain, please identify a mitigation project to reduce flood impacts. If you already mitigated, please indicate the action completed. If it is not within your jurisdiction, consider working with the facility owner to conduct a feasibility study to identify the most effective path forward – need an outcome of the study to determine next steps.

Action Worksheet

Project Name: Please identify a unique project name for the mitigation action.

Project Number: 2020-Jurisdiction-001.

Assessing the Risk and Vulnerability

Hazard(s) of Concern: Please identify the hazard(s) being addressed with this action.

Description of the Problem: Provide a detailed narrative of the problem. Describe the hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.

Action/Project Intended for Implementation

Description of the Solution: Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).

Critical Facility: Please indicate whether or not the identified project is related to a critical facility or lifeline in your community.

Level of Protection: Please identify the level of protection the proposed project will provide. For example, 100-year (1%) flood.

Useful Life: Identify the number of years the project will provide protection against the hazard.

Estimated Cost: Identify all estimate costs associated with implementation.

Estimated Benefits: Identify the benefits that implementation of this project will provide (e.g., risk reduction). If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Mitigation Action Type:

Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.

Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

Goals:

Goal 1: Protect life, property, and critical infrastructure from the impacts of natural, technological, and human-caused hazards.

Goal 2: Reduce the risk of hazards on life, property, and the environment.

Goal 3: Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.

Plan for Implementation

Prioritization: Please enter High/Medium/Low. Refer to the prioritization exercise and table.

Estimated Time Required for Project Implementation: Provide the estimated time required to complete the project from start to end.

Responsible Organization: Identify the name of a department or agency responsible for implementation, not the jurisdiction.

Desired Timeline for Implementation: Identify the desired start time for this project. For example, within six months.

Potential Funding Source(s): Identify multiple sources of potential funding. For example, FEMA HMGP and PDM Grants, CDBG-DR funding, etc.

Local Planning Mechanism to be Used in Implementation (if any): Consider the use of local planning mechanisms that will be used to implement the project.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Evaluation of Potential Actions/Projects

Actions/Projects Considered: Please consider three different options to mitigate the problem identified. One alternative is always to accept the current level or risk (tolerate the vulnerability/problem) by deciding to take no action at this time. Please include the name of the action considered, estimated cost to complete the project, and a description of the pros and cons of the project.

Reporting on Progress (for plan maintenance)

Date of Status Report: This section should be completed during plan maintenance/evaluation.

Report of Progress: Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.

Update Evaluation of the Problem and/or Solution: Provide an updated description of the problem and solution, and what has happened since initial consideration/development.

Please note this report on progress should be done, at minimum, each year prior to the annual Planning Committee update outlined in the plan maintenance procedures.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

COASTAL EROSION		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard:***
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ Retrofit/elevate structures
  ○ Purchase flood insurance
• ***Increase capability:***
  ○ Improve awareness of hazard and insurance options
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Retrofit structures, elevate mechanicals
	• ***Increase capability:***
	  ○ Improve awareness of hazard and insurance options
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Support sustainable and resilient land use and community development
		  ○ Recognize sea level rise and erosion areas as a hazard overlay for planning
		  ○ Limit new development and critical infrastructure inside the coastal erosion hazard area
		  ○ Develop design standards for development inside areas prone to coastal erosion
		  ○ Incentivize improved flood risk management
		• ***Increase capability:***
		  ○ Develop guidance and checklist for developers to assist with integration and incorporation of green and sustainable approaches
		  ○ Encourage property owners to purchase flood insurance

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

EARTHQUAKES		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Locate outside of hazard area (off soft soils)
• ***Reduce vulnerability to the hazard:***
  ○ Retrofit structure (anchor house structure to foundation)
  ○ Secure household items that can cause injury or damage, such as water heaters, bookcases, and other appliances
  ○ Build to higher design standards
• ***Increase capability:***
  ○ Practice "drop, cover, and hold"
  ○ Develop household mitigation plan, such as creating a retrofit savings account, communication capability with outside, 72 hr self-sufficiency during an event
  ○ Increase capability by having cash reserves for reconstruction
  ○ Become informed on the hazard and risk reduction alternatives available
  ○ Develop a post-disaster action plan for your household
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ Locate/relocate mission critical functions outside hazard area where possible
	• ***Reduce vulnerability to the hazard:***
	  ○ Build redundancy for critical functions/facilities
	  ○ Retrofit critical buildings/areas housing mission critical functions
	• ***Increase capability:***
	  ○ Adopt higher standard for new construction; consider "performance-based design" when building new structures
	  ○ Increase capability by having cash reserves for reconstruction
	  ○ Inform your employees on the possible impacts of earthquake and how to deal with them at your work facility
	  ○ Develop a Continuity of Operations (COOP) Plan
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ Locate critical facilities or functions outside of hazard area where possible
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure
		  ○ Provide redundancy for critical functions
		  ○ Adopt higher regulatory standards for structures
		  ○ Conduct "rapid screening" programs for critical facilities to identify facilities that may be particularly prone to EQ damage, then develop investigation/action plans to address such structures
		• ***Increase capability:***
		  ○ Provide better hazard maps
		  ○ Provide technical information and guidance
		  ○ Enact tools to help manage development in hazard areas: tax incentives, information
		  ○ Include retrofitting/replacement of critical system elements in CIP
		  ○ Develop strategy to take advantage of post-disaster opportunities
		  ○ Warehouse critical infrastructure components such as pipe, power line, and road repair material

EARTHQUAKES		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Develop and adopt a Continuity of Operations/Continuity of Government Plan (COOP/COG) ○ Initiate triggers guiding improvements such as: (< 50% substantial damage/improvements) ○ Further enhance seismic risk assessment to target high hazard buildings for mitigation opportunities ○ Develop a post-disaster action plan that includes a grant funding and debris removal components ○ Utilize warning systems such as NY Alert ○ Educate builders and developers on seismic construction standards

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

EXPANSIVE SOILS		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ None
• ***Increase capability:***
  ○ None
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ None
	• ***Increase capability:***
	  ○ None
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ Consider hazard areas in land use planning, zoning, and development siting
		  ○ Acquire structures in highest hazard areas (demolish and convert to restricted open space)
		  ○ Relocation of structures
		  ○ Open space preservation
		• ***Reduce vulnerability to the hazard:***
		  ○ Consider hazard areas in land use planning and development siting
		  ○ Build structures in land subsidence areas on piers anchored to bedrock
		  ○ Work with stakeholders such as USGS and SWCD to develop appropriate risk reduction strategies
		• ***Increase capability:***
		  ○ Increase understanding of hazard areas (e.g., Landslide Susceptibility Maps) geotechnical surveys, LIDAR, and mapping
		  ○ Work with stakeholders such as USGS, NYS - Geological Survey and SWCD to develop appropriate risk reduction strategies
		  ○ Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

		○ Develop county-level programs to document slide events (landslide inventory), and maintain its currency

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

EXTREME TEMPERATURES		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Insulate structure
  ○ Provide redundant power
  ○ Plant appropriate trees near home (“Right tree, right place” National Arbor Day Foundation Program)
• ***Reduce vulnerability to the hazard:***
  ○ Air condition non-conditioned buildings
  ○ Install backup heat (e.g., wood burning stoves)
  ○ Incorporate “green building” methods (e.g., green roofs)
• ***Increase capability:***
  ○ Be aware of impending heatwaves
  ○ Inform yourself on the do’s and don’ts during heatwaves
  ○ Have fans available for use during peak demands in lieu of air conditioning
  ○ Install backup generators
  ○ Know the location of cooling and warming shelters
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ Create redundancy to power supply to deal with power grid vulnerability during high demands
	• ***Reduce vulnerability to the hazard:***
	  ○ Air condition non-conditioned buildings
	  ○ Incorporate “green building” methods (e.g., green roofs)
	• ***Increase capability:***
	  ○ Inform employees of the seriousness of heatwaves
	  ○ Monitor weather forecasts
	  ○ Establish a COOP
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ Create redundancy to power supply to deal with power grid vulnerability during high demands
		• ***Reduce vulnerability to the hazard:***
		  ○ Air condition public buildings
		  ○ Incorporate “green building” methods (e.g., green roofs)
		• ***Increase capability:***
		  ○ Inform the public on the seriousness of heatwaves
		  ○ Identify populations vulnerable to extreme heat (elderly, poor) for early warning during potential heatwaves
		  ○ Enhance weather forecasting capability
		  ○ Distribute fans to vulnerable populations
		  ○ Promote selective approaches to cooling your residences and businesses during peak demands

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
• ***Manipulate the hazard:*** ○ Clear stormwater drains and culverts • ***Reduce exposure to the hazard:*** ○ Locate or relocate outside of hazard area ○ Institute low impact development techniques on property • ***Reduce vulnerability to the hazard:*** ○ Retrofit existing structures and utilities above Base Flood Elevation (BFE) ○ Floodproof existing structures (wet or dry flood-proofing) ○ Store hazardous materials above BFE or outside of flood-prone areas • ***Increase capability:*** ○ Develop household mitigation plan, such as retrofit savings, communication capability with outside, 72-hr self-sufficiency during and after an event ○ Buy flood insurance	• ***Manipulate the hazard:*** ○ Clear stormwater drains and culverts • ***Reduce exposure to the hazard:*** ○ Locate business critical facilities or functions outside hazard area ○ Institute low impact development techniques on property • ***Reduce vulnerability to the hazard:*** ○ Build redundancy for critical functions/ retrofit critical buildings ○ Provide flood-proofing measures when new critical infrastructure must be located in floodplains ○ Harden structures and infrastructure (wet and dry flood-proofing) ○ Store hazardous materials above BFE or outside of flood-prone areas • ***Increase capability:*** ○ Increase capability by having cash reserves for reconstruction ○ Develop and adopt a COOP Plan ○ Solicit “cost-sharing” through partnerships with private sector stakeholders on projects with multiple benefits ○ Dam owner/operators should continue to be aware of and understand dam inspection and reporting requirements ○ Ensure that all dam EAPs are kept in compliance with NYSDEC Regulations	• ***Manipulate the hazard:*** ○ Clear stormwater drains and culverts ○ Dredging, levee construction, providing retention areas ○ Structural flood control: levees, dams, channelization, revetments ○ Construct regional stormwater control facilities ○ Lead and develop a county-wide stream clearing strategy, including the development of thresholds for response/action • ***Reduce exposure to the hazard:*** ○ Locate/relocate critical facilities outside of hazard area ○ Acquire or relocate identified repetitive loss properties ○ Promote open space uses in identified high hazard areas via techniques such as: PUDs, easements, setbacks, greenways, sensitive area tracks ○ Adopt land development criteria such as PUDs, density transfers, clustering ○ Institute low impact development techniques on property ○ Acquire vacant land or promote open space uses in developing watersheds to control increases in runoff ○ Pass an ordinance to incorporate additional zoning classifications into flood zones within each municipality ○ Increase floodplain standards within municipal ordinances and include

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		provisions for enforcing best practice standards by requiring a minimum freeboard of 2' to align with NY State Standards ○ Continue development application reviews by County Planning Board to reduce risky development practices • ***Reduce vulnerability to the hazard:*** ○ Harden structures and infrastructure (wet and dry flood-proofing) ○ Provide redundancy for critical functions and infrastructure ○ Adopt appropriate regulatory standards such as cumulative substantial improvement/damage, freeboard, lower substantial damage threshold, compensatory storage ○ Stormwater management regulations and master planning ○ Adopt "no-adverse impact" floodplain management policies that strive to not increase the flood risk on down-stream communities ○ Participate in the Community Rating System (CRS) ○ Implement as-built regulatory requirements ○ Implement site review ordinances/requirements ○ Establish stream maintenance programs with stakeholders (e.g., Soil and Water Conservation District) and support county leads of such efforts

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Incorporate retrofitting/replacement of critical facilities and infrastructure in Capital Improvement Plans (CIPs) ○ Promote the use of vegetation/plants as green erosion control measures to reduce localized flooding ○ Work with the SWCD and other groups to address removal of debris, log jams, etc., in flood vulnerable stream sections • ***Increase capability:*** ○ Produce better hazard maps, and improve access to flood hazard mapping ○ Capture/survey "high-water" marks during flood events ○ Provide technical information and guidance on appropriate mitigation options available to businesses and homeowners ○ Enact tools to help manage development in hazard areas (stronger controls, tax incentives, information) ○ Establish an additional layer of zoning within flood hazard areas ○ Develop strategy to take advantage of post-disaster opportunities ○ Improve compliance with and enforcement of the NFIP ○ Develop mitigation partnerships with regional stakeholders ○ Join CRS program or improve level of participation in CRS ○ Develop and implement a public information strategy for flood hazard

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		awareness, flood insurance (NFIP) and mitigation ○ Maintain existing data as well as gather new data needed to define risks and vulnerability ○ Create a building and elevation inventory of structures in the floodplain ○ Identify flood-prone areas that may be in need of new flood studies ○ Establish a program to identify and educate owners of flood-prone properties of potential mitigation options (e.g., elevations, relocations) ○ Charge a hazard mitigation fee on all new permits to create a hazard mitigation funding source for initiatives or grant cost-share requirements ○ Integrate floodplain management policies into other planning mechanisms within the planning area ○ Establish a Stormwater Utility to deal with urban drainage/flooding issues ○ Establish incentives to promote flood hazard mitigation of private property (e.g., permit fee waivers) ○ Adopt ordinances/standards for cumulative damages and/or improvements ○ Upgrade NFIP Floodplain ordinance as well as other ordinances to current or above current state and federal standards ○ Develop and adopt a COOP ○ Join “StormReady” Program

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Participate in county and regional training programs ○ Provide additional training/certification to NFIP floodplain administrators and code officials ○ Implement annual training to account for turnover of municipal officials ○ Maintain and enhance flood forecasting ability, including the establishment and maintenance of critical stream gages ○ Explore grant funding opportunities and potential partnerships to help maintain existing gages and install additional gages to improve forecasting and flood warning ability ○ Promote awareness and participation in alert systems such as NYAlert ○ Support and participate in regional flood management efforts ○ Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones ○ Provide continued and enhanced training for emergency responders ○ Establish a revolving “bank” or budget line item to fund grant application support ○ Continue to review updated Flood Insurance Rate Maps to ensure accuracy as well as maintaining lines of communication with homeowners to make them aware of potential changes related to their property status

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

FLOOD		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Provide trainings for FPAs on the NFIP/Floodplain Best Practices and also pursue CFM accreditation for municipal FPAs ○ Build and maintain relationships to develop regional watershed/floodplain mitigation solutions ○ Pursue grant funding opportunities to fund repairs of catchments and infrastructure on a proactive basis ○ Explore grant funding opportunities related to climate change to fund mitigation projects

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

HAZARDOUS MATERIALS		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ Identify and eliminate sources of potential hazardous material spills
• ***Reduce exposure to the hazard***:
  ○ Increase distance between hazardous material sites and development
• ***Reduce vulnerability to the hazard:***
  ○ None
• ***Increase capability:***
  ○ Personal planning for potential event
	• ***Manipulate the hazard:***
	  ○ Identify and eliminate sources of potential hazardous material spills
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ None
	• ***Increase capability:***
	  ○ Increase inspection of hazardous material facilities and transport vehicles
	  ○ Conduct training for response
		• ***Manipulate the hazard:***
		  ○ Identify and eliminate sources of potential hazardous material spills
		• ***Reduce exposure to the hazard:***
		  ○ Increase inspection of hazardous material facilities and transport vehicles
		• ***Reduce vulnerability to the hazard:***
		  ○ None
		• ***Increase capability:***
		  ○ Increase inspection of hazardous material facilities and transport vehicles
		  ○ Conduct training for response
		  ○ Public outreach

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

LANDSLIDE		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep slopes
• ***Reduce exposure to the hazard***:
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ None
• ***Increase capability:***
  ○ None
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ None
	• ***Increase capability:***
	  ○ None
		• ***Manipulate the hazard:***
		  ○ Implement reinforcement measures in high-risk areas
		  ○ Use debris flow measures that may reduce damage in sloping areas, such as stabilization, emergency dissipation, and flow control measures
		  ○ Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep, publicly owned slopes
		• ***Reduce exposure to the hazard:***
		  ○ Consider hazard areas in land use planning, zoning, and development siting
		  ○ Acquire structures in highest hazard areas (demolish and convert to restricted open space)
		  ○ Relocation of structures
		  ○ Open space preservation
		  ○ Create or increase setback limits on parcels near high-risk parcels
		• ***Reduce vulnerability to the hazard:***
		  ○ Consider hazard areas in land use planning and development siting
		  ○ Stabilize vulnerable slopes near structures and infrastructure
		  ○ Work with stakeholders such as USGS and SWCD to develop appropriate risk reduction strategies

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

LANDSLIDE		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Install catch-fall nets for rocks at steep slopes near roadways • ***Increase capability:*** ○ Increase understanding of hazard areas (e.g., Landslide Susceptibility Maps) geotechnical surveys, LIDAR, and mapping ○ Assessing vegetation in wildfire-prone areas to prevent landslides after fires (e.g., encourage plants with strong root systems) ○ Work with stakeholders such as USGS, NYS - Geological Survey and SWCD to develop appropriate risk reduction strategies ○ Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones ○ Develop county-level programs to document slide events (landslide inventory), and maintain its currency

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

PANDEMIC		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Proper hygiene
  ○ PPE
  ○ Social distancing
• ***Reduce vulnerability to the hazard:***
  ○ Focus on personal health
• ***Increase capability:***
  ○ Storage of PPE
  ○ Storage of supplies and food to reduce need to enter public spaces
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ PPE
	  ○ Social distancing
	• ***Reduce vulnerability to the hazard:***
	  ○ Distanced work environment
	  ○ Regular cleaning of work environment
	• ***Increase capability:***
	  ○ Storage of PPE
	  ○ Equipment for monitoring
	  ○ Trainings for staff
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ PPE
		  ○ Social distancing
		• ***Reduce vulnerability to the hazard:***
		  ○ Distanced work environment
		  ○ Regular cleaning of work environment
		• ***Increase capability:***
		  ○ Storage of PPE
		  ○ Equipment for monitoring/treatment
		  ○ Trainings for staff
		  ○ Public outreach

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

SEVERE STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ None
• ***Reduce vulnerability to the hazard:***
  ○ Retrofit structures (improved roofing, glazing, insulation, etc.)
  ○ Provide for redundant heat and power
  ○ Contact municipality or utilities to trim or remove trees that could affect power lines
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program
• ***Increase capability:***
  ○ Improve awareness of impending severe weather (e.g., joining NYAlert, obtain a NOAA weather radio)
  ○ Promote 72-hour self-sufficiency
  ○ Provide for redundant heat and power
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations
	• ***Increase capability:***
	  ○ Contact municipality or utilities to trim or remove trees that could affect power lines
	  ○ Create redundancy (e.g., backup generators)
	  ○ Improve awareness of impending severe weather (e.g., joining NYAlert, obtain a NOAA weather radio)
	  ○ Develop a COOP Plan
	  ○ Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground
		  ○ Trimming trees back from power lines
		  ○ Designate and strengthen critical road sections and bridges
		  ○ Adopt ordinances that regulate the type and quantity of trees planted near utility lines
		  ○ Relocate critical infrastructure, such as power lines, underground
		• ***Increase capability:***
		  ○ Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Enforce building codes
		  ○ Increase communication alternatives
		  ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors
		  ○ Modify landscape and other ordinances to encourage appropriate planting near

SEVERE STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		overhead power, cable, and phone lines ○ Promote awareness and participation in alert systems such as NYAlert ○ Provide NOAA weather radios to the public ○ Create/enhance “mutual aid” agreements for response to all emergencies ○ Create/identify evacuation routes to be utilized during severe storm events ○ Develop debris management plans ○ Join StormReady program ○ Provide early warning of impending severe storm events to identified critical or essential facilities, including facilities such as large employments centers, schools, hospitals ○ Promote emergency power supplies to private property ○ Improve, expand, or harden communications facilities and services ○ Recruit additional emergency personnel or use mutual aid agreements ○ Increase sheltering capabilities ○ Increase capability to respond to power outages and downed power lines

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

SEVERE STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Establish partnerships with utility providers through proactive planning

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation)
• ***Reduce vulnerability to the hazard:***
  ○ Insulate house to provide greater thermal efficiency and reduce heat loss
  ○ Provide redundant heat and power
  ○ Insulate structure
  ○ Ensure natural gas input/release valves do not get covered in snow
• ***Increase capability:***
  ○ Trim or remove trees that could affect power lines
  ○ Prepare emergency food and supplies to be self-sufficient for at least 72 hours in the event of a severe winter storm
  ○ Be aware of inclement weather conditions and move your vehicles off of the street as severe weather systems approach
  ○ Retrofit structures
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations
	  ○ Install tree wire
	• ***Increase capability:***
	  ○ Trim or remove trees that could affect power lines
	  ○ Create redundancy in utilities and communications
	  ○ Develop a COOP Plan to address operations before, during, and after coastal storm events
	  ○ Utilize weather radios at the workplace to keep your employees aware of severe weather conditions
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground where appropriate
		  ○ Trimming trees back from power lines
		  ○ Designate snow routes and strengthen critical road sections and bridges
		  ○ Adopt codes and regulations that address the issues of parking vehicles along roadways during severe weather events
		  ○ Develop or enhance the capacity/capability of stormwater conveyance systems
		  ○ Provide backup power sources at vital critical facilities
		• ***Increase capability:***
		  ○ Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Establish and enforce building codes that require all roofs to withstand snow loads
		  ○ Develop, improve, and enforce building codes in hazard areas

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Increase communication alternatives ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors ○ Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines ○ Provide weather radios to vulnerable populations ○ Enhance public awareness campaigns to address those issues of alert and warning and actions to take during severe weather events ○ Utilize the best available technology to enhance the warning systems for all severe weather events (i.e., tornado warning systems) ○ Coordinate severe weather warning capabilities and the dissemination of warning amongst those agencies within the planning are with the highest degree of capability ○ Encourage local ordinances for planting trees near lines and join Tree City USA

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

SEVERE WINTER STORMS		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Increase tree management programs ○ Join the Community Rating System (CRS) ○ Join StormReady ○ Retrofit critical structures and promote hazard resistant construction ○ Keep open communications and education of hazards for mobile home communities ○ Retrofit above-ground utilities to underground facilities if appropriate ○ Create a salt reserve or research alternates to stretch salt reserve ○ Ensure accessibility to hospitals ○ Provide better debris logistics and removal ○ Provide better communication systems and backup communication systems to inform public of hazards and to communicate during the hazard event

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

UTILITY INTERRUPTION		
Personal Scale	**Corporate Scale**	**Government Scale**

• ***Manipulate the hazard:***
  ○ None
• ***Reduce exposure to the hazard***:
  ○ Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation)
• ***Reduce vulnerability to the hazard:***
  ○ Insulate house to provide greater thermal efficiency and reduce heat loss
  ○ Provide redundant heat and power
  ○ Insulate structure
  ○ Ensure natural gas input/release valves do not get covered in snow
• ***Increase capability:***
  ○ Trim or remove trees that could affect power lines
  ○ Prepare emergency food and supplies to be self-sufficient for at least 72 hours
	• ***Manipulate the hazard:***
	  ○ None
	• ***Reduce exposure to the hazard:***
	  ○ None
	• ***Reduce vulnerability to the hazard:***
	  ○ Relocate critical infrastructure, such as power lines, underground
	  ○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations
	  ○ Install tree wire
	• ***Increase capability:***
	  ○ Trim or remove trees that could affect power lines
	  ○ Create redundancy in utilities and communications
		• ***Manipulate the hazard:***
		  ○ None
		• ***Reduce exposure to the hazard:***
		  ○ None
		• ***Reduce vulnerability to the hazard:***
		  ○ Harden infrastructure such as locating utilities underground where appropriate
		  ○ Trimming trees back from power lines
		  ○ Provide backup power sources at vital critical facilities
		• ***Increase capability:***
		  ○ Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
		  ○ Increase communication alternatives
		  ○ Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors
		  ○ Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines
		  ○ Provide weather radios to vulnerable populations

UTILITY INTERRUPTION		
Personal Scale	**Corporate Scale**	**Government Scale**
		○ Encourage local ordinances for planting trees near lines and join Tree City USA ○ Increase tree management programs ○ Join StormReady ○ Retrofit above-ground utilities to underground facilities if appropriate ○ Provide better communication systems and backup communication systems to inform public of hazards and to communicate during the hazard event

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Potential Mitigation Funding Sources

While it is important to recognize the mitigation strategies for each jurisdiction to help achieve the mitigation goals and objectives of the Hazard Mitigation Plan (HMP), it is also important to provide sources for funding to implement these strategies. The table below provides a list of programs, descriptions, and links for those seeking funding sources. Please note that this table is not intended to be a comprehensive list but rather a starting point to help identify potential sources of funding for the identified mitigation strategies.

Table 1. Mitigation Funding Sources

Program	Description	Lead Agency	Website
Federal			
Hazard Mitigation Assistance (HMA)	Grants to provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages – includes FMA, HMGP, PDM.	FEMA	https://www.fema.gov/hazard-mitigation-assistance
Flood Mitigation Assistance (FMA)	Program grants to states and communities for pre-disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program.	FEMA	https://www.fema.gov/flood-mitigation-assistance-grant-program
Hazard Mitigation Grant Program (HMGP)	Grants to states and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration.	FEMA	https://www.fema.gov/hazard-mitigation-grant-program
Building Resilient Infrastructure and Communities (BRIC)	Grants to states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program.	FEMA	https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
Public Assistance: Hazard Mitigation Funding Under Section 406	Hazard mitigation discretionary funding available under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act following a Presidentially declared disaster.	FEMA	https://www.fema.gov/news-release/2017/05/03/4309/fema-hazard-mitigation-grants-404-and-406
Assistance to Firefighters Grant Program	The primary goal of the Assistance to Firefighters Grants (AFG) is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments, nonaffiliated Emergency Medical Services organizations, and State Fire Training Academies. This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operations efficiencies, foster interoperability, and support community resilience.	FEMA	https://www.fema.gov/welcome-assistance-firefighters-grant-program
High Hazard Potential Dams (HHPD) Rehabilitation Grant	The Rehabilitation of High Hazard Potential Dams Grant Program (HHPD provides technical, planning, design, and construction assistance in the form of grants to non-Federal governmental organizations or nonprofit organizations for rehabilitation of eligible high hazard potential dams.	FEMA	https://www.grants.gov/web/grants/view-opportunity.html?oppId=316238
Fire Management Assistance Grant Program	Assistance for the mitigation, management, and control of fires on publicly or privately-owned forests or grasslands that threaten such destruction as would constitute a major disaster. Provides a 75% Federal cost share. State pays the remaining 25% for actual cost.	FEMA	https://www.fema.gov/fire-management-assistance-grant-program

Program	Description	Lead Agency	Website
Disaster Housing Program	Emergency assistance for housing, including minor repair of home to establish livable conditions, mortgage, and rental assistance.	HUD	https://www.hud.gov/program_offices/public_indian_housing/publications/dhap
HOME Investment Partnerships Program	Grants to local and state government and consortia for permanent and transitional housing (including financial support for property acquisition and rehabilitation for low-income persons).	HUD	https://www.hud.gov/program_offices/comm_planning/affordablehousing/programs/home/
HUD Disaster Recovery Assistance	Grants to fund gaps in available recovery assistance after disasters (including mitigation).	HUD	https://www.hud.gov/info/disasterresources
Section 108 Loan Guarantee	Enables states and local governments participating in the Community Development Block Grant (CDBG) program to obtain federally guaranteed loans for disaster-distressed areas.	HUD	https://www.hudexchange.info/programs/section-108/
Smart Growth Implementation Assistance (SGIA) program	The SGIA program focuses on complex or cutting-edge issues, such as stormwater management, code revision, transit-oriented development, affordable housing, infill development, corridor planning, green building, and climate change. Applicants can submit proposals under 4 categories: community resilience to disasters, job creation, the role of manufactured homes in sustainable neighborhood design, or medical and social service facilities siting.	EPA	https://www.epa.gov/smartgrowth
Partners for Fish and Wildlife	Financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats.	U.S. Fish and Wildlife Service	https://www.fws.gov/partners/
FHWA Emergency Relief Program	Fund for the repair or reconstruction of Federal-aid highways that have suffered serious damage as a result of (1) natural disasters or (2) catastrophic failures from an external cause.	U.S. Department of Transportation (DOT)	https://www.fhwa.dot.gov/programadmin/erelief.cfm
Transportation Investment Generating Economic Recovery (TIGER)	Investing in critical road, rail, transit, and port projects across the nation.	U.S. DOT	https://www.transportation.gov/tags/tiger-grants
Community Facilities Direct Loan & Grant Program	This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area and does not include private, commercial, or business undertakings.	USDA	https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program
Emergency Loan Program	USDA's Farm Service Agency (FSA) provides emergency loans to help producers recover from production and physical losses due to drought, flooding, other natural disasters, or quarantine.	USDA	https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index
Emergency Watershed Protection (EWP) program	Provide assistance to relieve imminent hazards to life and property caused by floods, fires, drought, windstorms, and other natural occurrences.	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/
Financial Assistance	Financial assistance to help plan and implement conservation practices that address natural resource concerns or opportunities to help save energy, improve soil, water, plant, air, animal, and related resources on agricultural lands and non-industrial private forest land.	NRCS	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Program	Description	Lead Agency	Website
Emergency Management Performance Grants (EMPG) Program	Assist local, tribal, territorial, and state governments in enhancing and sustaining all-hazards emergency management capabilities.	U.S. DHS	https://www.fema.gov/emergency-management-performance-grant-program
Reimbursement for Firefighting on Federal Property	Provides reimbursement only for direct costs and losses over and above normal operating costs.	U.S. DHS	https://www.usfa.fema.gov/grants/firefighting_federal_property.html
Department of Homeland Security Grant Program (HSGP)	HSGP is composed of three interconnected grant programs, including the State Homeland Security Program (SHSP), Urban Areas Security Initiative (UASI), and the Operation Stonegarden (OPSG). Together, these competitive grant programs fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration.	U.S. DHS	https://www.dhs.gov/homeland-security-grant-program-hsgp
Land & Water Conservation Fund	Matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities (as well as funding for shared federal land acquisition and conservation strategies).	National Park Service	https://www.nps.gov/subjects/lwcf/index.htm
USSBA	Small Business Administration (SBA) provides low-interest disaster loans to homeowners, renters, business of all sizes, and most private nonprofit organizations. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.	Small Business Administration (SBA)	https://www.sba.gov/funding-programs/disaster-assistance
State			
Local Government Records Management Improvement Fund (LGRMIF) Disaster Recovery Grants	Grants for disaster recovery projects related to damage caused by a sudden, unexpected event involving fire, water, man-made or natural phenomena where a timely response is necessary to prevent the irretrievable loss of vital or archival records, or to ensure reasonable, timely access to vital records.	New York State Archives / New York State Education Department	http://www.archives.nysed.gov/grants/grants_lgrmif.shtml
The New York State Emergency Services Revolving Loan	Repair of firefighting apparatus, ambulances, or rescue vehicles; renovation, rehabilitation, or repair of facilities that house firefighting equipment, ambulances, rescue vehicles, and related equipment.	NYS DHSES	http://www.dhses.ny.gov/ofpc/services/loan/
Environmental Protection Fund (EPF)	Matching grants for the acquisition, planning, development, and improvement of parks, historic properties.	New York State Parks, Recreation & Historic Preservation (NYSOPRHP)	https://www.dec.ny.gov/about/92815.html
Recreational Trails (RTP)	Program matching grants for the acquisition, development, rehabilitation, and maintenance of trails and trail-related projects.	NYSOPRHP	https://parks.ny.gov/grants/recreational-trails/default.aspx

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

Program	Description	Lead Agency	Website
Environmental Protection & Improvement Grants	Competitive grants for environmental protection and improvement; available for municipalities, community organizations, not-for-profit organizations, and others.	New York State Department of Environmental Conservation	https://www.dec.ny.gov/about/92815.html
Volunteer Fire Assistance Grants	The grant is a 50/50 matching funds program. Its purpose is to make funds available to rural fire companies for the purchase of wildland firefighting equipment such as portable backpack pumps, Nomex protective clothing, hand tools, hard hats, hose, portable radios, and dry hydrants.	NYSDEC	https://www.dec.ny.gov/regulations/2364.html
Clean Water Act Section 604(b) Water Quality Planning Grants	Provide funding to implement regional comprehensive water quality management planning activities as described in Section 604(b) of the federal Clean Water Act. 604(b) funds are to be used for water quality management planning activities, including tasks to determine the nature, extent, and causes of point and nonpoint source water pollution problems and to develop plans to resolve these problems.	NYSDEC	https://www.dec.ny.gov/lands/53122.html
Water Quality Improvement Project (WQIP) Program	The Water Quality Improvement Project (WQIP) program is a competitive reimbursement grant program that funds projects that directly address documented water quality impairments. Applications are typically available each spring through the Consolidated Funding Application.	NYSDEC	https://www.dec.ny.gov/pubs/4774.html
New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG)	The New York State Department of Environmental Conservation (DEC), in conjunction with the New York State Environmental Facilities Corporation (EFC), will offer grants to municipalities to help pay for the initial planning of eligible Clean Water State Revolving Fund (CWSRF) water quality projects. The ultimate goal of the EPG program is to advance water quality projects to construction, so successful applicants can use the engineering report funded by the grant to seek financing through the CWSRF program, Water Quality Improvement Project program, or other funding entities to further pursue the identified solution.	NYSDEC	https://www.dec.ny.gov/pubs/81196.html
Climate Smart Communities Grant Program	The CSC Grant program was established in 2016 to provide 50/50 matching grants to cities, towns, villages, and counties (or boroughs of New York City) of the State of New York for eligible climate adaptation and mitigation projects.	NYSDEC	https://www.dec.ny.gov/energy/109181.html
BRIDGE NY	New York State is making funding available for local governments to rehabilitate and replace bridges and culverts statewide.	NYS DOT	https://www.dot.ny.gov/BRIDGENY

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the

MEETING NOTES

Meeting	Erie County Hazard Mitigation Plan (HMP) Update Plan Draft Review Meeting		
Date	September 8, 2021	**Time**	6:00 – 7:00 p.m.
Location	Webinar		
Attendees	Greg Butcher, Deputy Director, Erie County Department of Homeland Security and Emergency Services		
	Melissa Calhoun, Public Safety Officer, Erie County Department of Homeland Security and Emergency Services		
	Joanna Panasiewicz, Watershed Coordinator, Erie County Department of Environment and Planning		
	Darien Pratchett, Emergency Services Coordinator, Erie County Department of Homeland Security and Emergency Services		
	Elizabeth Cassidy, Clerk, Town of Aurora,/Village of East Aurora		
	Jason Keding, Supervisor, Town of Boston		
	Mike Mazurowski, Emergency Manager, Town of Cheektowaga		
	David Bissonette, Emergency Manager, Town of Clarence		
	Ken Martin, Supervisor, Town of Collins		
	Mike Willibey, Emergency Manager, Town of Concord		
	Robert Westfall, Water Department, Town of Grand Island		
	Geoffrey Hack, Emergency Manager, Town of Holland		
	Rich Stanton, City of Lackawanna		
	Danil Kowalik, Emergency Manager, Town of Newstead		
	Rick Meyers, Emergency Manager, Town of North Collins		
	Richard Mrugalski, Emergency Manger, Town/Village Orchard Park		
	Jerry Whittington, Supervisor, Town of Sardinia		
	Mark Banks, Director, Emergency Management, City of Tonawanda		
	Jim Chatham, Emergency Services Assistant, Town of Tonawanda		
	Robert Lutz, Emergency Manager, Town of Tonawanda		
	James Unger, Police Department, Town of West Seneca		
	Eric Conley, Emergency Manager, Town of West Seneca		
	Jason Tolsma, Emergency Response Manager, National Fuel Gas		
	Kevin Clapp, Program Manager, NYS Division of Homeland Security and Emergency Services		
	Brian Kehoe, Planner, Tetra Tech		
	Kate Long, Planner, Tetra Tech		

Discussion Points

This section summarizes each discussion point addressed during the meeting.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Introductions

Mr. Butcher and Mr. Kehoe welcomed attendees and thanked them for participating as the County wraps up the HMP update process.

Mr. Kehoe facilitated the remainder of the meeting and discussed the organization of the HMP, the breakdown of its nine sections, and appendices.

- Section 1: Introduction
  - Mitigation Planning
  - Participating Jurisdictions
  - Overview
- Section 2: Plan Adoption
  - Adoption Process
- Section 3: Planning Process
  - Participants
  - Activities
  - Ongoing Process
- Section 4: County Profile
  - History
  - Physical Setting
  - Population and Demographics
  - General Building Stock
  - Land Use and Population Trends
  - Critical Facilities
- Section 5: Risk Assessment
  - Hazards of Concern
  - Hazard Ranking
  - Hazard Profiles
- Section 6: Mitigation Strategies
  - Past Accomplishments
  - Goals and Objectives
  - Capability Assessment
    - Plans, Programs, and Resources Available
    - Administrative and Technical Capabilities
    - Fiscal Capabilities
  - Mitigation Strategy Development and Update
    - Action Identification
    - Evaluation and Prioritization

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

MEETING NOTES

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

    - Benefit/Cost Review
- Section 7: Plan Maintenance
    - HMP Coordinator
    - Ongoing Planning Partnership
    - Monitoring
    - Continuous Evaluation and Progress Reports
    - Updating
    - Integration of Hazard Mitigation with Existing and Future Programs
    - Continued Public Involvement
- Section 8: Planning Partnership
    - Participating Jurisdictions
    - Introduce Jurisdictional Annexes
- Section 9: Jurisdictional Annexes
    - Municipal Planning Team
    - Municipal Profile
    - Hazard Event History
    - Vulnerabilities
    - Capabilities
    - Mitigation Strategy
    - Status of Past Mitigation Actions
    - Current Mitigation Actions
- Appendices
    - Appendix A: Adoption Resolutions
    - Appendix B: Participation Matrix
    - Appendix C: Meeting Documentation
    - Appendix D: Public and Stakeholder Outreach
    - Appendix E: Critical Facilities
    - Appendix F: Plan Review Tools
    - Appendix G: Plan Review Matrix
    - Appendix H: Linkage Procedure

Mr. Kehoe showed participants where the plan sections are posted on the project website (https://www.eriecountynyhmp.com/draft-plans/). He emphasized that municipalities have this last opportunity to review their respective jurisdictional annexes and ensure that it faithfully reflects the municipality's intentions, including correctly detailing proposed mitigation actions. Changes requested by the municipality should be provided to the respective Tetra Tech planner by September 12, 2021. Changes will be incorporated into the final version of the annexes.

Mr. Kehoe explained that a municipality's participation in the hazard mitigation planning process, including adoption of the finalized HMP document, is necessary to access certain types of federal funding. Mr. Clapp then provided a comprehensive review of currently available mitigation funding

MEETING NOTES

programs administered through the NYS DHSES and the NYS Department of Environmental Conservation, including the following:

- Building Resilient Infrastructure and Communities – https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
- Flood Mitigation Assistance – https://www.fema.gov/grants/mitigation/floods
- High Hazard Dams - https://www.dec.ny.gov/press/122708.html#:~:text=New%20York%20State%20Department%20of%20Environmental%20Conservation%20%28DEC%29,%28FEMA%29%20High%20Hazard%20Potential%20Dam%20%28HHPD%29%20grant%20program.
- NYS DHSES – http://www.dhses.ny.gov/recovery
- Hazard Mitigation Grant Program (per Disaster Declaration 4480) https://www.fema.gov/disaster/coronavirus/disaster-declarations

Next Steps

Mr. Kehoe concluded the meeting by reminding participants to submit desired changes to their respective jurisdictional annex by September 12, 2021. Submission of the finalized document to NYS DHSES will occur in the near future, beginning a review process that will end with the granting of Approval Pending Adoption status from FEMA.

Meeting materials will be uploaded to the project website by end of day September 9, 2021. Mr. Kehoe provided his contact information: (585)-354-4216 and brian.kehoe@tetratech.com. He thanked everyone for their participation and made himself available after the meeting in order to address municipality-specific questions.

The meeting adjourned at 7:00 p.m.

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

TETRA TECH

complex world | CLEAR SOLUTIONS™

Erie County
Hazard Mitigation Plan
2021 Update

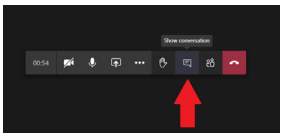
Plan Draft Review Meeting

September 8, 2021
6:00 to 8:00 PM

1

Welcome!

- If you are attending the webinar on your computer, please add your name, title, and organization(s) to the Chat.
  - Bring your mouse to the lower part of the screen until a set of buttons appears.
  - Click "Show Conversation."



2

Agenda

- Draft Plan Review
- Next Steps
- Questions

3

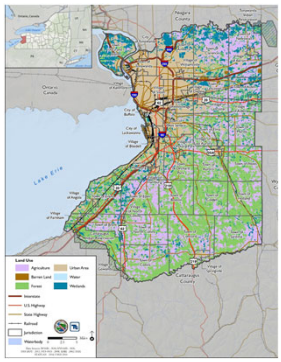
Draft Plan Review

- Section 1: Introduction
  - Mitigation Planning
  - Participating Jurisdictions
  - Overview
- Section 2: Plan Adoption
  - Adoption Process
- Section 3: Planning Process
  - Participants
  - Activities
  - Ongoing Process

4

Draft Plan Review

- Section 4: County Profile
  - History
  - Physical Setting
  - Population and Demographics
  - General Building Stock
  - Land Use and Population Trends
  - Critical Facilities
- Section 5: Risk Assessment
  - Hazards of Concern
  - Hazard Ranking
  - Hazard Profiles



5

Draft Plan Review

- Section 6: Mitigation Strategies
  - Past Accomplishments
  - Goals and Objectives
  - Capability Assessment
    - Plans, Programs, and Resources Available
    - Administrative and Technical Capabilities
    - Fiscal Capabilities
  - Mitigation Strategy Development and Update
    - Action Identification
    - Evaluation and Prioritization
    - Benefit/Cost Review

6

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

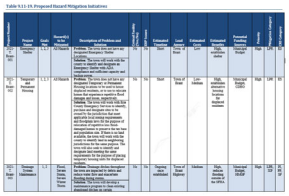
Draft Plan Review

- Section 7: Plan Maintenance
  - HMP Coordinator
  - Ongoing Planning Partnership
  - Monitoring
  - Continuous Evaluation and Progress Reports
  - Updating
  - Integration of Hazard Mitigation with Existing and Future Programs
  - Continued Public Involvement

7

Draft Plan Review

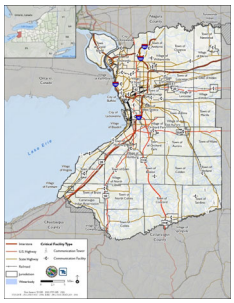
- Section 8: Planning Partnership
  - Participating Jurisdictions
  - Introduce Jurisdictional Annexes
- Section 9: Jurisdictional Annexes
  - Municipal Planning Team
  - Municipal Profile
  - Hazard Event History
  - Vulnerabilities
  - Capabilities
  - Mitigation Strategy
  - Status of Past Mitigation Actions
  - Current Mitigation Actions



8

Draft Plan Review

- Appendices
  - Appendix A: Adoption Resolutions
  - Appendix B: Participation Matrix
  - Appendix C: Meeting Documentation
  - Appendix D: Public and Stakeholder Outreach
  - Appendix E: Critical Facilities
  - Appendix F: Plan Review Tools
  - Appendix G: Plan Review Matrix



9

9

Next Steps

- Finalize the draft based on this meeting
- Submit to NYS DHSES
- NYS DHSES review over several months
- Update and submit to FEMA for review
- FEMA review for up to 45 days
- Approvable Pending Adoption (APA) status
- Municipal adoption

10

11

11

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

AGENDA

ERIE COUNTY HAZARD MITIGATION PLAN UPDATE

Plan Draft Review Meeting

September 8, 2021 | 6:00 to 8:00 p.m.

1. **Welcome**
2. **Draft Plan Review**
   a. Section 1: Introduction
   b. Section 2: Plan Adoption
   c. Section 3: Planning Process
   d. Section 4: County Profile
   e. Section 5: Risk Assessment
   f. Section 6: Mitigation Strategies
   g. Section 7: Plan Maintenance
   h. Section 8: Planning Partnership
   i. Section 9: Jurisdictional Annexes
   j. Appendices
3. **Next Steps**
4. **Questions**

Attachment: 31-Appendix-C-Meeting-Documentation-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

APPENDIX D. PUBLIC AND STAKEHOLDER OUTREACH DOCUMENTATION

Appendix D includes outreach to stakeholders including academia, industry, business and other sectors, plus public hearing notices, survey instruments and survey responses.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Subbio, Tony

Subject: RE: Multi Hazard Mitigation Plan Kick Off Meeting

From: Calhoun, Melissa J. <Melissa.Calhoun@erie.gov>
Sent: Friday, November 13, 2020 11:33 AM
Cc: Butcher, Gregory <Gregory.Butcher@erie.gov>
Subject: RE: Multi Hazard Mitigation Plan Kick Off Meeting

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

We sent to the following:
Emergency managers
Elected officials
School districts
Western district (contiguous counties)
County environment & planning
Water authority
DPW
LEPC
Medical Hospital

I think I got them all.

--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

From: Calhoun, Melissa J.
Sent: Monday, November 9, 2020 3:49 PM
To: Wayne Wolf <mounted9horse@gmail.com>; Whittington Jr., Gerard J. <Gerard.Whittington@erie.gov>; McCartan, Daniel <dmccartan@ecmc.edu>; 'dan@kulbacks.com' <dan@kulbacks.com>; 'Jhawes61@hotmail.com' <Jhawes61@hotmail.com>; 'james.a.pusateri@gmail.com' <james.a.pusateri@gmail.com>; 'Chieffreddie56@aol.com' <Chieffreddie56@aol.com>; 'joelmacalpine53@gmail.com' <joelmacalpine53@gmail.com>; 'jzymanek@apdny.org' <jzymanek@apdny.org>; 'dcreamer@apdny.org' <dcreamer@apdny.org>; 'Kcy9540@aol.com' <Kcy9540@aol.com>; 'BCHAR5557@aol.com' <BCHAR5557@aol.com>; 'scio@verizon.net' <scio@verizon.net>; 'JWFox44Sr@yahoo.com' <JWFox44Sr@yahoo.com>; 'wrednek@aol.com' <wrednek@aol.com>; 'codeofficer@brantny.com' <codeofficer@brantny.com>; 'Jgeorge1701952@roadrunner.com' <Jgeorge1701952@roadrunner.com>; 'mjtuberdyke@bfdny.org' <mjtuberdyke@bfdny.org>; 'eloder@tocny.org' <eloder@tocny.org>; 'MMazurowski@tocny.org' <MMazurowski@tocny.org>; 'issdb@hotmail.com' <issdb@hotmail.com>; 'dbaumler@clarence.ny.us' <dbaumler@clarence.ny.us>; 'bsudyn@gmail.com' <bsudyn@gmail.com>; 'rrpaluch@gmail.com' <rrpaluch@gmail.com>; 'mwillibey@gmail.com' <mwillibey@gmail.com>; 'rnieman@villageofdepew.org' <rnieman@villageofdepew.org>; 'Pastor.galenp@gmail.com' <Pastor.galenp@gmail.com>; 'emergencyservices@edenny.gov' <emergencyservices@edenny.gov>; 'kb2tea@aol.com' <kb2tea@aol.com>; 'Mdole4038@gmail.com' <Mdole4038@gmail.com>; 'mnolan@elmanewyork.com' <mnolan@elmanewyork.com>; 'jmalczewski@elmanewyork.com' <jmalczewski@elmanewyork.com>;

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

'pacholec@ecc.edu' <pacholec@ecc.edu>; 'Chief9@lebvfc.com' <Chief9@lebvfc.com>; 'williamhammsr@gmail.com' <williamhammsr@gmail.com>; 'farnhammayor@roadrunner.com' <farnhammayor@roadrunner.com>; 'vrovnak@gmail.com' <vrovnak@gmail.com>; 'racernick07@earthlink.net' <racernick07@earthlink.net>; 'gbutcher@grandislandfire.us' <gbutcher@grandislandfire.us>; 'scrotty@thpdny.org' <scrotty@thpdny.org>; 'budney@thpdny.org' <budney@thpdny.org>; 'ricdimpfl@roadrunner.com' <ricdimpfl@roadrunner.com>; 'mayor@villagehamburg.com' <mayor@villagehamburg.com>; 'messingdean@yahoo.com' <messingdean@yahoo.com>; 'Hckgff23@gmail.com' <Hckgff23@gmail.com>; 'akiefer@kenmorepolice.org' <akiefer@kenmorepolice.org>; 'publicsafety@lackny.com' <publicsafety@lackny.com>; 'WMKJR@roadrunner.com' <WMKJR@roadrunner.com>; 'cd122@oem-lancasterny.com' <cd122@oem-lancasterny.com>; 'r.david7109@aol.com' <r.david7109@aol.com>; 'skuhlmey@lancastervillage.org' <skuhlmey@lancastervillage.org>; 'srobinson@lancastervillage.org' <srobinson@lancastervillage.org>; 'Greg772@verizon.net' <Greg772@verizon.net>; 'bnolan@steubenfoods.com' <bnolan@steubenfoods.com>; 'rick@lnofd.com' <rick@lnofd.com>; 'mrugalskir@orchardparkny.org' <mrugalskir@orchardparkny.org>; 'geista@orchardparkny.org' <geista@orchardparkny.org>; 'mike.gates@sni.org' <mike.gates@sni.org>; 'Michele.Redeye@sni.org' <Michele.Redeye@sni.org>; 'Micah.Jones@sni.org' <Micah.Jones@sni.org>; 'gstowell@buffalo.edu' <gstowell@buffalo.edu>; 'mbanks@tonawandacityfd.com' <mbanks@tonawandacityfd.com>; 'firechief@tonawandacityfd.com' <firechief@tonawandacityfd.com>; 'rlutz@tonawanda.ny.us' <rlutz@tonawanda.ny.us>; 'emergencymanagement@buffalo.edu' <emergencymanagement@buffalo.edu>; 'wraichel@gmail.com' <wraichel@gmail.com>; 'chiggins@walescenterfire.com' <chiggins@walescenterfire.com>; 'chieffdsh@outlook.com' <chieffdsh@outlook.com>; 'commishpete@verizon.net' <commishpete@verizon.net>; 'ungerj@westsenecapolice.org' <ungerj@westsenecapolice.org>

Cc: Neaverth, Daniel <Daniel.Neaverth@erie.gov>; Gill, Gregory <Gregory.Gill@erie.gov>; Butcher, Gregory <Gregory.Butcher@erie.gov>; Couell, Christopher <Christopher.Couell@erie.gov>; Geary, William <William.Geary@erie.gov>; Adamski, Dean <Dean.Adamski@erie.gov>; aldenmayor@rochester.rr.com; Beverly Gambino (beverlygambino@gmail.com) <beverlygambino@gmail.com>; Beverly Gambino (beverlygambino@outlook.com) <beverlygambino@outlook.com>; Brian Kulpa - Town of Amherst (bkulpa@amherst.ny.us) <bkulpa@amherst.ny.us>; Byron Brown (bbrown@city-buffalo.com) <bbrown@city-buffalo.com>; Calhoun, Marilynn <assocofecgov@roadrunner.com>; Carl Patterson - carl.patterson@perrysicecream.com <carl.patterson@perrysicecream.com>; Clyde Drake <concordtownsupervisor@gmail.com>; Dave Cummings - dcummings@townofnewstead.com <dcummings@townofnewstead.com>; David Smith <dsmith@gowcsd.org>; Dennis Powers - supervisor@elmanewyork.com <supervisor@elmanewyork.com>; Diane Benczkowski (dbenczkowski@tocny.org) <dbenczkowski@tocny.org>; Dickson, Gary <gdickson@twsny.org>; Earl Gingerich Jr. - egingerich@townofmarilla.com <egingerich@townofmarilla.com>; Joe Emminger <jemminger@tonawanda.ny.us>; Gail Nicholson <mayorsec@lackny.com>; Geoff Szymanski <mayor@lackny.com>; Hoisington, Jere <farnhammayor@roadrunner.com>; Howard "Hub" Frawley <angolaclerk@verizon.net>; Hutchinson, Jan <villageclerk@villageofnorthcollins.org>; James Bach - jbach@townofaurora.com <jbach@townofaurora.com>; James DePasquale (james.depasquale@townofcolden.com) <james.depasquale@townofcolden.com>; James Niwinski (sloanny@roadrunner.com) <sloanny@roadrunner.com>; James Shaw <jshaw@townofhamburgny.com>; Jason Keding <supervisorkeding@gmail.com>; JoAnn Litwin Clinton <Mayor@orchardparkvillage.org>; John Tobia (jtobia@northcollinsny.org) <jtobia@northcollinsny.org>; Kenneth Martin <ken.martin@townofcollins.com>; County Executive <County.Executive@erie.gov>; Mary Nytz-Hosler (mhosler@townofevans.org) <mhosler@townofevans.org>; Mary Nytz-Hosler (supervisor@townofevans.org) <supervisor@townofevans.org>; Melissa Hartman - mhartman@edenny.gov <mhartman@edenny.gov>; Michael Kasprzyk - hollandsupr@roadrunner.com <hollandsupr@roadrunner.com>; Michael Petrie - voboffice@aol.com <voboffice@aol.com>; Patrick Casilio (pcasilio@clarence.ny.us) <pcasilio@clarence.ny.us>; Patrick Keem - supervisor.keem@orchardparkny.org <supervisor.keem@orchardparkny.org>; Patrick Mang - mayor@vi.kenmore.ny.us <mayor@vi.kenmore.ny.us>; Patrick Mang (kjohnson@vi.kenmore.ny.us) <kjohnson@vi.kenmore.ny.us>; Peter Mercurio - mayor@east-aurora.ny.us <mayor@east-aurora.ny.us>; Peterson, Kevin <kpeterson@villageofdepew.org>; Rick Davis - City of Tonawanda (mayor@tonawandacity.com) <mayor@tonawandacity.com>; Rickey Venditti - rvenditti@moog.com <rvenditti@moog.com>; Rogers, Deborah <drogers@village.williamsville.ny.us>; Ronald Ruffino (rruffino@lancasterny.gov) <rruffino@lancasterny.gov>; Sullivan, Kelly <Kelly.Sullivan@erie.gov>;

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

supervisor@brantny.com; Thomas Ferrucci <tom@idealconcreteinc.com>; Thomas Moses - mayor@villagehamburg.com <mayor@villagehamburg.com>; Whitney, John <jwhitney@grand-island.ny.us>; Whyte, Maria <Maria.Whyte@erie.gov>; William Krebs - wkrebs@villageofspringvilleny.com <wkrebs@villageofspringvilleny.com>; William Schroeder <wschroeder@lancastervillage.org>
Subject: Multi Hazard Mitigation Plan Kick Off Meeting
Importance: High

Good afternoon,
As we are moving forward with the Multi Hazard Mitigation Plan, the county chose Tetra Tech as the consultant for the plan updates. Please see the attached letter with the kick off meeting information. This ill be the first meeting of a series of meetings with the consultant to updated the plan. It will lay out the timeline and information they will be asking your agency / municipality for. This will be a webinar so please register with Tony and he will send you the contact information for the meeting.

Any questions feel free to ask.

Thank you!

Melissa

--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
Subject: EC Hazard Mitigation Plan Meetings
Date: Tuesday, January 12, 2021 5:13:29 PM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Hello! As you know, we have been working to update the Erie County Hazard Mitigation Plan with our contractor, Tetra Tech. Thank you again to all of the officials who have submitted information via their worksheets, and/or have worked with Tetra Tech's planners to provide input. Later this month, we will be having a set of meetings to collect information and answer any questions you may have. These meetings will consist of the following six webinars, held at various times to accommodate schedules:

- Thursday, January 21, 2:00-4:00 p.m.
- Thursday, January 21, 7:00-9:00 p.m.
- Friday, January 22, 9:00-11:00 a.m.
- Monday, January 25, 2:00-4:00 p.m.
- Tuesday, January 26, 7:00-9:00 p.m.
- Wednesday, January 27, 9:00-11:00 a.m.

The meetings are identical, and you would only need to attend one. Please email Brian Kehoe, from our consultant team, at brian.kehoe@tetratech.com to register your municipality for one of these meetings. He will then send you the information for the meeting. We are limiting registration to up to eight municipalities per session, on a first come-first served basis, so please register as soon as you can! Thank you!

Melissa

--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

News from the Office of
ERIE COUNTY EXECUTIVE MARK POLONCARZ

NEWS RELEASE

January 13, 2021

CONTACT: Peter Anderson / Peter.Anderson@erie.gov
Phone: (716)858-8500 / Mobile: (716) 270-7842

ERIE COUNTY TO UPDATE HAZARD MITIGATION PLAN

Two public webinars planned; public input sought to reduce hazard vulnerability

ERIE COUNTY, NY— Erie County is updating its Hazard Mitigation Plan ("HMP"). The HMP documents Erie County's vulnerability to natural and manmade hazards along with the county's, cities', towns', and villages' strategies to reduce that vulnerability.

There will be a pair of public webinars to discuss hazards and the HMP on:

- **Monday January 25, 2021 from 6:00 to 7:30 PM and**
- **Thursday January 28, 2021 from 6:00 – 7:30 PM**

All interested residents, businesses, and other stakeholders are invited to attend.

Please visit https://www.eriecountynyhmp.com/calendar/ for the meeting links.

Contact Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services, at (716) 858-6578 for more information.

# # #

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
Subject: Hazard Mitigation Plan - Municipal Meetings
Date: Tuesday, January 19, 2021 9:32:51 AM
Importance: High

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

JUST A REMINDER If you haven't signed up below. Please make sure you do so. First meeting is Thursday!

Thank you!

Hello! As you know, we have been working to update the Erie County Hazard Mitigation Plan with our contractor, Tetra Tech. Thank you again to all of the officials who have submitted information via their worksheets, and/or have worked with Tetra Tech's planners to provide input. Later this month, we will be having a set of meetings to collect information and answer any questions you may have. These meetings will consist of the following six webinars, held at various times to accommodate schedules:

- Thursday, January 21, 2:00-4:00 p.m.
- Thursday, January 21, 7:00-9:00 p.m.
- Friday, January 22, 9:00-11:00 a.m.
- Monday, January 25, 2:00-4:00 p.m.
- Tuesday, January 26, 7:00-9:00 p.m.
- Wednesday, January 27, 9:00-11:00 a.m.

The meetings are identical, and you would only need to attend one. Please email Brian Kehoe, from our consultant team, at brian.kehoe@tetratech.com to register your municipality for one of these meetings. He will then send you the information for the meeting. We are limiting registration to up to eight municipalities per session, on a first come-first served basis, so please register as soon as you can! Thank you!

Melissa J. Calhoun – Public Safety Officer – Special Assistant
Erie County – Department of Homeland Security & Emergency Services
45 Elm Street – Buffalo, NY 14203
P: 716-858-8440 F: 716-858-7937 C: 716-432-3086
Melissa.Calhoun@erie.gov http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
To: Subbio, Tony
Subject: OFFICIAL NEWSPAPERS for 2020
Date: Monday, May 10, 2021 12:48:12 PM
Attachments: OFFICIAL NEWSPAPERS for 2020.docx

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Here are the list of papers that I send requests to put the ad/public notice into their paper for the 5/19 date. Not sure if it is enough lead time but I will send you the info when I hear back from them. Otherwise it did go out to all media outlets via our pio as well as the social media.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

MAJORITY

Buffalo Challenger Newspaper - official newspaper for the publication of local laws, notices and other matters required by law to be published for the County of Erie
alnisa33@yahoo.com – http://www.thechallengernews.com/ – Phone: 881 - 1051

Grand Island Dispatch - official newspaper for the publication of all Concurrent Resolutions of the New York State Legislature
https://www.wnypapers.com/advertise-with-us – Phone: 773-7676

MINORITY

Amherst Bee - official newspaper for the publication of local laws, notices, and other matters required by law to be published for the County of Erie
legals@beenews.com – http://www.amherstbee.com/ – Phone: 632-4700, ask for 'legals'

East Aurora Advertiser - official newspaper for the publication of all Concurrent Resolutions of the New York State Legislature
ads@eastaurorany.com – http://www.mywnynews.com/east_aurora_advertiser/ – Phone: 652-0320

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
To: Subbio, Tony
Subject: RE: HMP - Risk Assessment Review Meeting Invitation and Public Notice
Date: Tuesday, May 4, 2021 9:09:07 AM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Ok I sent out a blind cc to all the following groups:
Steering Committee
LOI POCs
Mayors/Supervisors of municipalities
LEPC
Emergency Managers

Don't think I am missing anyone. I sent to our County PIO to push out to Media as well as our Twitter/Facebook accounts for the county and for our department sites.

Now left is the newspapers

From: Subbio, Tony <Tony.Subbio@tetratech.com>
Sent: Tuesday, May 4, 2021 8:20 AM
To: Calhoun, Melissa J. <Melissa.Calhoun@erie.gov>
Cc: Butcher, Gregory <Gregory.Butcher@erie.gov>; Kehoe, Brian <Brian.Kehoe@tetratech.com>
Subject: HMP - Risk Assessment Review Meeting Invitation and Public Notice

[**Caution**: this email is **not** from an Erie County employee: attachments or links **may not be safe**.]

Melissa,

Good morning! Attached is the invitation for the Risk Assessment Review Meeting. Please put it on your letterhead (or in an email) and send it out to the entire Planning Partnership (municipalities and other organizations), like you did for the kickoff meetings in November. As with that meeting, please copy me on the email(s) when you send it out, and then let me know the organizations to which you sent it. Thanks!

Also, here is the text for the public notice for the meeting. Please get it published in the newspaper as soon as you can, and ask for a proof of publication (or photocopy the actual newspaper when it appears). You can also use this text for social media posts. Please forward me the link to any of those as well.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County is updating its Hazard Mitigation Plan (HMP). The HMP is designed to make our communities more resistant to losses from natural and man-made disasters, and to enable the County and municipalities to be eligible for federal funding for qualifying mitigation projects. There will be a public webinar to review the updated risk assessment. The webinar will be held from 6:00-8:00 p.m. on May 19, 2021. All interested residents, businesses, and other stakeholders are invited to attend. For the meeting link, please visit https://www.eriecountynyhmp.com/calendar/. Contact Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services, at (716) 858-6578 for more information.

Let me know if you have any questions. Thanks!

Have a great day!

Tony Subbio, CEM, CFM, PMP | Operations and Program Manager
Direct **+1 (717) 839-5654** | Mobile **+1 (717) 856-4290** | tony.subbio@tetratech.com

Tetra Tech | Complex World, Clear Solutions™ |
2000 Linglestown Road, Suite 203 | Harrisburg, PA 17110 | tetratech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

Please consider the environment before printing. Read more

TETRA TECH

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
Cc: Subbio, Tony
Subject: EC Hazard Mitigation Risk Assessment Review Meeting
Date: Tuesday, May 4, 2021 8:57:38 AM
Attachments: EC Hazard Risk Assessment Review Meeting - 5-19-21-Webinar.pdf
Importance: High

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Good morning,
First, I would like to say thank you for working with the County to update our Countywide Hazard Mitigation Plan. This is a big endeavor and even larger because of the pandemic. By updating this plan, it shows our commitment to identifying hazards in our communities, figuring out ways we can mitigate them, making our communities safer. In addition, it is the first step to potentially opening the door to mitigation funding for the projects identified in this plan. I truly appreciate all your hard work on this project!!

The next stage of the Mitigation Plan Update is, the Risk Assessment Review Meeting. Tetra Tech would like to go over the results of the risk assessment that they have conducted. They would like your input, discuss the hazards that could affect Erie County and develop strategies for minimizing the impacts of the hazards.

The meeting will be a webinar held on May 19th from 6:00pm-8:00pm. You can find the webinar information by visiting https://www.eriecountynyhmp.com/.

Attached is a letter with additional information as well.

Melissa

--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

COUNTY OF ERIE

MARK POLONCARZ
COUNTY EXECUTIVE

DEPARTMENT OF HOMELAND SECURITY & EMERGENCY SERVICES
45 Elm Street – Buffalo, NY 14203
716 858-6578 – FAX 858-7937
www.erie.gov/emergency

Daniel Neaverth Jr.
Commissioner

Gregory Butcher
Deputy Commissioner
Civil Defense/ Disaster Preparedness

Gregory Gill
Deputy Commissioner
Emergency Medical Services

Christopher Couell
Deputy Commissioner
Fire Safety

May 4, 2021

RE: Erie County Hazard Mitigation Plan 2021 Update

Dear Planning Team/Municipal Officials/Stakeholders,

The Erie County Department of Homeland Security and Emergency Services has been updating the county's Hazard Mitigation Plan (HMP). The HMP analyzes the hazards faced by the county and its municipalities, and identifies a strategy for minimizing our vulnerability to these hazards. We held kickoff meetings in November 2020 and held several municipal support meetings in late January/early February 2021. Our contract consultant, Tetra Tech, has been working with the cities, towns, and villages to collect vital information for the HMP.

We will be conducting a Risk Assessment Review Meeting webinar from 6:00-8:00 p.m. on Wednesday May 19, 2021. The purpose of this webinar is to review the results of the updated risk assessment and discuss the problems that hazards pose to Erie County and its municipalities, so that we can develop a strategy for minimizing the impacts of hazards. I would appreciate it if someone from your organization would attend the webinar and participate in the discussion. You can find the webinar information by visiting https://www.eriecountynyhmp.com/.

Thank you for your support, and we look forward to hearing from you at the Risk Assessment Review Meeting. Please contact me if you have any questions.

Sincerely,

Melissa Calhoun
Public Safety Officer - Special Assistant

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

News from the Office of
ERIE COUNTY EXECUTIVE MARK POLONCARZ

NEWS RELEASE

May 5, 2021

CONTACT: Peter Anderson / Peter.Anderson@erie.gov
Phone: (716)858-8500 / Mobile: (716) 270-7842

ERIE COUNTY CONTINUING UPDATE OF HAZARD MITIGATION PLAN

Risk Assessment Review Meeting webinar scheduled for May 19; public input sought

Hazard Mitigation Plan analyzes hazards faced by Erie County, identifies strategies to minimize vulnerability

ERIE COUNTY, NY— Erie County is updating its Hazard Mitigation Plan ("HMP"). The HMP documents Erie County's vulnerability to natural and manmade hazards and identifies approaches to diminish the county's, cities', towns', and villages' vulnerability to those hazards. The Erie County Department of Homeland Security and Emergency Services began the process of updating the HMP in November 2020.

Erie County Hazard Mitigation Plan 2021 Update/Risk Assessment Review Meeting Webinar:

- **Wednesday May 19, 2021 from 6:00 – 8:00 PM**

All interested residents, businesses, and other stakeholders are invited to attend.

Please visit http://www.eriecountynyhmp.com/ for webinar information.

Contact Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services, at (716) 858-6578 for more information.

# # #

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Department of Homeland Security & Emergency Services

May 4 at 3:54 PM ·

Erie County is updating its Hazard Mitigation Plan (HMP). The HMP is designed to make our communities more resistant to losses from natural and man-made disasters, and to enable the County and municipalities to be eligible for federal funding for qualifying mitigation projects. There will be a public webinar to review the updated risk assessment. The webinar will be held from 6:00-8:00 p.m. on May 19, 2021. All interested residents, businesses, and other stakeholders are invited to attend. For the meeting link, please visit https://www.eriecountynyhmp.com/calendar/. Contact Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services, at (716) 858-6578 for more information.

ERIECOUNTYNYHMP.COM

Calendar - Erie County Hazard Mitigation Plan (HMP) Public Website

3 1 Share

Like Comment Share

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County, NY
May 6 at 2:16 PM ·

PUBLIC WEBINAR: May 19, 6 – 8 PM, on Erie County's Hazard Mitigation Plan (HMP) update, designed to make our communities more resistant to losses from natural and man-made disasters, and to enable eligibility for federal funding. All interested residents, businesses, and other stakeholders are invited to attend and review the plan.

Details & meeting link at: http://eriecountynyhmp.com/.../risk-assessment-review...

For more info, contact Melissa Calhoun at Erie County Department of Homeland Security & Emergency Services: (716) 858-6578

2 1 Share

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County, NY
17.1K Tweets

Follow

Erie County, NY @ErieCountyNY · May 6

PUBLIC WEBINAR: May 19, 6 – 8 PM, on Erie County's Hazard Mitigation Plan update, designed to make our communities more resistant to losses from disasters.

Details & meeting link: eriecountynyhmp.com/events/risk-as...

For more info, contact Melissa Calhoun @ErieCountyESU: (716) 858-6578

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie Cty Emerg Svces
@ErieCountyESU

Erie County is updating its Hazard Mitigation Plan (HMP). The HMP is designed to make our communities more resistant to losses from natural and man-made disasters, and to enable the County and municipalities to be eligible for federal funding for qualifying mitigation projects.

9:18 AM · May 4, 2021 · Twitter Web App

2 Retweets **5** Likes

Erie Cty Emerg Svces @ErieCountyESU · May 4

Replying to @ErieCountyESU

A public webinar to review the updated risk assessment will be held from 6-8 p.m. on May 19, 2021. Interested residents, businesses, stakeholders are invited to attend. Visit eriecountynyhmp.com/calendar/ or contact Melissa Calhoun, at (716) 858-6578 for more information. #ReadyErie

Calendar - Erie County Hazard Mitigation Plan (HMP) Public Website
eriecountynyhmp.com

1 1

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

COUNTY OF ERIE

MARK POLONCARZ
COUNTY EXECUTIVE

Daniel Neaverth Jr.
Commissioner

DEPARTMENT OF HOMELAND SECURITY & EMERGENCY SERVICES
45 Elm Street – Buffalo, NY 14203
716 858-6578 – FAX 858-7937
www.erie.gov/emergency

Gregory Butcher
Deputy Commissioner
Civil Defense/ Disaster Preparedness

Gregory Gill
Deputy Commissioner
Emergency Medical Services

Christopher Couell
Deputy Commissioner
Fire Safety

May 25, 2021

RE: Erie County Hazard Mitigation Plan 2021 Update

Dear Planning Team/Municipal Officials,

The Erie County Department of Homeland Security and Emergency Services continues to update the county's Hazard Mitigation Plan (HMP). The HMP analyzes the hazards faced by the county and its municipalities, and identifies a strategy for minimizing our vulnerability to these hazards. We held kickoff meetings in November 2020, held several municipal support meetings in late January/early February 2021, and reviewed the results of the updated risk assessment at a public meeting on May 19, 2021.

We will be conducting a pair of Mitigation Strategy Workshop webinars on June 9, 2021. The purpose of the webinars is to discuss developing mitigation actions to address our communities' vulnerabilities, based on the information we have gathered from the planning process so far. The two sessions will be identical, so you only need to attend one session. To meet the varied schedules of our planning partners, the two sessions will be held at the following times:

- 9:00 – 11:00 a.m.
- 6:00 – 8:00 p.m.

I would appreciate it if someone from your municipality would attend one of the webinars and participate in the discussions. You can find the webinar information by visiting the calendar on https://www.eriecountynyhmp.com/.

Thank you for your continued support, and we look forward to hearing from you at one of the Mitigation Strategy Workshops. Please contact me if you have any questions.

Sincerely,

Melissa J Calhoun

Melissa Calhoun
Public Safety Officer - Special Assistant

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
To: Subbio, Tony
Subject: FW: Erie CO Hmp letter for EMS - June meeting
Date: Tuesday, May 25, 2021 9:27:37 AM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

This went out to the Emergency Managers, Steering committee members, the POC from LOI list and the elected officials list.

From: Calhoun, Melissa J.
Sent: Tuesday, May 25, 2021 9:27 AM
Cc: Tony Subio (Tony.Subbio@tetratech.com) <Tony.Subbio@tetratech.com>
Subject: Erie CO Hmp letter for EMS - June meeting

Good morning,
Please see the attached letter regarding the next phase of the Hazard Mitigation Plan update. If you have any questions let me know. I apologize if you receive more than once. It is going out to multiple lists.

Thank you!

Melissa
--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

COUNTY OF ERIE

MARK POLONCARZ
COUNTY EXECUTIVE

DEPARTMENT OF HOMELAND SECURITY & EMERGENCY SERVICES
45 Elm Street – Buffalo, NY 14203
716 858-6578 – FAX 858-7937
www.erie.gov/emergency

Daniel Neaverth Jr.
Commissioner

Gregory Butcher
Deputy Commissioner
Civil Defense/ Disaster Preparedness

Gregory Gill
Deputy Commissioner
Emergency Medical Services

Christopher Couell
Deputy Commissioner
Fire Safety

August 9, 2021

RE: Erie County Hazard Mitigation Plan 2021 Update

Dear Planning Team/Municipal Officials/Stakeholders,

As you know, the Erie County Department of Homeland Security and Emergency Services has been updating the Erie County Hazard Mitigation Plan (HMP) since November 2020. Since that time, Erie County and our contractor, Tetra Tech, have been updating the HMP and working with each jurisdiction in the county to develop their respective mitigation strategies. The full, updated HMP is available for review at the project website: https://www.eriecountynyhmp.com/.

We will review the draft of the updated HMP at a meeting of our Planning Partnership. The meeting will **be conducted via webinar from 6:00-8:00 p.m. on September 8, 2021**. Visit the Calendar on the project website for the link.

I would appreciate it if someone from your organization would review the draft HMP and attend the webinar to provide comments on the draft before it is submitted to the New York State Division of Homeland Security and Emergency Services (NYS DHSES) and Federal Emergency Management Agency (FEMA) Region II. This webinar will be open to the general public as well.

Thank you for your support, and we look forward to hearing from you at the Draft Review Meeting. Please contact me if you have any questions.

Sincerely,

Melissa J. Calhoun

Melissa Calhoun
Public Safety Officer - Special Assistant

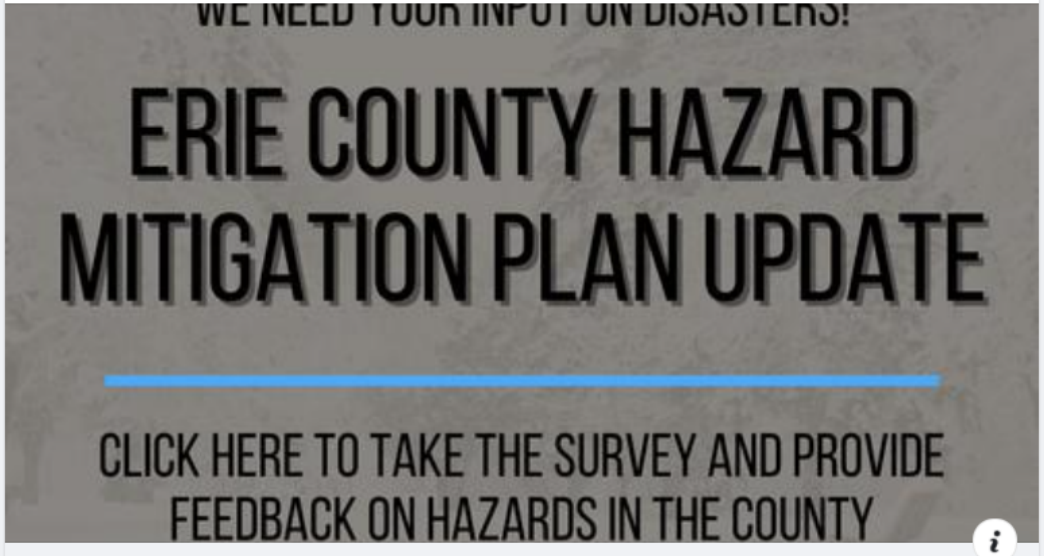
Sent to disaster coordinators/emergency managers, Planning Partnership, municipal points of contact, elected officials
- August 9, 2021

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Department of Homeland Sec... Send Message Like

Erie County Department of Homeland Security & Emergency Services
August 9 at 1:27 PM ·

Since November 2020, Erie County and our contractor, Tetra Tech, have been updating the HMP and working with each municipality in the county to develop their respective mitigation strategies. The full, updated HMP is available for review at the HMP website: www.eriecountynyhmp.com. Please visit the site and review the documents posted there. We will review the draft of the updated HMP and collect comments during a public webinar on Wednesday, September 8, 2021, from 6:00-8:00 p.m. Details about the webinar can be found on the website above. Contact Melissa Calhoun, Public Safety Officer - Special Assistant, Erie County Department of Homeland Security and Emergency Services, at (716) 858-6578 for more information.



ERIECOUNTYNYHMP.COM
Home - Erie County Hazard Mitigation Plan (HMP) Public Website
Putnam County is currently updating their Hazard Mitigation Plan for the County and its partic...

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing

Erie Cty Emerg Svces @ErieCountyESU · Aug 9

Hot off the press, the Erie County Hazard Mitigation Plan has been updated & we'd love your feedback! Visit: eriecountynyhmp.com for review and info on our public comment webinar 9/8/21 6-8 pm. need more call Melissa Calhoun, Erie County Homeland Security/E.S (716) 858-6578

3 4

Erie County, NY Retweeted

Erie Cty Emerg Svces @ErieCountyESU · Aug 9

Hot off the press, the Erie County Hazard Mitigation Plan has been updated & we'd love your feedback! Visit: eriecountynyhmp.com for review and info on our public comment webinar 9/8/21 6-8 pm. need more call Melissa Calhoun, Erie County Homeland Security/E.S (716) 858-6578

3 4

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing

Subbio, Tony

From: Calhoun, Melissa J. <Melissa.Calhoun@erie.gov>
Sent: Monday, December 14, 2020 6:26 PM
To: Adamski, Dean; AJ Keifer (akiefer@kenmorepolice.org); Baskerville, Corey; Berke, Mark; Berns, Michael; Beverly Gambino (beverlygambino@outlook.com); Bieler, PE, CFM, Wayne; Borth, Mike; Bowen, Patrick; Bremer, Steve; Budney, Nick; Burgstahler, Brian 2; Calhoun, Melissa J.; Cansdale, Bill; Chuck Stuart (firechief@tonawandacityfd.com); Clark, Wayne - supervisor@elmanewyork.com; Clyde Drake; Conley, Eric; Crawford, Richard; Creamer Dominic (dcreamer@apdny.org); Dave Cummings - dcummings@townofnewstead.com; Degman, Gene; Dimpfl Jr., Ric; Fischione, Matt; Fischione, Tony; Fox Sr., Joseph; Giboson, Roger; Hoeh, Matthew; Hopkins, Traci; Hutchinson, Jan; Iafallo, Annette; Izydorczak, Dawn; James Bach - jbach@townofaurora.com; James P. Unger ; Jason Keding; Jerackas, Maureen; Whittington Jr., Gerard J.; Jim Zymanek (jzymanek@apdny.org); Johnson, Kathleen; Kaleta, Mike; Kenneth Martin; Kowalik, Dan; Kramer, William; Kuhlmey, Scott ; Larivey, James; Lindhurst, Erik; Lutz, Robert ; Maggs, Ron; Mark Banks; Matthew W. Barrett; Melissa Hartman - mhartman@edenny.gov; Melock, Liz; Michael Perry; Michael Petrie - voboffice@aol.com; Mike Willibey (cd153oem@gmail.com); Miller, David; Mr. Earl Loder (eloder@tocny.org); Mrugalski, Richard; Nolan, Michael; Patterson, Carl; Peterson, Kevin; Robinson, Scott; Ronald Rozler - Town of Lancaster (Rrozler@lancasterny.gov); Ronald Ruffino (rruffino@lancasterny.gov); rondapaluch@gmail.com; Sean Crotty (scrotty@thpdny.org); Sheilbey Carol; Singleton, Jeffrey; Smith, William; building; Stauffiger, James; Sutton, Matthew; Thomas, Cathie; Vilonen, Ben; Vincent George; Westfall, PE., Robert; Whitney, John; Wieckowski, Gene; William Krebs - wkrebs@villageofspringvilleny.com; Wyzykiewicz, James; Butcher, Gregory; Castle, Daniel; Cheverie, Al; Hersey, Thomas; Lawrence, Bonnie Lange-; Neaverth, Daniel; Nieman, RJ; Panasiewicz, Joanna; Poleto, Donald; Rose, P.E., Brian A.; Sheedy, Ryan; Subbio, Tony; Wilson, P. Josh
Subject: Multi Hazard Jurisdictional Plan Update

Importance: High

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Good evening,
I just would like to share some updated information with you regarding Multi Hazard Jurisdictional plan update.

Currently, the worksheets are due 12/22 – please try your best to meet that deadline. Link for the worksheet is below. Any questions do not hesitate to ask.

During the kick off meeting there was reference to public information meetings in December (2 webinars).These will now be conducted after the first of the year. Anyone will be able to attend either session. Dates will be sent out soon!

In addition, the consultant will also look at January to do the municipal information gathering sessions. As the deadline for the worksheet is 12/22 – they will do these sessions to assist you with finishing your worksheets and gather additional information if needed. Dates will be sent out soon for those as well.

If you missed the kick off meetings that were held back in Mid-November, you can now access them on the website where the worksheets are. Scroll to the top and you will see the Meetings tab, click on that and the kick off meeting is available there.

Here is the link to the worksheets again: https://www.eriecountynyhmp.com/municipal-information/

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

All municipalities need to fill out worksheets 0-3, 5 & 6, then worksheet 4 there is a specific worksheet per municipality. The information on worksheet 4 is what you submitted in the 2015 plan, you need to update the information in that worksheet via the drop downs and columns on the right of the sheet.

As always, any questions please do not hesitate to ask!

Thank you!

Melissa

--
Melissa J. Calhoun | Public Safety Officer - Special Assistant
Erie County | Emergency Services
45 Elm St., | Buffalo, NY 14203
P:+1(716)858-8440 | F:+1(716)858-7937 | C:+1(716)432-3086
Melissa.Calhoun@erie.gov | http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.

To: AJ Keifer (akiefer@kenmorepolice.org); alden asst. coordinator; aldenmayor@rochester.rr.com; Anderson, Peter; Ball, Betsy (Buffalo); Baumler, Dave; "Baumler, Dave"; Bissonette, Dave; "Bissonette, Dave"; Boston Fire; bsudyn@gmail.com; Budney, Nick; Burgstahler, Brian; Burgstahler, Brian 2; Butcher, Gregory; Calhoun, Melissa J.; Cappon, Nick (Buffalo); Captain Fredric Foels; "Chris Chiodo@nfta.com"; Chuck - Angola Fire Chief; Chuck Stuart (firechief@tonawandacityfd.com); Clarkson, Paul; Couell, Christopher; "Crassi, Nick"; Creamer Dominic (dcreamer@apdny.org); Curt Young; Dan Kowalik (dan@kulbacks.com); dbissonette@clarence.ny.us; Dean Messing; "Dimpfl, Richard"; "Dole, Maury"; Eleczko, Bob; Eric Connelly (chieffdsh@outlook.com); Eric Sharpe; fdinstny1@gmail.com; "Fox, Joe"; "Fox, Joe"; Frank, Shaun; Galen Purpura; "Gates, Mike"; Gene Wieckowski2; Geoff Hack (hckgff23@gmail.com); Geoff Szymanski; George, James; "Gerber, Nicole"; Gill, Gregory; Glenn-Eden; Gramaglia, Joseph; Greenan, John; Guy Canonico Jr. (lebchief@gmail.com); Hagelberger, John; Hamm, Bill; "Hawes, Joe"; "Higgins, Chris"; Hoisington, Jere; Hultquist, Darci; Hutchins, Athena; Hutchinson, Jan; James DePasquale (james.depasquale@townofcolden.com); James P. Unger ; Jancewicz, James; Jankowiak, Greg; Jason Keding; Jim Miller (jimwnyalert@gmail.com); Jim Zymanek (jzymanek@apdny.org); "Joachimiak, Glenn"; Joe Colern Jr.; Joel Macalpine; Jones, Richard A. (DOT); Judith Levan; "Kelly, Tom"; Kenneth Martin; Kerwin, Glenn; Kindron, J; "Klimowicz, Ronald"; Kowalski, Mark; "Kuhlmey, Scott "; "Kukoleca, William"; Lavelle, James; Linda Foels; "Loder, Earl"; Lutz, Robert ; Major, Bill; Malczewski, James; Manfredo, Denise; Mark Banks; Martin, Larry; "Mazurowski, Mike"; McCartan, Daniel; "Michaels, Timothy"; Mike (msmith@nittec.org); Mike Fries (michael.j.fries@noaa.gov); Mike Mutter (mmutt58@gmail.com); Mike Nolan; Mike Willibey (cd153oem@gmail.com); mikeka04@aol.com; Miller, Colin; "Moses, Sr., Thomas"; "Moskal, Michael"; "Mrugalski, Richard"; "Muehlbauer, Carl"; Neaverth, Daniel; Nieman, RJ; Nolan, Brian; Nolan, Mike; Palizay, Michael; "Paluch, Ronald"; Patchin Fire; Patronik, Scott; Patty Zurbrick; Pete Spilsbury; "Phillips, William"; Priutt, Mark - V. of Alden; Rachel Buchanan; RGreiss@verizon.net; Rick Myers; "Rinow, Daniel"; "Robinson, Scott"; Ronald Rozler - Town of Lancaster (Rrozler@lancasterny.gov); Roorbach, James; Rovnak, Vincent; Savage, Richard; Schreiber, David; Scott Lycett; Sean Crotty (scrotty@thpdny.org); Sheedy, Ryan; spilsbury@westsenecapolice.org; Stella, Julianna; "Stickney, Bob"; Stowell, Greg; "supervisor@brantny.com"; "Taylor, Randy"; Tuberdyke, Mike; "Unverdorben, David"; Village of Angola Clerk; Wachowiak, Terry; Walter Raichel (wraichel@gmail.com); Whittington Jr., Gerard J.; "Wieckowski, Gene"; William Laing (bill@edenny.gov); "Williams, Bob"; "Willibey, Mike"; Wohlhueter, Scott; Wolf, John; Young, Keith; Zurbrick, Patty; Zylka, Scott; Adamski, Dean; aldenmayor@rochester.rr.com; Beverly Gambino (beverlygambino@gmail.com); Beverly Gambino (beverlygambino@outlook.com); Brian Kulpa - Town of Amherst (bkulpa@amherst.ny.us); Byron Brown (bbrown@city-buffalo.com); Calhoun, Marilynn; Carl Patterson - carl.patterson@perrysicecream.com; Clyde Drake; Dave Cummings - dcummings@townofnewstead.com; David Smith; Dennis Powers - supervisor@elmanewyork.com; Diane Benczkowski (dbenczkowski@tocny.org); Dickson, Gary; Earl Gingerich Jr. - egingerich@townofmarilla.com; Joe Emminger; Gail Nicholson ; Gene Majchrzak ; Geoff Szymanski; Hoisington, Jere; Howard "Hub" Frawley; Hutchinson, Jan; James Bach - jbach@townofaurora.com; James DePasquale (james.depasquale@townofcolden.com); James Niwinski (sloanny@roadrunner.com); James Shaw; Jason Keding; JoAnn Litwin Clinton; John Tobia (jtobia@northcollinsny.org); Kenneth Martin; County Executive; Mary Nytz-Hosler (mhosler@townofevans.org); Mary Nytz-Hosler (supervisor@townofevans.org); Melissa Hartman - mhartman@edenny.gov; Michael Kasprzyk - Town of Holland (mkasprzyk@townofhollandny.com); Michael Petrie - voboffice@aol.com; Patrick Casilio (pcasilio@clarence.ny.us); Patrick Mang - mayor@vi.kenmore.ny.us; Patrick Mang (kjohnson@vi.kenmore.ny.us); Peter Mercurio - mayor@east-aurora.ny.us; Peterson, Kevin; Rick Davis - City of Tonawanda (mayor@tonawandacity.com); Rickey Venditti - rvenditti@moog.com; Rogers, Deborah; Ronald Ruffino (rruffino@lancasterny.gov); Ruth Hromchak ; Sullivan, Kelly; supervisor@brantny.com; Thomas Ferrucci; Thomas Moses - mayor@villagehamburg.com; Whitney, John; Whyte, Maria; William Krebs - wkrebs@villageofspringvilleny.com; William Schroeder

Cc: Subbio, Tony

Subject: Hazard Mitigation Plan - update 12-2-2020

Date: Wednesday, December 2, 2020 2:39:03 PM

Importance: High

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Good afternoon!

We hope you enjoyed the Thanksgiving holiday with your families. Now that we're all back to work, we wanted to follow up with you on the set of information gathering worksheets that was discussed at the Hazard Mitigation Planning Partnership Kickoff Meetings on November 18th and 19th. You can find the worksheets for download on the project website, here: https://www.eriecountynyhmp.com/municipal-information/.

Here is some information for you as you work through the worksheets:

1. You are not alone in completing the worksheets. You should work with a team of officials

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

from your jurisdictions to fill them out. The Worksheet Outline lists the officials who might be involved in filling out each one. You will also be assigned a planner from our consultant team who will reach out to offer assistance.

2. More information is better. Even if you see a yes/no question, any details you can provide will make our plan stronger.
3. It's best to fill them out in Word rather than printing them out and writing in your answers, so that the rows give you enough room to answer, but if filling them out by hand is easiest for you, that's fine too.
4. **Worksheet 1 – Evaluation of Identified Hazards and Risks** – Please note how your municipality's vulnerability has changed, and identify any additional hazards you think we should examine. Also, please provide some details on how the events listed impacted your municipality, and identify any other hazard events that impacted you. On the last page, tell us about any problems that hazards present in your community, or anything that you'd like to address in this planning process.
5. **Worksheet 2 – Capability Assessment and Integration**
    a. Planning and Regulatory Capability
        i. Identify any local plans and/or regulations that you have in effect in your municipality. For any that you say you have, you must fill in the entire row. Provide a code citation. For regulations, that's the local law number or chapter of your municipal code, and the date. For plans, we need the formal title of the plan and the date it was last updated.
        ii. In the comments, describe how the regulation or plan helps reduce long-term vulnerability. For instance, if you have zoning, does it limit development in hazard areas like the floodplain?
    b. Administrative and Technical Capability
        i. Identify what staff members or technical expertise you have on staff (full time, part time, or volunteer for your municipality), or who you have access to through the county or another organization. If you have that resource, identify who it is by organization/position, not by a person's name.
    c. Community Classifications
        i. Your code enforcement officer should know your BCEGS rating.
        ii. Your fire department might know your ISO Fire Protection Class, if none of your municipal officials know.
        iii. There are links on the last page for finding out your BCEGS rating and Fire Protection Class, as well.
6. **Worksheet 3 – NFIP Floodplain Administrator Questionnaire** –your floodplain administrator will lead the charge on filling this one out, but may need help from other officials (zoning, codes enforcement, etc.). Again, more information is better. Really describe your municipality's programs, rather than just saying yes/no.
7. **Worksheet 4 – Mitigation Action Review Worksheet** – see below
8. **Worksheet 5 – New Development and Building Permits** – identify the number of permits issued in your municipality in each of the last several years (by occupancy), the number of those permits that were for development in the Special Flood Hazard Area (SFHA) – the floodplain, any major development in the last 5 years, and any known or proposed major development on the horizon. For major development, we're looking for any commercial or

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

industrial development, and any apartment buildings, subdivisions, etc. You don't need to list every single residential structure that was built.

9. **Worksheet 6 – Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing** –
    a. Evacuation Routes – what are the main routes you would use to evacuate your municipality, particularly from a flood?
    b. Sheltering Needs – provide all of the information requested for each facility that has been identified as a potential shelter.
    c. Temporary Housing – the State requires that we identify where we could place FEMA trailers or other temporary housing to help people displaced by an emergency. List any parks, open lots, RV campgrounds, etc. where you could theoretically place temporary housing. The sites do not need to be ready to accept them right now, but if you identify a site that isn't ready yet, the plan will have an action to meet the requirements.
    d. Permanent Housing – the State also requires that we also identify potential sites that can be developed with new permanent housing. Of course, it depends on the landowner being willing to sell, a developer being willing to build new housing, and other factors, but identify any targeted growth areas or sites that have already been identified for future development in your municipality.

Worksheet 4 is different for each jurisdiction, as it capture information about the actions that your municipality included in the 2015 plan. The Erie County Water Authority, Village of Farnham, and Town of Wales do not have a Worksheet 4, because there were no jurisdiction-specific actions in the 2015 plan for those jurisdictions.

- Brief Summary of the Original Problem - the 2015 HMP did not identify the problem being solved for each action, but if you know what problem was to be solved by each, enter it.
- Status (In Progress, Ongoing, No Progress, Complete) – choose the status of the action. If you haven't gotten the project done (or even started) in the last five years, that's OK- we just need to know the status.
- Evaluation of Success (if project status is complete) – these columns are filled in ONLY FOR COMPLETED ACTIONS. If you completed an action, tell us how much it cost, what level of protection it provides (to the 10-year storm, to the 500-year flood, etc.), and describe the benefits it provides in terms of damages avoided or other evidence that it was a successful project.
- In the right-most column, let us know what you want to do with the action.
    - Should it be included in the updated plan or discontinued? If it's no longer relevant, or not specific enough for the updated plan, it can be discontinued.
    - If you want to include it in the updated plan, is the wording OK, or do you want to update it at all?
    - If you discontinued the action, say why.
- On the last page, identify any other actions that you carried out that weren't on the list from the 2015 plan. For instance, did you replace a bridge, update a culvert, update a plan or regulation, etc.? Also include any projects that you know you want to include in the updated plan.

If you need the worksheets emailed to you, or sent via hard copy, please let me know.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Please work with your colleagues to complete and return the worksheets **by December 22, 2020.**

While you're thinking about the HMP, why not provide some additional information on the hazards that impact our communities? Please go to our online problem mapping tool (https://arcg.is/9bzzr) to identify places where hazards affect your municipality.

Please let me know if you have any questions. Thank you!

Best,
Greg Butcher & Melissa Calhoun

Melissa J. Calhoun – Public Safety Officer – Special Assistant
Erie County – Department of Homeland Security & Emergency Services
45 Elm Street – Buffalo, NY 14203
P: 716-858-8440 F: 716-858-7937 C: 716-432-3086
Melissa.Calhoun@erie.gov http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
To: Matthew W. Barrett
Cc: Subbio, Tony; Butcher, Gregory
Subject: FW: Hazard Mitigation Plan - update 12-2-2020
Date: Wednesday, December 2, 2020 2:40:49 PM
Importance: High

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Good afternoon!

We hope you enjoyed the Thanksgiving holiday with your families. Now that we're all back to work, we wanted to follow up with you on the set of information gathering worksheets that was discussed at the Hazard Mitigation Planning Partnership Kickoff Meetings on November 18th and 19th. You can find the worksheets for download on the project website, here: https://www.eriecountynyhmp.com/municipal-information/.

Here is some information for you as you work through the worksheets:

1. You are not alone in completing the worksheets. You should work with a team of officials from your jurisdictions to fill them out. The Worksheet Outline lists the officials who might be involved in filling out each one. You will also be assigned a planner from our consultant team who will reach out to offer assistance.
2. More information is better. Even if you see a yes/no question, any details you can provide will make our plan stronger.
3. It's best to fill them out in Word rather than printing them out and writing in your answers, so that the rows give you enough room to answer, but if filling them out by hand is easiest for you, that's fine too.
4. **Worksheet 1 – Evaluation of Identified Hazards and Risks** – Please note how your municipality's vulnerability has changed, and identify any additional hazards you think we should examine. Also, please provide some details on how the events listed impacted your municipality, and identify any other hazard events that impacted you. On the last page, tell us about any problems that hazards present in your community, or anything that you'd like to address in this planning process.
5. **Worksheet 2 – Capability Assessment and Integration**
    a. Planning and Regulatory Capability
        i. Identify any local plans and/or regulations that you have in effect in your municipality. For any that you say you have, you must fill in the entire row. Provide a code citation. For regulations, that's the local law number or chapter of your municipal code, and the date. For plans, we need the formal title of the plan and the date it was last updated.
        ii. In the comments, describe how the regulation or plan helps reduce long-term vulnerability. For instance, if you have zoning, does it limit development in hazard areas like the floodplain?
    b. Administrative and Technical Capability

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

i. Identify what staff members or technical expertise you have on staff (full time, part time, or volunteer for your municipality), or who you have access to through the county or another organization. If you have that resource, identify who it is by organization/position, not by a person's name.

c. Community Classifications

i. Your code enforcement officer should know your BCEGS rating.

ii. Your fire department might know your ISO Fire Protection Class, if none of your municipal officials know.

iii. There are links on the last page for finding out your BCEGS rating and Fire Protection Class, as well.

6. **Worksheet 3 – NFIP Floodplain Administrator Questionnaire** –your floodplain administrator will lead the charge on filling this one out, but may need help from other officials (zoning, codes enforcement, etc.). Again, more information is better. Really describe your municipality's programs, rather than just saying yes/no.
7. **Worksheet 4 – Mitigation Action Review Worksheet** – see below
8. **Worksheet 5 – New Development and Building Permits** – identify the number of permits issued in your municipality in each of the last several years (by occupancy), the number of those permits that were for development in the Special Flood Hazard Area (SFHA) – the floodplain, any major development in the last 5 years, and any known or proposed major development on the horizon. For major development, we're looking for any commercial or industrial development, and any apartment buildings, subdivisions, etc. You don't need to list every single residential structure that was built.
9. **Worksheet 6 – Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing** –
    a. Evacuation Routes – what are the main routes you would use to evacuate your municipality, particularly from a flood?
    b. Sheltering Needs – provide all of the information requested for each facility that has been identified as a potential shelter.
    c. Temporary Housing – the State requires that we identify where we could place FEMA trailers or other temporary housing to help people displaced by an emergency. List any parks, open lots, RV campgrounds, etc. where you could theoretically place temporary housing. The sites do not need to be ready to accept them right now, but if you identify a site that isn't ready yet, the plan will have an action to meet the requirements.
    d. Permanent Housing – the State also requires that we also identify potential sites that can be developed with new permanent housing. Of course, it depends on the landowner being willing to sell, a developer being willing to build new housing, and other factors, but identify any targeted growth areas or sites that have already been identified for future development in your municipality.

Worksheet 4 is different for each jurisdiction, as it capture information about the actions that your municipality included in the 2015 plan. The Erie County Water Authority, Village of Farnham, and Town of Wales do not have a Worksheet 4, because there were no jurisdiction-specific actions in the 2015 plan for those jurisdictions.

- Brief Summary of the Original Problem - the 2015 HMP did not identify the problem being solved for each action, but if you know what problem was to be solved by each, enter it.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Status (In Progress, Ongoing, No Progress, Complete) – choose the status of the action. If you haven't gotten the project done (or even started) in the last five years, that's OK- we just need to know the status.

- Evaluation of Success (if project status is complete) – these columns are filled in ONLY FOR COMPLETED ACTIONS. If you completed an action, tell us how much it cost, what level of protection it provides (to the 10-year storm, to the 500-year flood, etc.), and describe the benefits it provides in terms of damages avoided or other evidence that it was a successful project.
- In the right-most column, let us know what you want to do with the action.
    - Should it be included in the updated plan or discontinued? If it's no longer relevant, or not specific enough for the updated plan, it can be discontinued.
    - If you want to include it in the updated plan, is the wording OK, or do you want to update it at all?
    - If you discontinued the action, say why.
- On the last page, identify any other actions that you carried out that weren't on the list from the 2015 plan. For instance, did you replace a bridge, update a culvert, update a plan or regulation, etc.? Also include any projects that you know you want to include in the updated plan.

If you need the worksheets emailed to you, or sent via hard copy, please let me know.

Please work with your colleagues to complete and return the worksheets **by December 22, 2020.**

While you're thinking about the HMP, why not provide some additional information on the hazards that impact our communities? Please go to our online problem mapping tool (https://arcg.is/9bzzr) to identify places where hazards affect your municipality.

Please let me know if you have any questions. Thank you!

Best,
Greg Butcher & Melissa Calhoun

Melissa J. Calhoun – Public Safety Officer – Special Assistant
Erie County – Department of Homeland Security & Emergency Services
45 Elm Street – Buffalo, NY 14203
P: 716-858-8440 F: 716-858-7937 C: 716-432-3086
Melissa.Calhoun@erie.gov http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.

To: AJ Keifer (akiefer@kenmorepolice.org); alden asst. coordinator; aldenmayor@rochester.rr.com; Anderson, Peter; Ball, Betsy (Buffalo); Baumler, Dave; "Baumler, Dave"; Bissonette, Dave; "Bissonette, Dave"; Boston Fire; bsudyn@gmail.com; Budney, Nick; Burgstahler, Brian; Burgstahler, Brian 2; Butcher, Gregory; Cappon, Nick (Buffalo); Captain Fredric Foels; "Chris_Chiodo@nfta.com"; Matthew W. Barrett; Chuck - Angola Fire Chief; Chuck Stuart (firechief@tonawandacityfd.com); Clarkson, Paul; Couell, Christopher; "Crassi, Nick"; Creamer Dominic (dcreamer@apdny.org); Curt Young; Dan Kowalik (dan@kulbacks.com); dbissonette@clarence.ny.us; Dean Messing; "Dimpfl, Richard"; "Dole, Maury"; Eleczko, Bob; Eric Connelly (chieffdsh@outlook.com); Eric Sharpe; fdinstny1@gmail.com; "Fox, Joe"; "Fox, Joe"; Frank, Shaun; Galen Purpura; "Gates, Mike"; Gene Wieckowski2; Geoff Hack (hckgff23@gmail.com); Geoff Szymanski; George, James; "Gerber, Nicole"; Gill, Gregory; Glenn- Eden; Gramaglia, Joseph; Greenan, John; Guy Canonico Jr. (lebchief@gmail.com); Hagelberger, John; Hamm, Bill; "Hawes, Joe"; "Higgins, Chris"; Hoisington, Jere; Hultquist, Darci; Hutchins, Athena; Hutchinson, Jan; James DePasquale (james.depasquale@townofcolden.com); James P. Unger ; Jancewicz, James; Jankowiak, Greg; Jason Keding; Jim Miller (jimwnyalert@gmail.com); Jim Zymanek (jzymanek@apdny.org); "Joachimiak, Glenn"; Joe Colern Jr.; Joel Macalpine; Jones, Richard A. (DOT); Judith Levan; "Kelly, Tom"; Kenneth Martin; Kerwin, Glenn; Kindron, J; "Klimowicz, Ronald"; Kowalski, Mark; "Kuhlmey, Scott "; "Kukoleca, William"; Lavelle, James; Linda Foels; "Loder, Earl"; Lutz, Robert ; Major, Bill; Malczewski, James; Manfredo, Denise; Mark Banks; Martin, Larry; "Mazurowski, Mike"; McCartan, Daniel; "Michaels, Timothy"; Mike (msmith@nittec.org); Mike Fries (michael.j.fries@noaa.gov); Mike Mutter (mmutt58@gmail.com); Mike Nolan; Mike Willibey (cd153oem@gmail.com); mikeka04@aol.com; Miller, Colin; "Moses, Sr., Thomas"; "Moskal, Michael"; "Mrugalski, Richard"; "Muehlbauer, Carl"; Neaverth, Daniel; Nieman, RJ; Nolan, Brian; Nolan, Mike; Palizay, Michael; "Paluch, Ronald"; Patchin Fire; Patronik, Scott; Patty Zurbrick; Pete Spilsbury; "Phillips, William"; Priutt, Mark - V. of Alden; Rachel Buchanan; RGreiss@verizon.net; Rick Myers; "Rinow, Daniel"; "Robinson, Scott"; Ronald Rozler - Town of Lancaster (Rrozler@lancasterny.gov); Roorbach, James; Rovnak, Vincent; Savage, Richard; Schreiber, David; Scott Lycett; Sean Crotty (scrotty@thpdny.org); Sheedy, Ryan; spilsbury@westsenecapolice.org; Stella, Julianna; "Stickney, Bob"; Stowell, Greg; "supervisor@brantny.com"; "Taylor, Randy"; Tuberdyke, Mike; "Unverdorben, David"; Village of Angola Clerk; Wachowiak, Terry; Walter Raichel (wraichel@gmail.com); Whittington Jr., Gerard J.; "Wieckowski, Gene"; William Laing (bill@edenny.gov); "Williams, Bob"; "Willibey, Mike"; Wohlhueter, Scott; Wolf, John; Young, Keith; Zurbrick, Patty; Zylka, Scott; Adamski, Dean; aldenmayor@rochester.rr.com; Beverly Gambino (beverlygambino@gmail.com); Beverly Gambino (beverlygambino@outlook.com); Brian Kulpa - Town of Amherst (bkulpa@amherst.ny.us); Byron Brown (bbrown@city-buffalo.com); Calhoun, Marilynn; Carl Patterson - carl.patterson@perrysicecream.com; Clyde Drake; Dave Cummings - dcummings@townofnewstead.com; David Smith; Dennis Powers - supervisor@elmanewyork.com; Diane Benczkowski (dbenczkowski@tocny.org); Dickson, Gary; Earl Gingerich Jr. - egingerich@townofmarilla.com; Joe Emminger; Gail Nicholson ; Gene Majchrzak ; Geoff Szymanski; Hoisington, Jere; Howard "Hub" Frawley; Hutchinson, Jan; James Bach - jbach@townofaurora.com; James DePasquale (james.depasquale@townofcolden.com); James Niwinski (sloanny@roadrunner.com); James Shaw; Jason Keding; JoAnn Litwin Clinton; John Tobia (jtobia@northcollinsny.org); Kenneth Martin; County Executive; Mary Nytz-Hosler (mhosler@townofevans.org); Mary Nytz-Hosler (supervisor@townofevans.org); Melissa Hartman - mhartman@edenny.gov; Michael Kasprzyk - Town of Holland (mkasprzyk@townofhollandny.com); Michael Petrie - voboffice@aol.com; Patrick Casilio (pcasilio@clarence.ny.us); Patrick Mang - mayor@vi.kenmore.ny.us; Patrick Mang (kjohnson@vi.kenmore.ny.us); Peter Mercurio - mayor@east-aurora.ny.us; Peterson, Kevin; Rick Davis - City of Tonawanda (mayor@tonawandacity.com); Rickey Venditti - rvenditti@moog.com; Rogers, Deborah; Ronald Ruffino (rruffino@lancasterny.gov); Ruth Hromchak ; Sullivan, Kelly; supervisor@brantny.com; Thomas Ferrucci; Thomas Moses - mayor@villagehamburg.com; Whitney, John; Whyte, Maria; William Krebs - wkrebs@villageofspringvilleny.com; William Schroeder; "wsmith@townofevans.org"; "cbaskerville@townofevans.org"

Cc: Subbio, Tony

Subject: RE: Hazard Mitigation Plan - update 12-2-2020

Date: Thursday, December 3, 2020 10:49:44 AM

Importance: High

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Good morning again all,

Ok so I spoke Tony. If you are having issues opening the website, please send me a screen shot of the error message as well as what browser you are using and what antivirus software your municipality/agency has. He will then take that information to his IT people to see if there is a setting or something they can change so the website will not flag your antivirus. Also, you may want to speak to your IT department to see if they can unblock that specific website. I sent a message yesterday to ours and now the site is unblocked.

In the meantime, attached are the 5 documents that are the same for all municipalities. If you still cannot get onto the website, I don't want you to lose time, send me an email and I will then send

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

you Worksheet 4 that is specific to your municipality so you can start the process.

Thank you all for your patience. Stay safe!

Melissa

Melissa J. Calhoun – Public Safety Officer – Special Assistant
Erie County – Department of Homeland Security & Emergency Services
45 Elm Street – Buffalo, NY 14203
P: 716-858-8440 F: 716-858-7937 C: 716-432-3086
Melissa.Calhoun@erie.gov http://www.erie.gov

From: Calhoun, Melissa J. <Melissa.Calhoun@erie.gov>
Sent: Wednesday, December 2, 2020 2:39 PM
To: AJ Keifer (akiefer@kenmorepolice.org) <akiefer@kenmorepolice.org>; alden asst. coordinator <americangrace77@yahoo.com>; aldenmayor@rochester.rr.com; Anderson, Peter <Peter.Anderson@erie.gov>; Ball, Betsy (Buffalo) <bball@ch.ci.buffalo.ny.us>; Baumler, Dave <purchasing@advancedthermal.net>; 'Baumler, Dave' <dbaumler@clarence.ny.us>; Bissonette, Dave <David@davidbissonette.com>; 'Bissonette, Dave' <issdb@hotmail.com>; Boston Fire <bostonvfc@gmail.com>; bsudyn@gmail.com; Budney, Nick <nbudney@thpdny.org>; Burgstahler, Brian <bburgstahler@yahoo.com>; Burgstahler, Brian 2 <emergencyservices@edenny.gov>; Butcher, Gregory <Gregory.Butcher@erie.gov>; Calhoun, Melissa J. <Melissa.Calhoun@erie.gov>; Cappon, Nick (Buffalo) <ncappon@ch.ci.buffalo.ny.us>; Captain Fredric Foels <ffoels@tonawandacitypd.com>; 'Chris_Chiodo@nfta.com' <Chris_Chiodo@nfta.com>; Chuck - Angola Fire Chief <afdchief@outlook.com>; Chuck Stuart (firechief@tonawandacityfd.com) <firechief@tonawandacityfd.com>; Clarkson, Paul <clarksonPJ57@gmail.com>; Couell, Christopher <Christopher.Couell@erie.gov>; 'Crassi, Nick' <racernick07@earthlink.net>; Creamer Dominic (dcreamer@apdny.org) <dcreamer@apdny.org>; Curt Young <kc2cqd@gmail.com>; Dan Kowalik (dan@kulbacks.com) <dan@kulbacks.com>; dbissonette@clarence.ny.us; Dean Messing <messingdean@rocketmail.com>; 'Dimpfl, Richard' <ricdimpfl@roadrunner.com>; 'Dole, Maury' <mdole4038@gmail.com>; Eleczko, Bob <chieffreddie56@aol.com>; Eric Connelly (chieffdsh@outlook.com) <chieffdsh@outlook.com>; Eric Sharpe <eric.sharpe@redcross.org>; fdinstny1@gmail.com; 'Fox, Joe' <jwfox44sr@yahoo.com>; 'Fox, Joe' <Blasdellfd@yahoo.com>; Frank, Shaun <Shaun.Frank@wegmans.com>; Galen Purpura <pastor.galenp@gmail.com>; 'Gates, Mike' <mike.gates@sni.org>; Gene Wieckowski2 <nbfcchief@gmail.com>; Geoff Hack (hckgff23@gmail.com) <hckgff23@gmail.com>; Geoff Szymanski <mayor@lackny.com>; George, James <Jgeorge1701952@roadrunner.com>; 'Gerber, Nicole' <nicole.gerber@roswellpark.org>; Gill, Gregory <Gregory.Gill@erie.gov>; Glenn- Eden <email-kb2tea@aol.com>; Gramaglia, Joseph <jagramaglia@bpdny.org>; Greenan, John <John.Greenan@erie.gov>; Guy Canonico Jr. (lebchief@gmail.com) <lebchief@gmail.com>; Hagelberger, John <john.hagelberger@use.salvationarmy.org>; Hamm, Bill <williamhammsr@gmail.com>; 'Hawes, Joe' <jhawes61@hotmail.com>; 'Higgins, Chris' <chiggins@walescenterfire.com>; Hoisington, Jere <farnhammayor@roadrunner.com>; Hultquist, Darci <Darci.Hultquist@erie.gov>; Hutchins, Athena <ahutchins@nittec.org>; Hutchinson, Jan <villageclerk@villageofnorthcollins.org>; James DePasquale (james.depasquale@townofcolden.com) <james.depasquale@townofcolden.com>;

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

James P. Unger <ungerj@westsenecapolice.org>; Jancewicz, James <James.Jancewicz@erie.gov>; Jankowiak, Greg <Greg772@verizon.net>; Jason Keding <supervisorkeding@gmail.com>; Jim Miller (jimwnyalert@gmail.com) <jimwnyalert@gmail.com>; Jim Zymanek (jzymanek@apdny.org) <jzymanek@apdny.org>; 'Joachimiak, Glenn' <gjoa91@hotmail.com>; Joe Colern Jr. <joecolern@elmanewyork.com>; Joel Macalpine <joelmacalpine53@gmail.com>; Jones, Richard A. (DOT) <Richard.Jones@dot.ny.gov>; Judith Levan <Judith.Levan@noaa.gov>; 'Kelly, Tom' <Thomas.Kelly@troopers.ny.gov>; Kenneth Martin <ken.martin@townofcollins.com>; Kerwin, Glenn <KB2TEA@aol.com>; Kindron, J <JKindron@village.williamsville.ny.us>; 'Klimowicz, Ronald' <RonKlimo@aol.com>; Kowalski, Mark <Mark.Kowalski@erie.gov>; 'Kuhlmey, Scott ' <skuhlmey@lancastervillage.org>; 'Kukoleca, William' <WMKJR@roadrunner.com>; Lavelle, James <James_Lavelle@nfta.com>; Linda Foels <irishhomeslice@yahoo.com>; 'Loder, Earl' <eloder@tocny.org>; Lutz, Robert <rlutz@tonawanda.ny.us>; Major, Bill <william_major@nfta.com>; Malczewski, James <jmalczewski@elmanewyork.com>; Manfredo, Denise <Denise.Manfredo@erie.gov>; Mark Banks <mbanks@tonawandacityfd.com>; Martin, Larry <Larry.Martin@nationalgrid.com>; 'Mazurowski, Mike' <mmazurowski@tocny.org>; McCartan, Daniel <dmccartan@ecmc.edu>; 'Michaels, Timothy' <tmichaels@villageofdepew.org>; Mike (msmith@nittec.org) <msmith@nittec.org>; Mike Fries (michael.j.fries@noaa.gov) <michael.j.fries@noaa.gov>; Mike Mutter (mmutt58@gmail.com) <mmutt58@gmail.com>; Mike Nolan <nolanmichael21@gmail.com>; Mike Willibey (cd153oem@gmail.com) <cd153oem@gmail.com>; mikeka04@aol.com; Miller, Colin <wnyalert@yahoo.com>; 'Moses, Sr., Thomas' <mayor@villagehamburg.com>; 'Moskal, Michael' <mmoskal@villageofdepew.org>; 'Mrugalski, Richard' <mrugalskir@orchardparkny.org>; 'Muehlbauer, Carl' <carl.muehlbauer@gmail.com>; Neaverth, Daniel <Daniel.Neaverth@erie.gov>; Nieman, RJ <rnieman@villageofdepew.org>; Nolan, Brian <BNolan@steubenfoods.com>; Nolan, Mike <MNOLAN@ELMANEWYORK.COM>; Palizay, Michael <mjpalizay@bpdny.org>; 'Paluch, Ronald' <rrpaluch@gmail.com>; Patchin Fire <patchin.chief@yahoo.com>; Patronik, Scott <Scott.Patronik@erie.gov>; Patty Zurbrick <patricia.zurbrick@townofcolden.com>; Pete Spilsbury <pspilsbury@wsfd5.com>; 'Phillips, William' <captain@kenmorepolice.org>; Priutt, Mark - V. of Alden <map1sultan@aol.com>; Rachel Buchanan <RTBuchanan@nyseg.com>; RGreiss@verizon.net; Rick Myers <rick@lnofd.com>; 'Rinow, Daniel' <cappy5022@verizon.net>; 'Robinson, Scott' <srobinson@lancastervillage.org>; Ronald Rozler - Town of Lancaster (Rrozler@lancasterny.gov) <Rrozler@lancasterny.gov>; Roorbach, James <jayroor@buffalo.edu>; Rovnak, Vincent <vrovnak@gmail.com>; Savage, Richard <Richard.Savage@erie.gov>; Schreiber, David <gds2857@gmail.com>; Scott Lycett <scott.lycett@thruway.ny.gov>; Sean Crotty (scrotty@thpdny.org) <scrotty@thpdny.org>; Sheedy, Ryan <Ryan.Sheedy2@erie.gov>; spilsbury@westsenecapolice.org; Stella, Julianna <Julianna.stella2@redcross.org>; 'Stickney, Bob' <bstick@roadrunner.com>; Stowell, Greg <gstowell@buffalo.edu>; 'supervisor@brantny.com' <supervisor@brantny.com>; 'Taylor, Randy' <scio@verizon.net>; Tuberdyke, Mike <mjtuberdyke@bfdny.org>; 'Unverdorben, David' <David1843@aol.com>; Village of Angola Clerk <angolaclerk@verizon.net>; Wachowiak, Terry <twachowiak@rochester.rr.com>; Walter Raichel (wraichel@gmail.com) <wraichel@gmail.com>; Whittington Jr., Gerard J. <Gerard.Whittington@erie.gov>; 'Wieckowski, Gene' <wrednek@aol.com>; William Laing (bill@edenny.gov) <bill@edenny.gov>; 'Williams, Bob' <bobpegwms@roadrunner.com>; 'Willibey, Mike' <willibey.michael@dol.gov>; Wohlhueter, Scott <swohlhueter90@yahoo.com>; Wolf, John <publicsafety@lackny.com>; Young, Keith <kcy9540@aol.com>; Zurbrick, Patty

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

<patmarty@aol.com>; Zylka, Scott <Scott.Zylka@erie.gov>; Adamski, Dean <Dean.Adamski@erie.gov>; aldenmayor@rochester.rr.com; Beverly Gambino (beverlygambino@gmail.com) <beverlygambino@gmail.com>; Beverly Gambino (beverlygambino@outlook.com) <beverlygambino@outlook.com>; Brian Kulpa - Town of Amherst (bkulpa@amherst.ny.us) <bkulpa@amherst.ny.us>; Byron Brown (bbrown@city-buffalo.com) <bbrown@city-buffalo.com>; Calhoun, Marilynn <assocofecgov@roadrunner.com>; Carl Patterson - carl.patterson@perrysicecream.com <carl.patterson@perrysicecream.com>; Clyde Drake <concordtownsupervisor@gmail.com>; Dave Cummings - dcummings@townofnewstead.com <dcummings@townofnewstead.com>; David Smith <dsmith@gowcsd.org>; Dennis Powers - supervisor@elmanewyork.com <supervisor@elmanewyork.com>; Diane Benczkowski (dbenczkowski@tocny.org) <dbenczkowski@tocny.org>; Dickson, Gary <gdickson@twsny.org>; Earl Gingerich Jr. - egingerich@townofmarilla.com <egingerich@townofmarilla.com>; Joe Emminger <jemminger@tonawanda.ny.us>; Gail Nicholson <mayorsec@lackny.com>; Gene Majchrzak <majchrzakg@orchardparkny.org>; Geoff Szymanski <mayor@lackny.com>; Hoisington, Jere <farnhammayor@roadrunner.com>; Howard "Hub" Frawley <angolaclerk@verizon.net>; Hutchinson, Jan <villageclerk@villageofnorthcollins.org>; James Bach - jbach@townofaurora.com <jbach@townofaurora.com>; James DePasquale (james.depasquale@townofcolden.com) <james.depasquale@townofcolden.com>; James Niwinski (sloanny@roadrunner.com) <sloanny@roadrunner.com>; James Shaw <jshaw@townofhamburgny.com>; Jason Keding <supervisorkeding@gmail.com>; JoAnn Litwin Clinton <Mayor@orchardparkvillage.org>; John Tobia (jtobia@northcollinsny.org) <jtobia@northcollinsny.org>; Kenneth Martin <ken.martin@townofcollins.com>; County Executive <County.Executive@erie.gov>; Mary Nytz-Hosler (mhosler@townofevans.org) <mhosler@townofevans.org>; Mary Nytz-Hosler (supervisor@townofevans.org) <supervisor@townofevans.org>; Melissa Hartman - mhartman@edenny.gov <mhartman@edenny.gov>; Michael Kasprzyk - Town of Holland (mkasprzyk@townofhollandny.com) <mkasprzyk@townofhollandny.com>; Michael Petrie - voboffice@aol.com <voboffice@aol.com>; Patrick Casilio (pcasilio@clarence.ny.us) <pcasilio@clarence.ny.us>; Patrick Mang - mayor@vi.kenmore.ny.us <mayor@vi.kenmore.ny.us>; Patrick Mang (kjohnson@vi.kenmore.ny.us) <kjohnson@vi.kenmore.ny.us>; Peter Mercurio - mayor@east-aurora.ny.us <mayor@east-aurora.ny.us>; Peterson, Kevin <kpeterson@villageofdepew.org>; Rick Davis - City of Tonawanda (mayor@tonawandacity.com) <mayor@tonawandacity.com>; Rickey Venditti - rvenditti@moog.com <rvenditti@moog.com>; Rogers, Deborah <drogers@village.williamsville.ny.us>; Ronald Ruffino (rruffino@lancasterny.gov) <rruffino@lancasterny.gov>; Ruth Hromchak <hromchakr@orchardparkny.org>; Sullivan, Kelly <Kelly.Sullivan@erie.gov>; supervisor@brantny.com; Thomas Ferrucci <tom@idealconcreteinc.com>; Thomas Moses - mayor@villagehamburg.com <mayor@villagehamburg.com>; Whitney, John <jwhitney@grand-island.ny.us>; Whyte, Maria <Maria.Whyte@erie.gov>; William Krebs - wkrebs@villageofspringvilleny.com <wkrebs@villageofspringvilleny.com>; William Schroeder <wschroeder@lancastervillage.org>
Cc: 'Subbio, Tony' <Tony.Subbio@tetratech.com>
Subject: Hazard Mitigation Plan - update 12-2-2020
Importance: High

Good afternoon!

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

We hope you enjoyed the Thanksgiving holiday with your families. Now that we're all back to work, we wanted to follow up with you on the set of information gathering worksheets that was discussed at the Hazard Mitigation Planning Partnership Kickoff Meetings on November 18th and 19th. You can find the worksheets for download on the project website, here: https://www.eriecountynyhmp.com/municipal-information/.

Here is some information for you as you work through the worksheets:

1. You are not alone in completing the worksheets. You should work with a team of officials from your jurisdictions to fill them out. The Worksheet Outline lists the officials who might be involved in filling out each one. You will also be assigned a planner from our consultant team who will reach out to offer assistance.
2. More information is better. Even if you see a yes/no question, any details you can provide will make our plan stronger.
3. It's best to fill them out in Word rather than printing them out and writing in your answers, so that the rows give you enough room to answer, but if filling them out by hand is easiest for you, that's fine too.
4. **Worksheet 1 – Evaluation of Identified Hazards and Risks** – Please note how your municipality's vulnerability has changed, and identify any additional hazards you think we should examine. Also, please provide some details on how the events listed impacted your municipality, and identify any other hazard events that impacted you. On the last page, tell us about any problems that hazards present in your community, or anything that you'd like to address in this planning process.
5. **Worksheet 2 – Capability Assessment and Integration**
    a. Planning and Regulatory Capability
        i. Identify any local plans and/or regulations that you have in effect in your municipality. For any that you say you have, you must fill in the entire row. Provide a code citation. For regulations, that's the local law number or chapter of your municipal code, and the date. For plans, we need the formal title of the plan and the date it was last updated.
        ii. In the comments, describe how the regulation or plan helps reduce long-term vulnerability. For instance, if you have zoning, does it limit development in hazard areas like the floodplain?
    b. Administrative and Technical Capability
        i. Identify what staff members or technical expertise you have on staff (full time, part time, or volunteer for your municipality), or who you have access to through the county or another organization. If you have that resource, identify who it is by organization/position, not by a person's name.
    c. Community Classifications
        i. Your code enforcement officer should know your BCEGS rating.
        ii. Your fire department might know your ISO Fire Protection Class, if none of your municipal officials know.
        iii. There are links on the last page for finding out your BCEGS rating and Fire Protection Class, as well.
6. **Worksheet 3 – NFIP Floodplain Administrator Questionnaire** –your floodplain administrator will lead the charge on filling this one out, but may need help from other officials (zoning,

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

codes enforcement, etc.). Again, more information is better. Really describe your municipality's programs, rather than just saying yes/no.

7. **Worksheet 4 – Mitigation Action Review Worksheet** – see below
8. **Worksheet 5 – New Development and Building Permits** – identify the number of permits issued in your municipality in each of the last several years (by occupancy), the number of those permits that were for development in the Special Flood Hazard Area (SFHA) – the floodplain, any major development in the last 5 years, and any known or proposed major development on the horizon. For major development, we're looking for any commercial or industrial development, and any apartment buildings, subdivisions, etc. You don't need to list every single residential structure that was built.
9. **Worksheet 6 – Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing** –
    a. Evacuation Routes – what are the main routes you would use to evacuate your municipality, particularly from a flood?
    b. Sheltering Needs – provide all of the information requested for each facility that has been identified as a potential shelter.
    c. Temporary Housing – the State requires that we identify where we could place FEMA trailers or other temporary housing to help people displaced by an emergency. List any parks, open lots, RV campgrounds, etc. where you could theoretically place temporary housing. The sites do not need to be ready to accept them right now, but if you identify a site that isn't ready yet, the plan will have an action to meet the requirements.
    d. Permanent Housing – the State also requires that we also identify potential sites that can be developed with new permanent housing. Of course, it depends on the landowner being willing to sell, a developer being willing to build new housing, and other factors, but identify any targeted growth areas or sites that have already been identified for future development in your municipality.

Worksheet 4 is different for each jurisdiction, as it capture information about the actions that your municipality included in the 2015 plan. <u>The Erie County Water Authority, Village of Farnham, and Town of Wales do not have a Worksheet 4</u>, because there were no jurisdiction-specific actions in the 2015 plan for those jurisdictions.

- Brief Summary of the Original Problem - the 2015 HMP did not identify the problem being solved for each action, but if you know what problem was to be solved by each, enter it.
- Status (In Progress, Ongoing, No Progress, Complete) – choose the status of the action. If you haven't gotten the project done (or even started) in the last five years, that's OK- we just need to know the status.
- Evaluation of Success (if project status is complete) – these columns are filled in ONLY FOR COMPLETED ACTIONS. If you completed an action, tell us how much it cost, what level of protection it provides (to the 10-year storm, to the 500-year flood, etc.), and describe the benefits it provides in terms of damages avoided or other evidence that it was a successful project.
- In the right-most column, let us know what you want to do with the action.
    - Should it be included in the updated plan or discontinued? If it's no longer relevant, or not specific enough for the updated plan, it can be discontinued.
    - If you want to include it in the updated plan, is the wording OK, or do you want to

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

update it at all?
    - If you discontinued the action, say why.
- On the last page, identify any other actions that you carried out that weren't on the list from the 2015 plan. For instance, did you replace a bridge, update a culvert, update a plan or regulation, etc.? Also include any projects that you know you want to include in the updated plan.

If you need the worksheets emailed to you, or sent via hard copy, please let me know.

Please work with your colleagues to complete and return the worksheets **by December 22, 2020.**

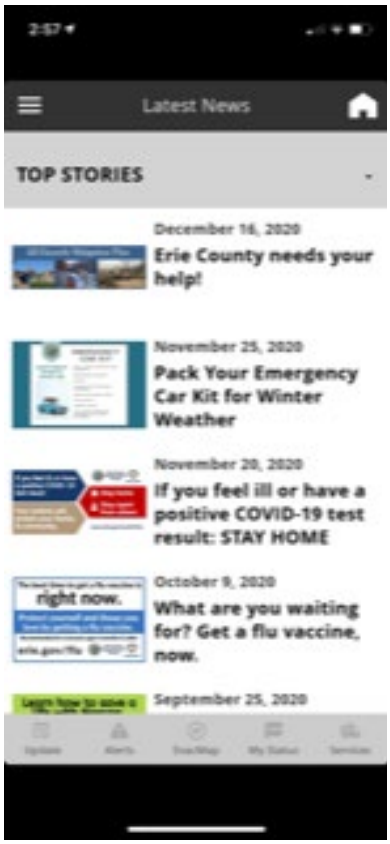
While you're thinking about the HMP, why not provide some additional information on the hazards that impact our communities? Please go to our online problem mapping tool (https://arcg.is/9bzzr) to identify places where hazards affect your municipality.

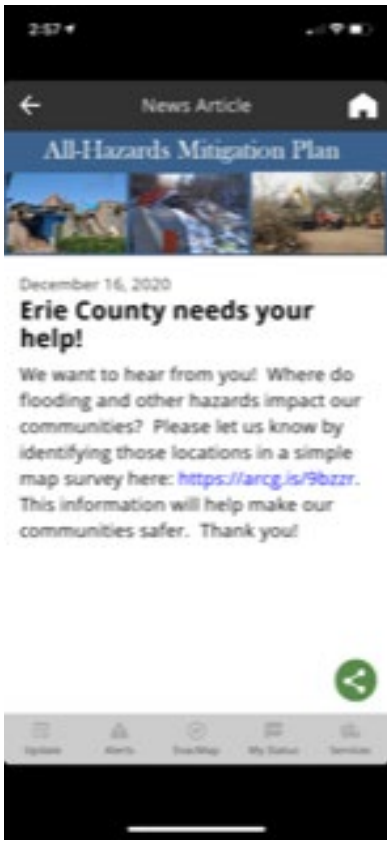
Please let me know if you have any questions. Thank you!

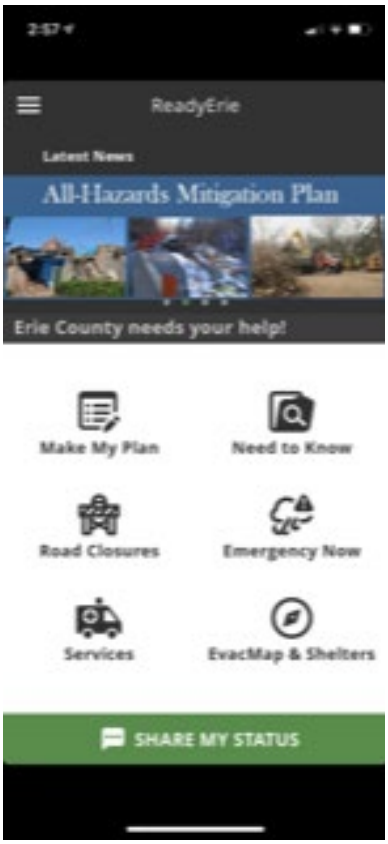
Best,
Greg Butcher & Melissa Calhoun

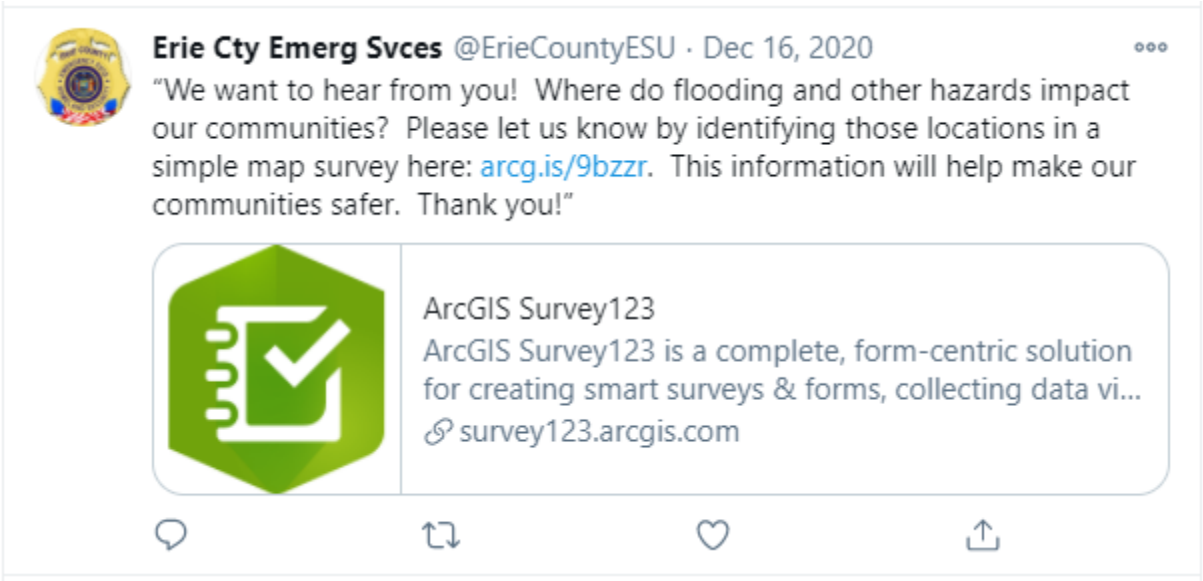
Melissa J. Calhoun – Public Safety Officer – Special Assistant
Erie County – Department of Homeland Security & Emergency Services
45 Elm Street – Buffalo, NY 14203
P: 716-858-8440 F: 716-858-7937 C: 716-432-3086
Melissa.Calhoun@erie.gov http://www.erie.gov

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY









Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie Cty Emerg Svces

@ErieCountyESU Follows you

Department of Homeland Security & Emergency Services works closely with the emergency services and public safety community in Erie County, NY

Buffalo, NY erie.gov/emergencyservi...

Joined September 2009

483 Following **8,748** Followers

Followed by WGRZ TrafficTracker2, Jon Schultz, timothy yaeger, and 59 others

Tweets | Tweets & replies | Media | Likes

Erie Cty Emerg Svces @ErieCo... · 22h

"We want to hear from you! Where do flooding and other hazards impact our communities? Please let us know by identifying those locations in a simple map survey here: arcg.is/9bzzr. This information will help make our communities safer. Thank you!"

ArcGIS Survey123
survey123.arcgis.com

1 1

Promoted Tweet

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan Update - Individual Mitigation Survey

Erie County Residents,

Erie County has assembled a team to update our hazard mitigation plan which addresses hazards that impact our communities. Please help us plan for future disasters by completing this survey (will take approximately 15 minutes).

Hazard mitigation **is any action taken to reduce the loss of life and property by lessening the impact of disasters. These disasters include floods, severe storms, extreme temperatures, and others.**

This survey is designed to gather information from around Erie County to help us better coordinate activities and reduce the risk of injury or property damage. These questions are for information-gathering only and do not necessarily reflect any intent or future priorities of any governing body. This information will be shared with municipal, state, federal and county entities for planning purposes only.

You will be asked if you live in a floodplain. If you do not know, or are not sure, please check the FEMA website: https://msc.fema.gov/portal/home.

We would like to thank you in advance for your cooperation and participation.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan Update - Individual Mitigation Survey

Hazard Information

In this section, we are looking for your input on the types of hazards that impact Erie County and its residents. Please answer the following questions to help us understand the concerns throughout the county.

1. In the past 10 years, which of the following hazard events has Erie County experienced? Check all that apply.

- [ ] Coastal Erosion
- [ ] Coastal Storm (winds, storm surge)
- [ ] Communications Outage
- [ ] Cyber Attack
- [ ] Expansive Soils
- [ ] Flooding - Street/Property
- [ ] Flooding - Stormwater
- [ ] Flooding - Basement
- [ ] Flooding - 1st floor or above
- [ ] Hazardous Materials Release
- [ ] Other (please specify)
- [ ] Pandemic
- [ ] Power Outage
- [ ] Severe Weather (tornado, thunderstorm, hail)
- [ ] Severe Winter Storms (blizzard, heavy snow, ice)
- [ ] Water/Sewer Outage
- [ ] Wildfire
- [ ] Earthquake
- [ ] Extreme Temperatures (heat and cold)
- [ ] Climate Change (sea level rise or other)
- [ ] None

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

2. How concerned are you about the following natural hazards in Erie County? Please check one for each hazard.

	Not Concerned	Somewhat Concerned	Concerned	Very Concerned	Extremely Concerned
Climate Change (sea level rise or other)	☐	☐	☐	☐	☐
Coastal Erosion	☐	☐	☐	☐	☐
Coastal Storms (winds, storm surge)	☐	☐	☐	☐	☐
Communications Outage	☐	☐	☐	☐	☐
Cyber Attack	☐	☐	☐	☐	☐
Earthquake	☐	☐	☐	☐	☐
Extreme Temperatures (heat and cold)	☐	☐	☐	☐	☐
Expansive Soils	☐	☐	☐	☐	☐
Flooding - Street/Property	☐	☐	☐	☐	☐
Flooding - Stormwater	☐	☐	☐	☐	☐
Flooding - Basement	☐	☐	☐	☐	☐
Flooding - 1st Floor or above	☐	☐	☐	☐	☐
Hazardous Materials Releases	☐	☐	☐	☐	☐
Pandemic	☐	☐	☐	☐	☐
Power Outage	☐	☐	☐	☐	☐
Severe Weather (tornado, thunderstorm, hail)	☐	☐	☐	☐	☐
Severe Winter Storms (blizzard, heavy snow, ice)	☐	☐	☐	☐	☐
Water/Sewer Outage	☐	☐	☐	☐	☐
Wildfire	☐	☐	☐	☐	☐
Other Natural Hazard	☐	☐	☐	☐	☐

Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

3. How prepared is your household to get along without electricity or natural gas for up to five days?

- ◯ Not at all prepared
- ◯ Somewhat prepared
- ◯ Very prepared

4. Please rank how prepared you feel and your household are for disaster events likely to occur within your community. Rank on a scale of 1 to 5, with 5 representing the most prepared.

1 (least) 3 5 (most)

5. How do you receive your information concerning a disaster? Check all that apply.

- ☐ County Website
- ☐ Municipal Websites
- ☐ Newspaper
- ☐ Municipal E-Mail
- ☐ Police, Fire, EMS, 9-1-1
- ☐ Telephone Book
- ☐ Informational Brochures
- ☐ Public Meetings, Workshops, Public Awareness Events
- ☐ Schools
- ☐ TV News
- ☐ TV Advertising
- ☐ Radio News
- ☐ Radio Advertisements
- ☐ Outdoor Advertisements
- ☐ Internet
- ☐ Social Media
- ☐ Chamber of Commerce
- ☐ Academic Institutions
- ☐ Books
- ☐ Public Library
- ☐ Mass Notification System
- ☐ Other (please specify)

6. Of the answers you provided above, what are the top three methods you use?

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

7. Which of the following steps has your household taken to prepare for a local hazard event? Check all that apply.

- [ ] Received first aid/CPR training
- [ ] Made an emergency plan
- [ ] Designated a meeting place
- [ ] Identified utility shutoffs
- [ ] Prepared a disaster supply kit
- [ ] Installed smoke detectors on each level of home
- [ ] Stored food and water
- [ ] Stored flashlights and batteries
- [ ] Stored a battery-operated radio
- [ ] Stored a fire extinguisher
- [ ] Stored medical supplies (first aid kit, medications)
- [ ] Registered to receive emergency alerts (i.e. ReadyErie, NY Alert)
- [ ] Purchased additional insurance to cover losses (i.e. flood insurance)
- [ ] Identified the location of the nearest emergency shelter
- [ ] Received emergency preparedness information from a government source
- [ ] Other (please specify)

8. In the past, has your home been damaged by a hazard event? For example, the basement of your home flooded and damaged the hot water heater.

- ( ) Yes
- ( ) No
- ( ) Other (please specify)

9. If you answered "yes" to question #8, did you report the damages to your insurance company or local officials?

- ( ) Yes
- ( ) No
- ( ) Other (please specify)

10. If you answered "no" to question #9, why did you not report the damages?

11. Please explain the damage your structure sustained and when it occurred.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

12. In the last 10 years, were you evacuated from your home as a result of a disaster (e.g. flooding)? If so, how long were you displaced? Did you go to a shelter?

13. To the best of your knowledge, is your property located in a designated floodplain? If you do not know, click here to find out.

- ◯ Yes
- ◯ No
- ◯ Don't Know

14. If your property is in the floodplain, do you have flood insurance?

- ◯ Yes
- ◯ No
- ◯ N/A

15. If your property is located outside of the floodplain, do you have flood insurance?

- ◯ Yes
- ◯ No
- ◯ N/A

16. If you do NOT have flood insurance, why not? Check all that apply.

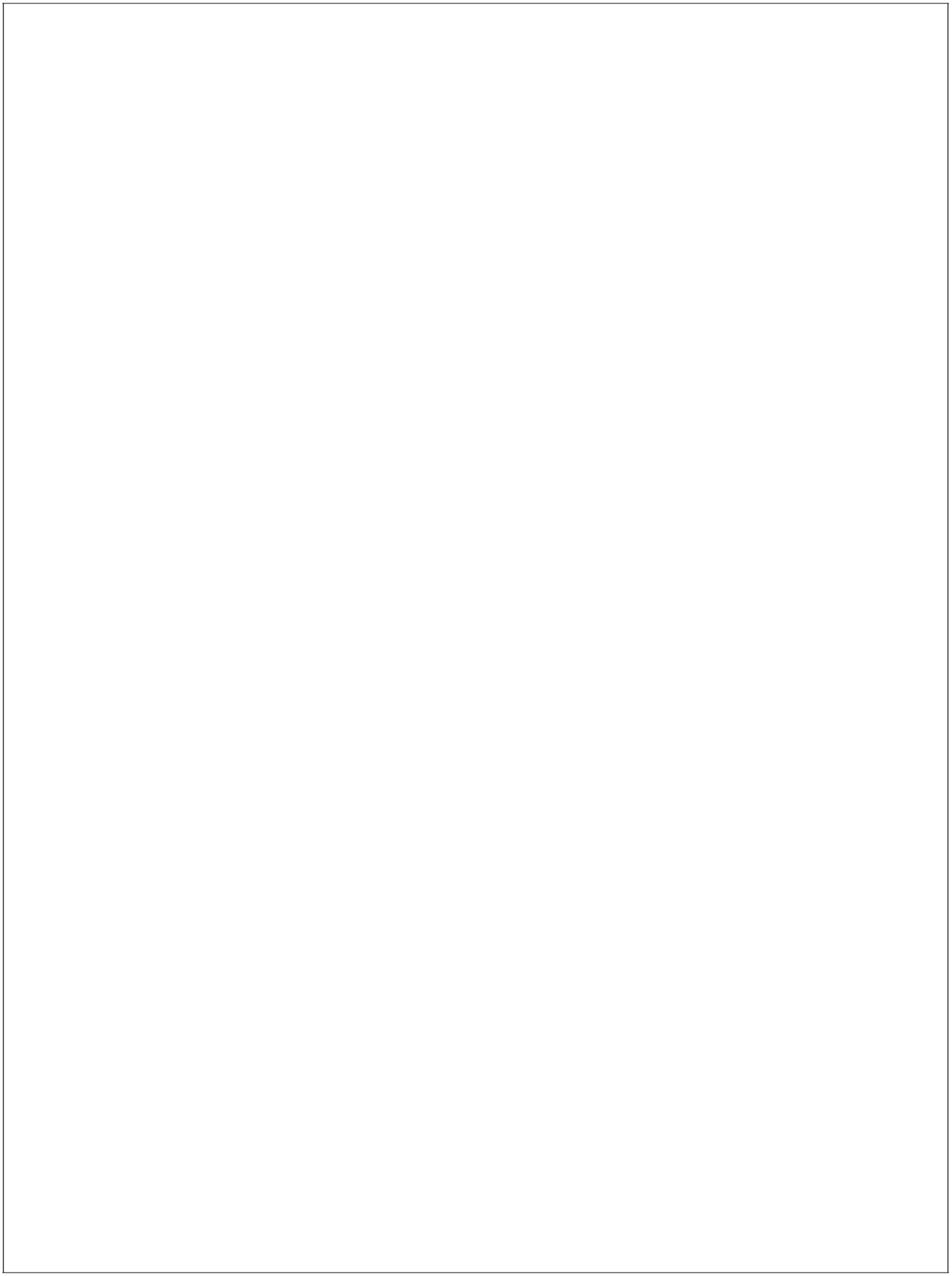
- ☐ I don't need it
- ☐ My property has never flooded
- ☐ My property is located on high ground
- ☐ It is too expensive
- ☐ Other (please specify)
- ☐ Not familiar with it/don't know about it
- ☐ Insurance company will not provide
- ☐ I believe my homeowners insurance will cover me

17. Do you or did you have problems getting homeowners/renters insurance due to risks from hazards?

- ◯ Yes
- ◯ No

18. If you answered "yes" to the previous question, please identify the hazard risk that caused you to have problems obtaining homeowners/renters insurance.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan Update - Individual Mitigation Survey

Hazard Mitigation

As defined by FEMA, mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. In order for mitigation to be effective, we need to take action now - before the next disaster - to reduce human and financial consequences later.

Effective mitigation requires that we all understand local risks, address the hard choices, and invest in long-term community well-being. Without mitigation actions, we jeopardize our safety, financial security and self-reliance.

In this section of the survey, we want to hear from you how Erie County can help mitigate the county and become more resilient before the next storm strikes.

19. Please identify any specific vulnerabilities that you are aware of in Erie County (e.g. floodprone areas or specific properties, critical facilities that lack backup power, etc.). Please list street names and other specific identifiers if possible.

20. Please identify any specific vulnerabilities that you are aware of in the municipality you live in (e.g. floodprone areas or specific properties, critical facilities that lack backup power, etc.). Please list street names and other specific identifiers if possible.

You can also plot these vulnerabilities on a map using a simple mapping tool that was developed for this planning process. Click here.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

21. What types of projects do you believe local, county, state, or federal government agencies could be doing to reduce the damage and disruption of disasters in Erie County? Select your top three choices.

- [ ] Retrofit and strengthen essential facilities such as police, schools, and hospitals
- [ ] Retrofit infrastructure, such as elevating roadways and improving drainage systems
- [ ] Work on improving the damage resistance of utilities (electricity, communications, water/wastewater facilities etc.)
- [ ] Install or improve protective structures, such as floodwalls, levees, bulkheads, and firebreaks
- [ ] Enhance stream maintenance programs/projects
- [ ] Replace inadequate or vulnerable bridges and causeways
- [ ] Strengthen codes, ordinances and plans to require higher hazard risk management standards and/or provide greater control over development in high hazard areas
- [ ] Buy out flood prone properties and maintain as open space
- [ ] Inform property owners of ways they can mitigate damage to their properties
- [ ] Improve access to information about hazard risks and high-hazard areas
- [ ] Assist vulnerable property owners with securing funding to mitigate their properties
- [ ] Create a stream gage and weather monitoring program to provide more accurate data and warnings
- [ ] Other (please specify)

22. Do you feel that your municipality is doing enough towards flood prevention and mitigation or prevention/mitigation from other hazards?

- ◯ Yes
- ◯ No

Please provide details for your answer.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

23. If your property were located in a designated high-hazard area (for example, NFIP flood zone) or had received repeated damages from a disaster event, would you consider any of the following options?

If your response is dependent on certain factors, such as the funding source, please indicate those factors in the following question.

	Yes	No	Unsure
Having your property bought out	○	○	○
Moving your structure to another property or a less risky part of your property	○	○	○
Elevating your structure	○	○	○
Floodproof your structure	○	○	○
Look into other ways to mitigate	○	○	○

Other (please specify)

24. Please select the factor(s) that would influence your decision on the mitigation options listed above (buyout/acquisition, relocation, or elevation).

- ☐ Cost
- ☐ Unaware of available programs
- ☐ Do not have the means to move/relocate
- ☐ Length of process
- ☐ Other (please specify)

25. If you have already had to spend money to mitigate your property, how much have you spent and on what measures?

26. Which (if any) incentives would motivate you to spend money on protecting your home from the possible impacts of a disaster? Such as lower interest rates, grant funding, waivers, etc.

27. Please list any additional types of projects you believe local, county, state, or federal government agencies could be doing to reduce the damage and disruption in Erie County.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

28. Do you have any other comments, questions, or concerns regarding hazard mitigation in Erie County?

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan Update - Individual Mitigation Survey

General Household Information

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan. Please note that individual answers will not be published in the plan.

29. Please indicate the municipality in which you live:

- Akron (V)
- Alden (T)
- Alden (V)
- Amherst (T)
- Angola (V)
- Aurora (T)
- Blasdell (V)
- Boston (T)
- Brant (T)
- Buffalo (C)
- Cheektowaga (T)
- Clarence (T)
- Colden (T)
- Collins (T)
- Concord (T)
- Depew (V)
- East Aurora (V)
- Eden (T)
- Elma (T)
- Evans (T)
- Farnham (V)
- Gowanda (V)
- Grand Island (T)
- Hamburg (T)
- Hamburg (V)
- Holland (T)
- Kenmore (V)
- Lackawanna (C)
- Lancaster (T)
- Lancaster (V)
- Marilla (T)
- Newstead (T)
- North Collins (T)
- North Collins (V)
- Orchard Park (T)
- Orchard Park (V)
- Sardinia (T)
- Sloan (V)
- Springville (V)
- Tonawanda (T)
- Tonawanda (C)
- Wales (T)
- West Seneca (T)
- Williamsville (V)
- Other (please specify)

30. How long have you lived here?

- Less than 1 year
- 1 to 5 years
- 6 to 9 years
- 10 to 19 years
- 20 years or more

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

31. Do you own or rent your place of residence?

- ◯ Own
- ◯ Rent

32. What type of residence do you live in?

- ◯ Single-family detached
- ◯ Multi-family detached
- ◯ Town Home
- ◯ Other (please specify)
- ◯ Condominium
- ◯ Apartment Complex
- ◯ Commercial

33. If you received real estate disclosure information when you moved into your current residents, did your real estate agent or landlord explain the implications of living in a hazard risk zone and did you understand the information they presented?

- ◯ Yes
- ◯ Other (please specify)

34. Which of the following digital media outlets do you use and/or subscribe to receive general news and information about Erie County? Check all that apply.

- ☐ Facebook
- ☐ Twitter
- ☐ Mass Notification System
- ☐ Other (please specify)
- ☐ Email and/or text messages
- ☐ ReadyErie
- ☐ Local News

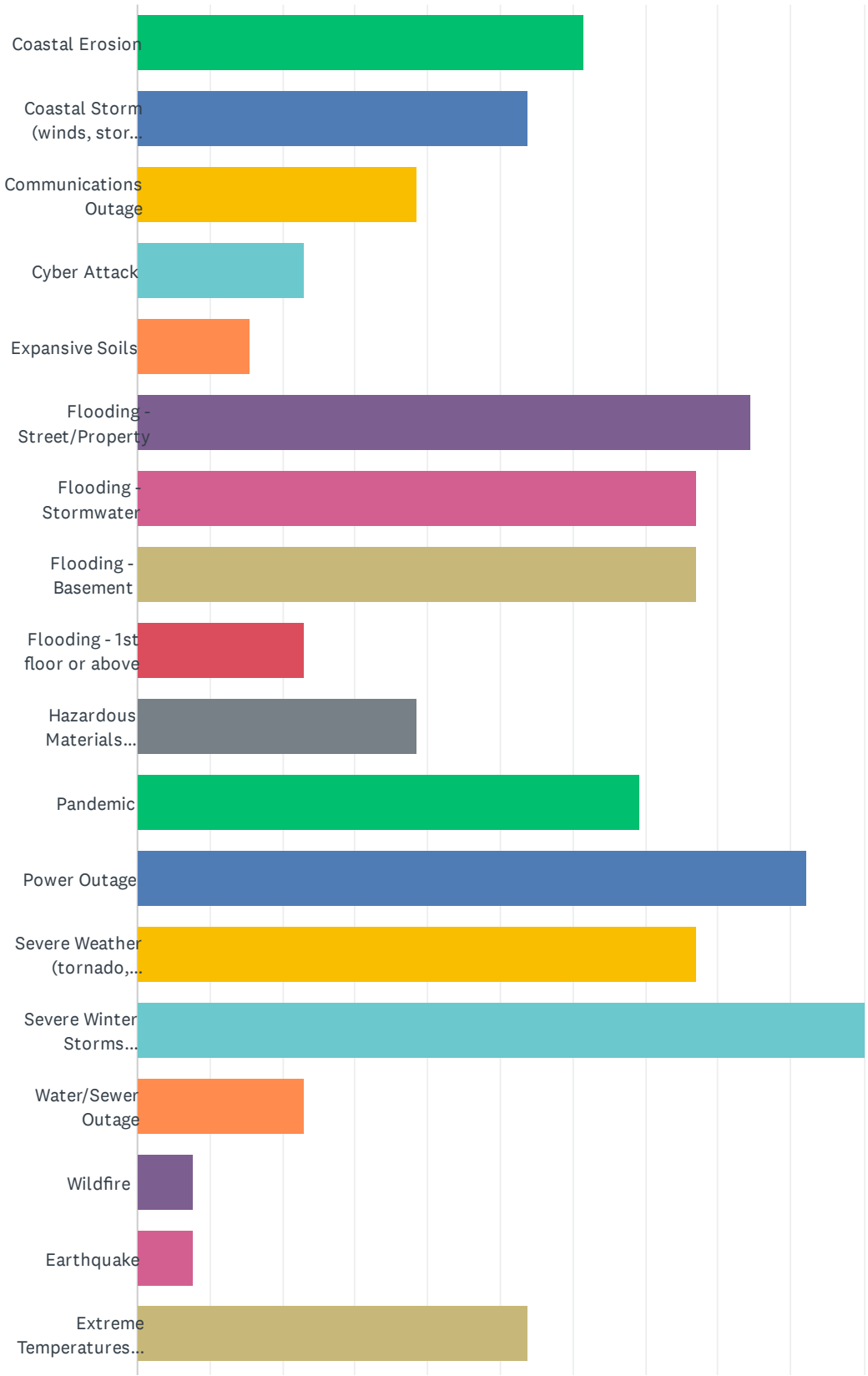
35. Please indicate your age range:

- ◯ Under 18
- ◯ 18 to 30
- ◯ 31 to 40
- ◯ 41 to 50
- ◯ 51 to 60
- ◯ 61+

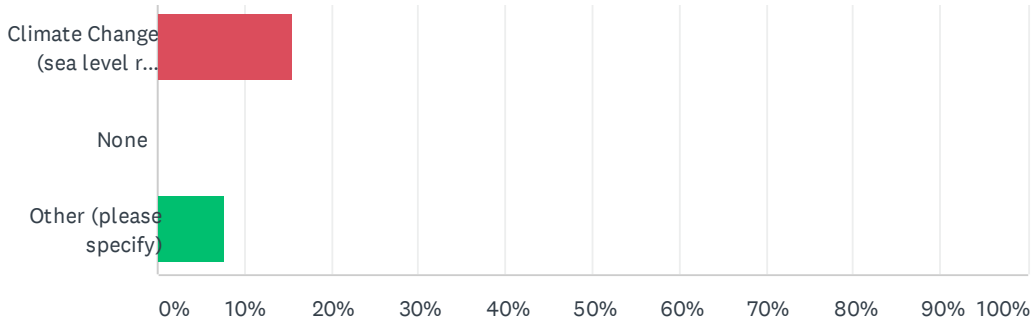
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q1 In the past 10 years, which of the following hazard events has Erie County experienced? Check all that apply.

Answered: 13 Skipped: 0



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



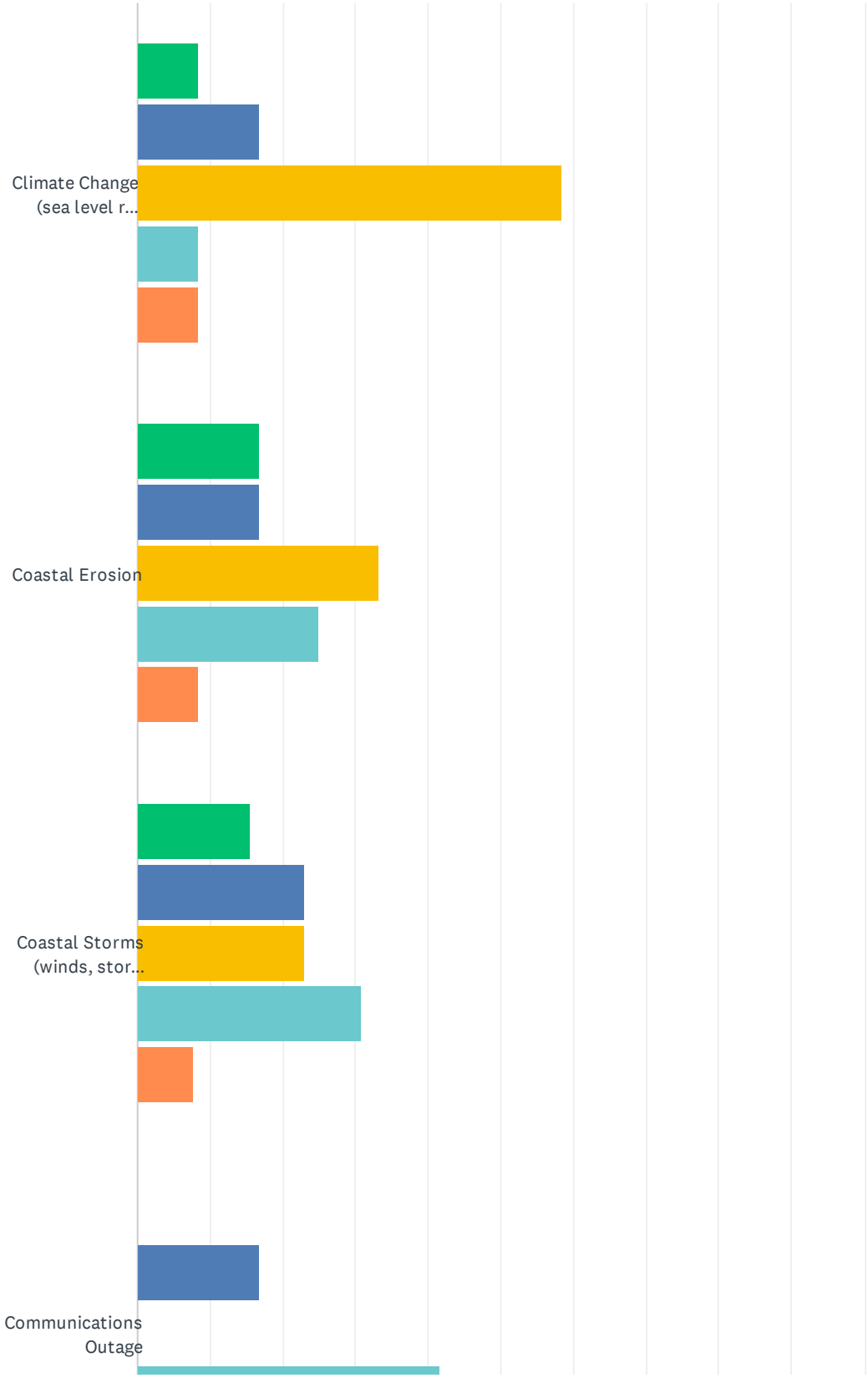
ANSWER CHOICES	RESPONSES	
Coastal Erosion	61.54%	8
Coastal Storm (winds, storm surge)	53.85%	7
Communications Outage	38.46%	5
Cyber Attack	23.08%	3
Expansive Soils	15.38%	2
Flooding - Street/Property	84.62%	11
Flooding - Stormwater	76.92%	10
Flooding - Basement	76.92%	10
Flooding - 1st floor or above	23.08%	3
Hazardous Materials Release	38.46%	5
Pandemic	69.23%	9
Power Outage	92.31%	12
Severe Weather (tornado, thunderstorm, hail)	76.92%	10
Severe Winter Storms (blizzard, heavy snow, ice)	100.00%	13
Water/Sewer Outage	23.08%	3
Wildfire	7.69%	1
Earthquake	7.69%	1
Extreme Temperatures (heat and cold)	53.85%	7
Climate Change (sea level rise or other)	15.38%	2
None	0.00%	0
Other (please specify)	7.69%	1
Total Respondents: 13		

#	OTHER (PLEASE SPECIFY)	DATE
1	Lake Erie at levels higher than long term averages	1/8/2021 5:33 PM

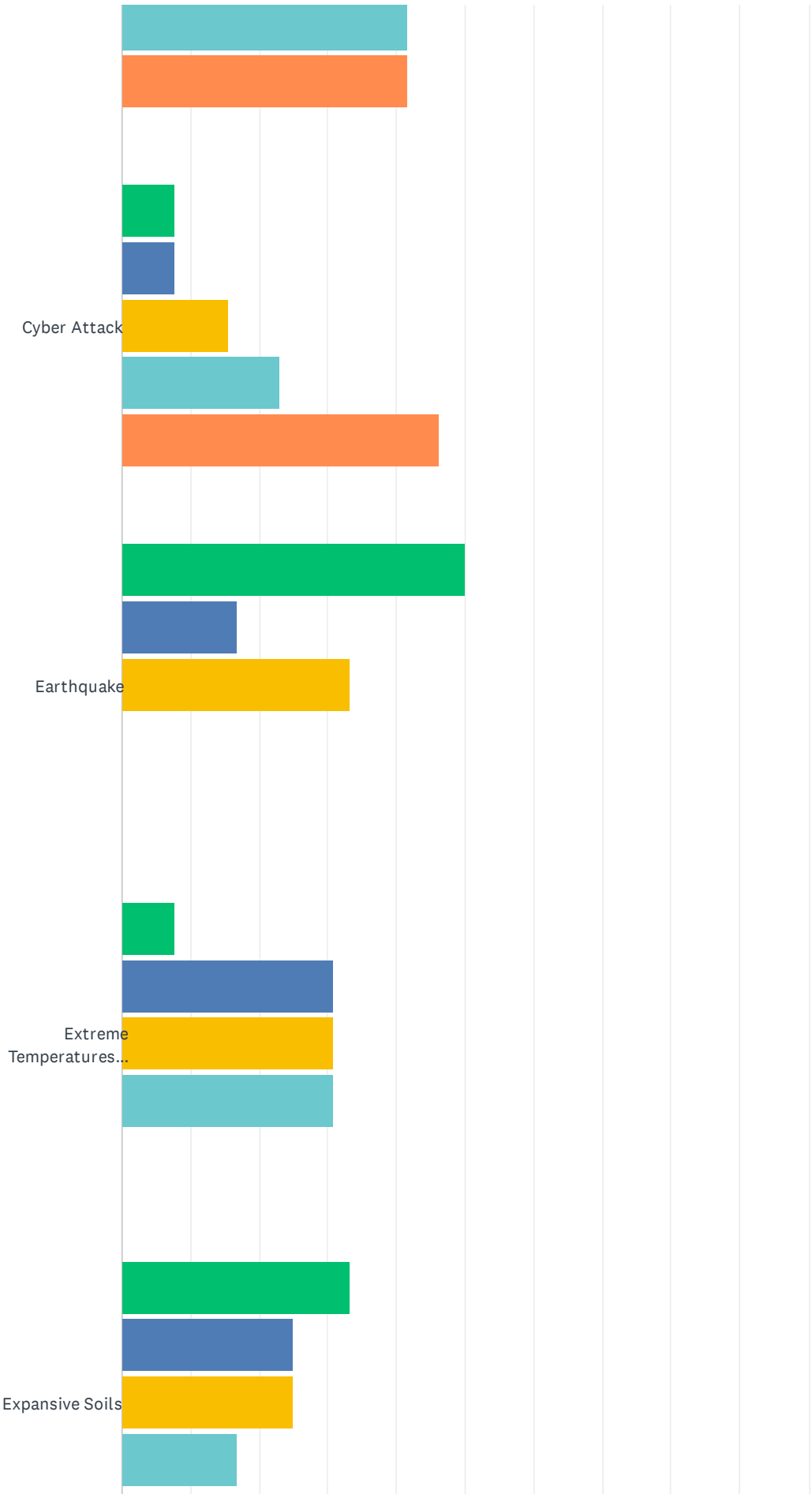
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q2 How concerned are you about the following natural hazards in Erie County? Please check one for each hazard.

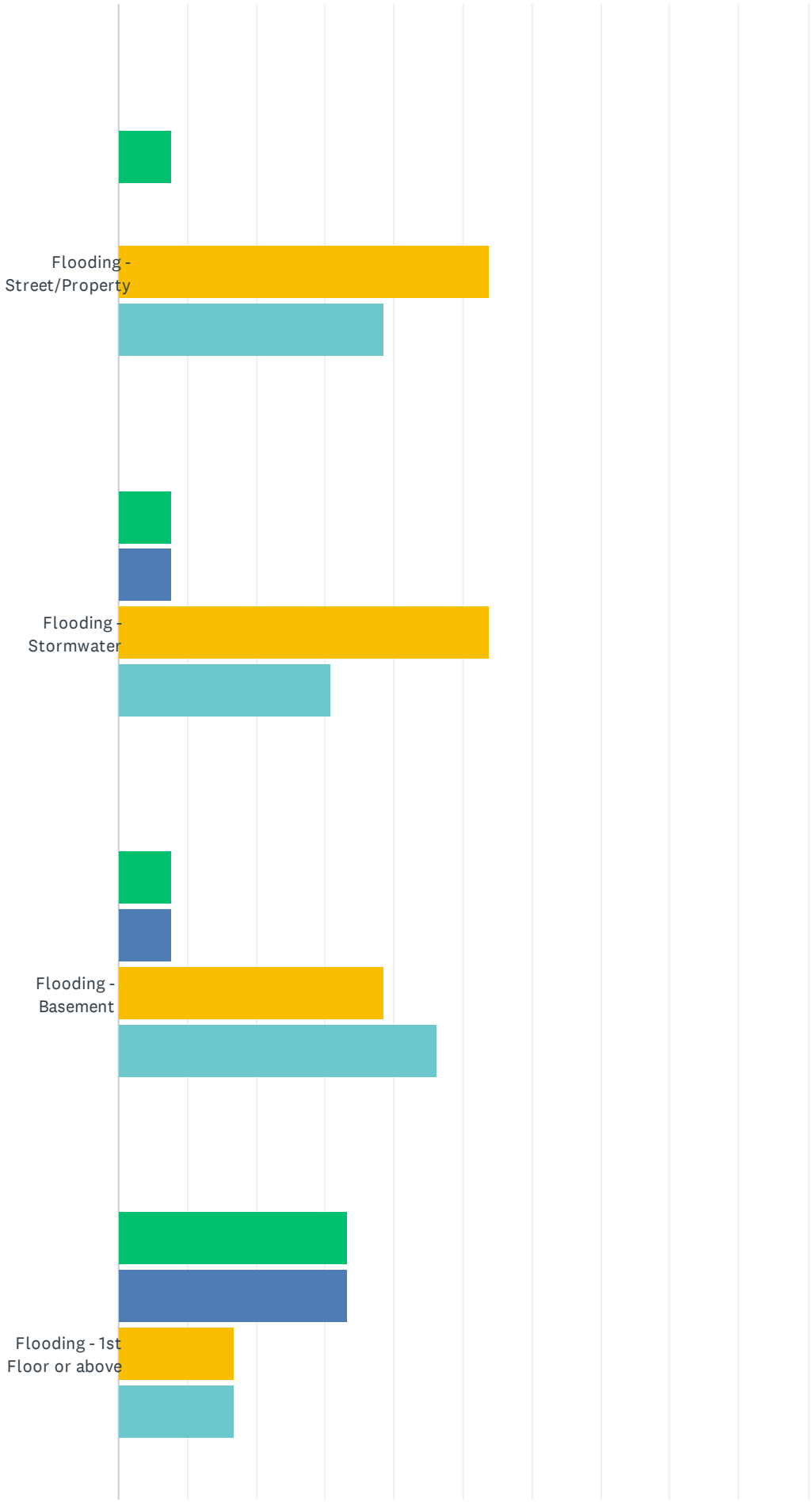
Answered: 13 Skipped: 0



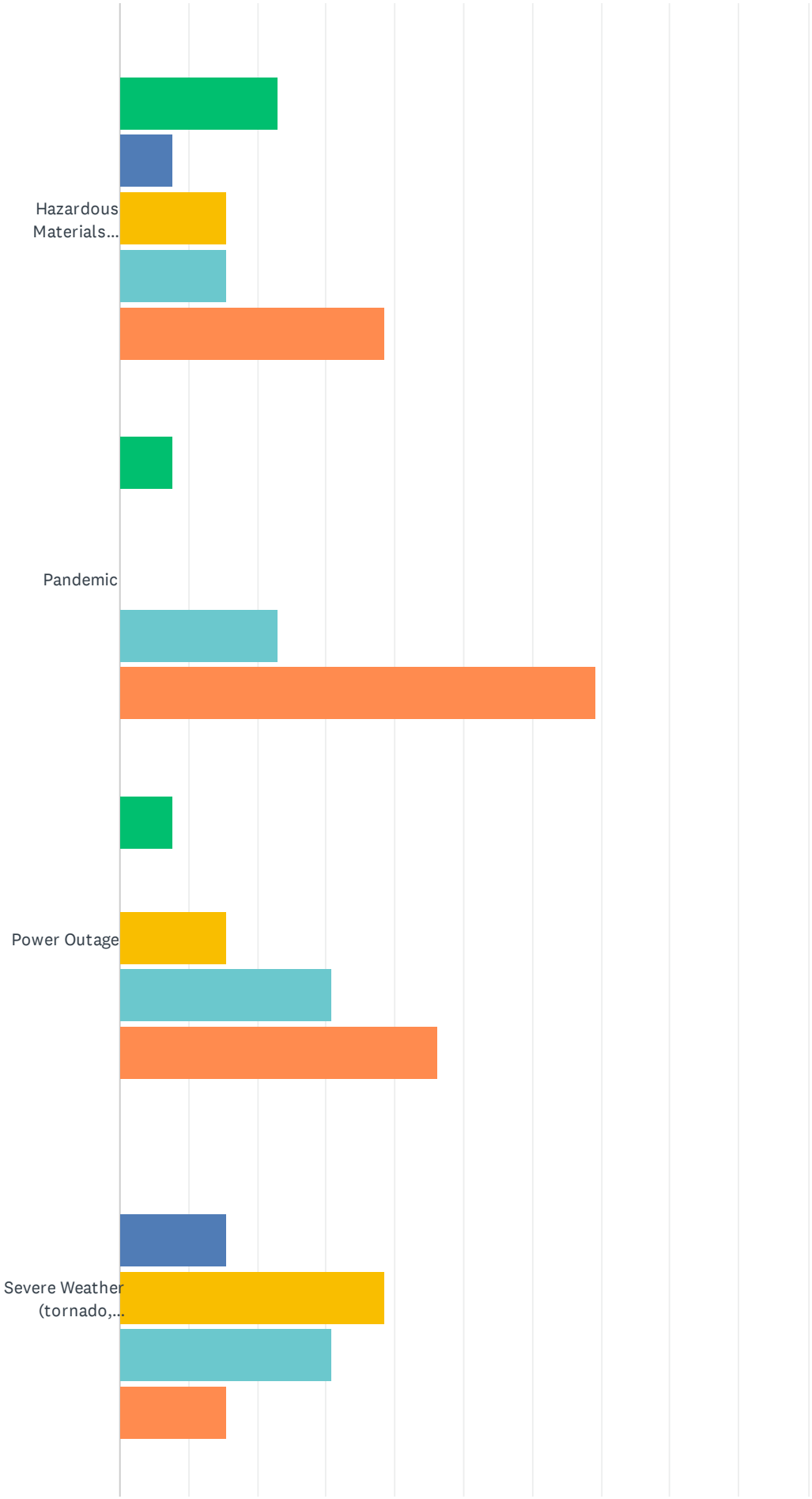
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



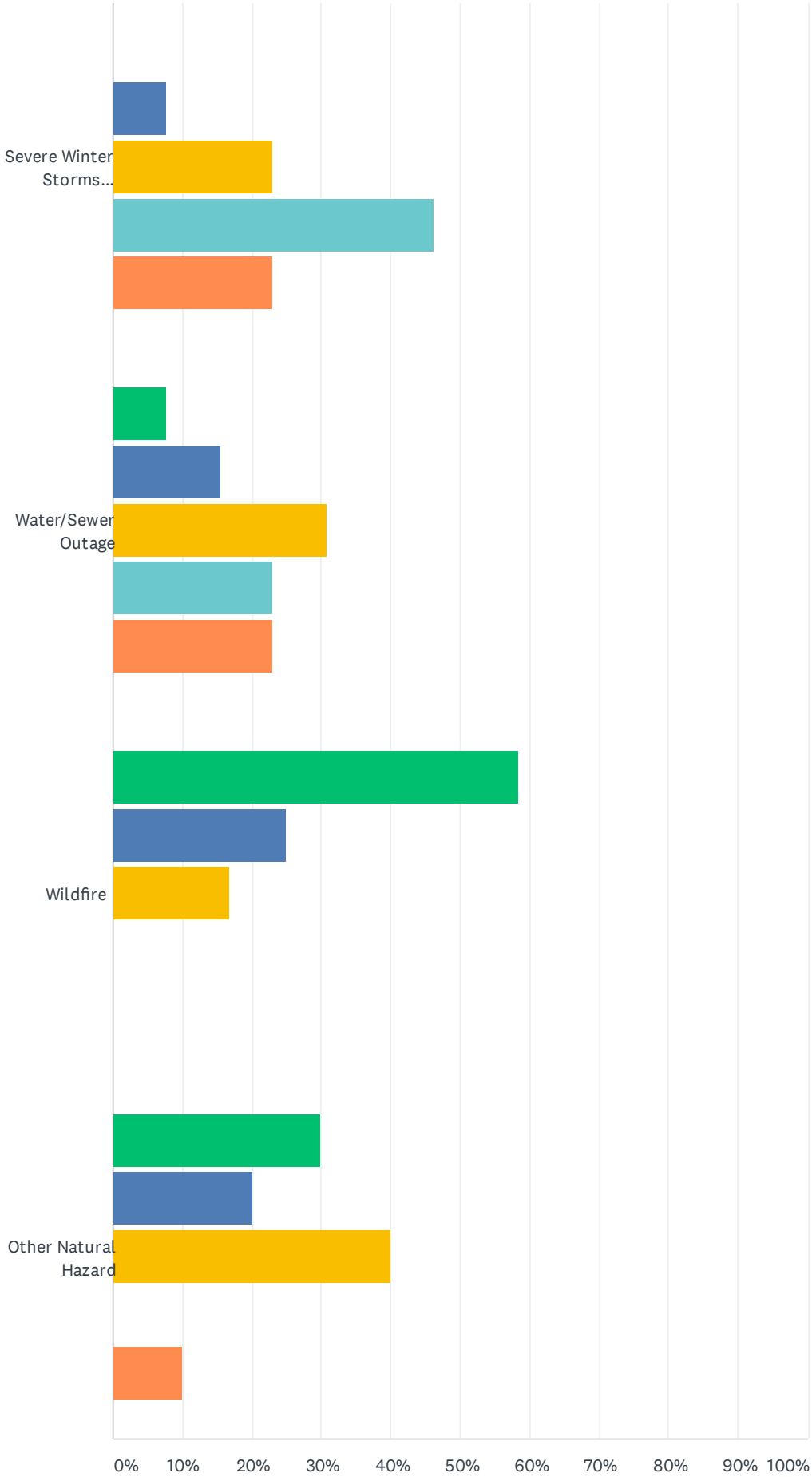
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



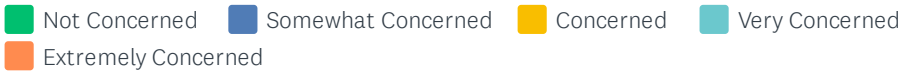
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



	NOT CONCERNED	SOMEWHAT CONCERNED	CONCERNED	VERY CONCERNED	EXTREMELY CONCERNED	TOTAL RESPONDENTS
Climate Change (sea level rise or other)	8.33% 1	16.67% 2	58.33% 7	8.33% 1	8.33% 1	12
Coastal Erosion	16.67% 2	16.67% 2	33.33% 4	25.00% 3	8.33% 1	12
Coastal Storms (winds, storm surge)	15.38% 2	23.08% 3	23.08% 3	30.77% 4	7.69% 1	13
Communications Outage	0.00% 0	16.67% 2	0.00% 0	41.67% 5	41.67% 5	12
Cyber Attack	7.69% 1	7.69% 1	15.38% 2	23.08% 3	46.15% 6	13
Earthquake	50.00% 6	16.67% 2	33.33% 4	0.00% 0	0.00% 0	12
Extreme Temperatures (heat and cold)	7.69% 1	30.77% 4	30.77% 4	30.77% 4	0.00% 0	13
Expansive Soils	33.33% 4	25.00% 3	25.00% 3	16.67% 2	0.00% 0	12
Flooding - Street/Property	7.69% 1	0.00% 0	53.85% 7	38.46% 5	0.00% 0	13
Flooding - Stormwater	7.69% 1	7.69% 1	53.85% 7	30.77% 4	0.00% 0	13
Flooding - Basement	7.69% 1	7.69% 1	38.46% 5	46.15% 6	0.00% 0	13
Flooding - 1st Floor or above	33.33% 4	33.33% 4	16.67% 2	16.67% 2	0.00% 0	12
Hazardous Materials Releases	23.08% 3	7.69% 1	15.38% 2	15.38% 2	38.46% 5	13
Pandemic	7.69% 1	0.00% 0	0.00% 0	23.08% 3	69.23% 9	13
Power Outage	7.69% 1	0.00% 0	15.38% 2	30.77% 4	46.15% 6	13
Severe Weather (tornado, thunderstorm, hail)	0.00% 0	15.38% 2	38.46% 5	30.77% 4	15.38% 2	13
Severe Winter Storms (blizzard, heavy snow, ice)	0.00% 0	7.69% 1	23.08% 3	46.15% 6	23.08% 3	13
Water/Sewer Outage	7.69% 1	15.38% 2	30.77% 4	23.08% 3	23.08% 3	13
Wildfire	58.33% 7	25.00% 3	16.67% 2	0.00% 0	0.00% 0	12
Other Natural Hazard	30.00% 3	20.00% 2	40.00% 4	0.00% 0	10.00% 1	10

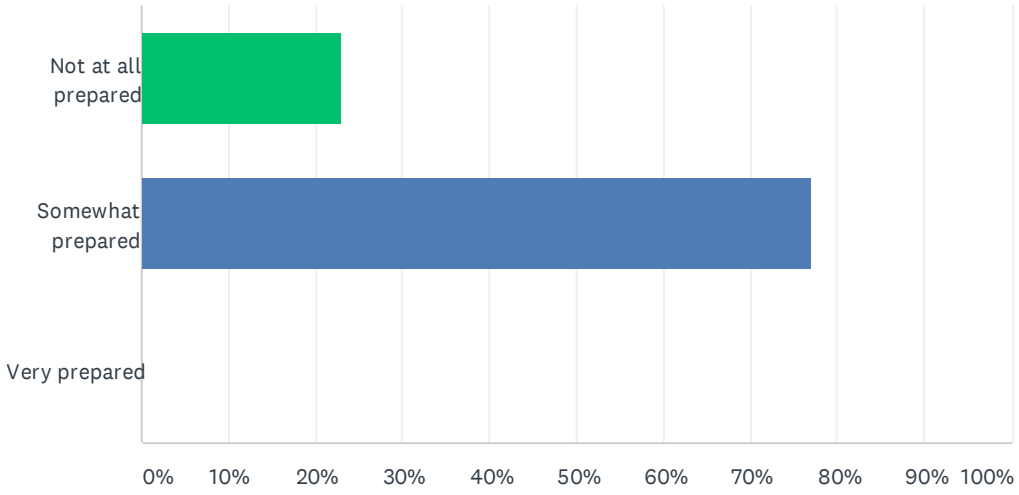
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	OTHER (PLEASE SPECIFY)	DATE
1	Sinkholes	1/11/2021 9:27 PM
2	We have too many power outages. Especially in Cheektowaga.	1/9/2021 8:42 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q3 How prepared is your household to get along without electricity or natural gas for up to five days?

Answered: 13 Skipped: 0

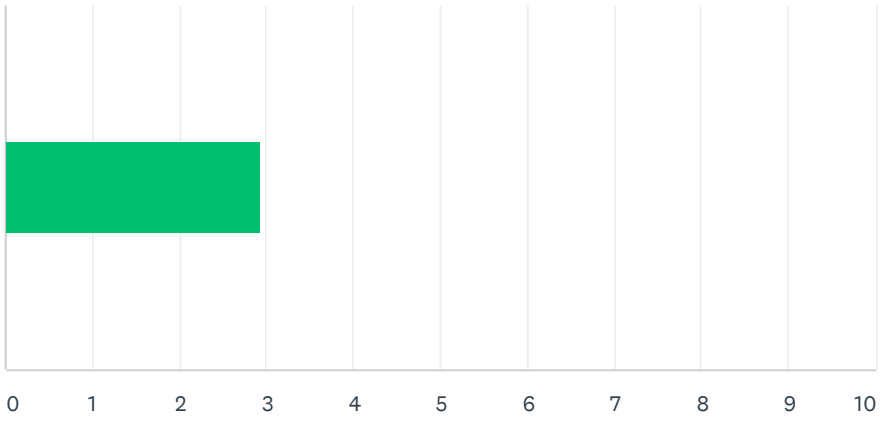


ANSWER CHOICES	RESPONSES	
Not at all prepared	23.08%	3
Somewhat prepared	76.92%	10
Very prepared	0.00%	0
TOTAL		13

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q4 Please rank how prepared you feel and your household are for disaster events likely to occur within your community. Rank on a scale of 1 to 5, with 5 representing the most prepared.

Answered: 13 Skipped: 0



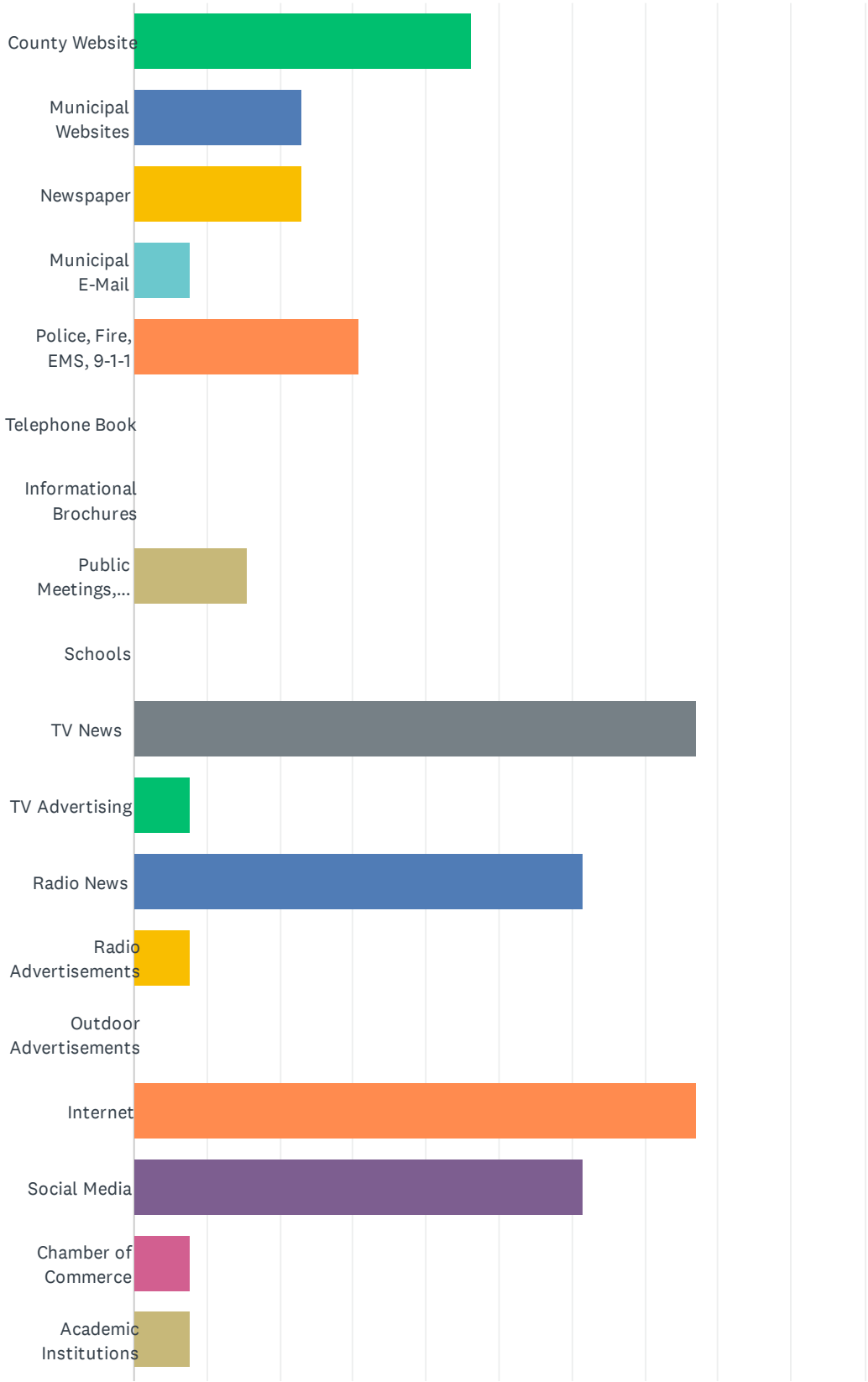
ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	3	38	13
Total Respondents: 13			

#		DATE
1	4	1/29/2021 11:50 AM
2	3	1/27/2021 9:02 AM
3	1	1/19/2021 12:37 PM
4	4	1/13/2021 10:28 AM
5	2	1/12/2021 8:30 AM
6	4	1/11/2021 9:27 PM
7	3	1/11/2021 3:38 PM
8	3	1/11/2021 12:03 PM
9	4	1/11/2021 11:29 AM
10	1	1/9/2021 8:42 PM
11	3	1/8/2021 7:31 PM
12	3	1/8/2021 5:33 PM
13	3	1/8/2021 5:22 PM

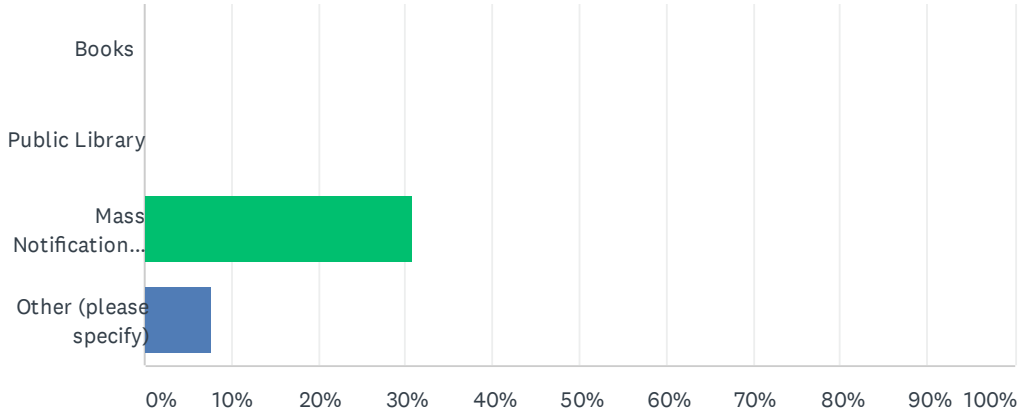
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q5 How do you receive your information concerning a disaster? Check all that apply.

Answered: 13 Skipped: 0



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



ANSWER CHOICES	RESPONSES	
County Website	46.15%	6
Municipal Websites	23.08%	3
Newspaper	23.08%	3
Municipal E-Mail	7.69%	1
Police, Fire, EMS, 9-1-1	30.77%	4
Telephone Book	0.00%	0
Informational Brochures	0.00%	0
Public Meetings, Workshops, Public Awareness Events	15.38%	2
Schools	0.00%	0
TV News	76.92%	10
TV Advertising	7.69%	1
Radio News	61.54%	8
Radio Advertisements	7.69%	1
Outdoor Advertisements	0.00%	0
Internet	76.92%	10
Social Media	61.54%	8
Chamber of Commerce	7.69%	1
Academic Institutions	7.69%	1
Books	0.00%	0
Public Library	0.00%	0
Mass Notification System	30.77%	4
Other (please specify)	7.69%	1
Total Respondents: 13		

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	OTHER (PLEASE SPECIFY)	DATE
1	NY Alert	1/29/2021 11:50 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q6 Of the answers you provided above, what are the top three methods you use?

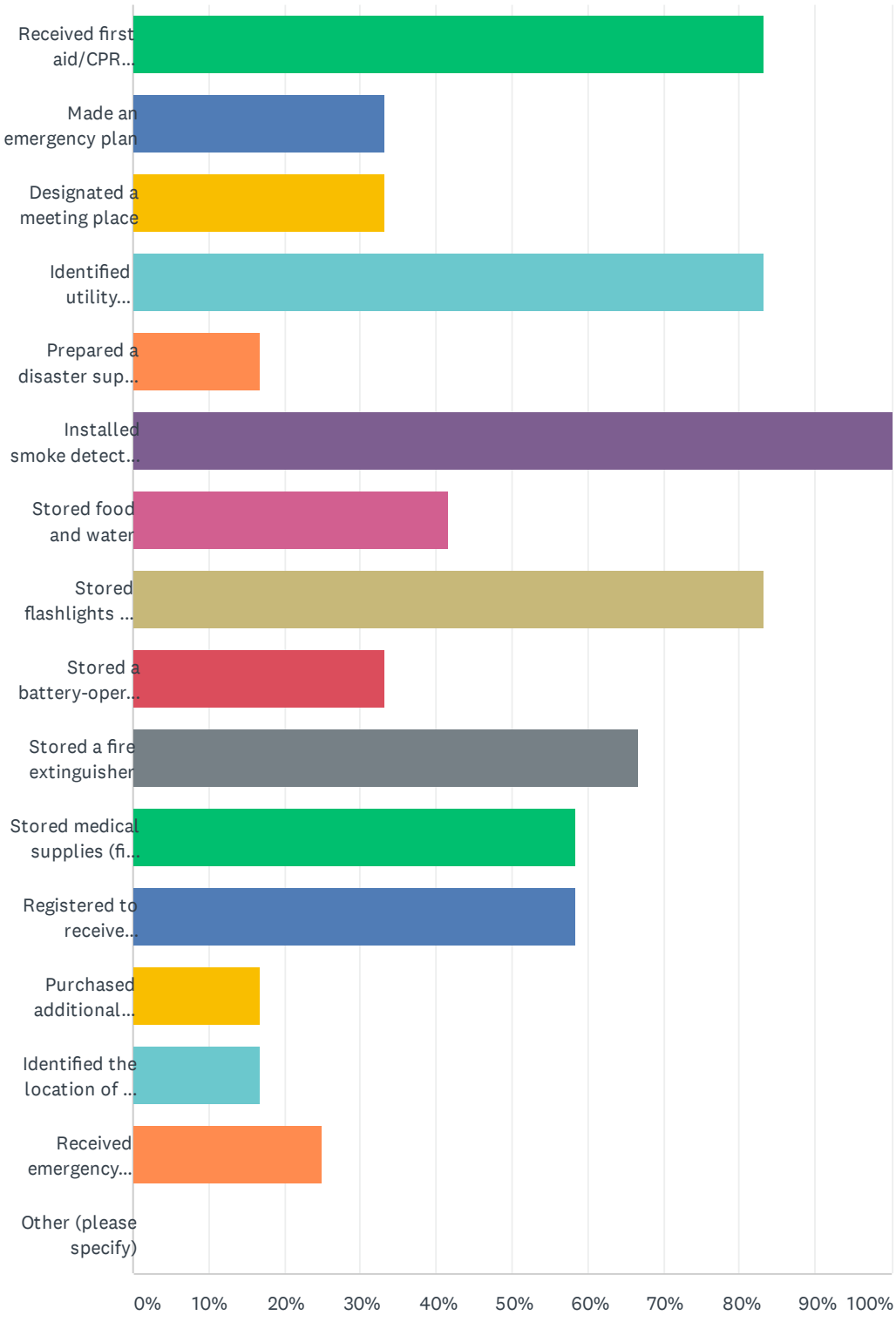
Answered: 12 Skipped: 1

#	RESPONSES	DATE
1	Web site, NY Alert, social media	1/29/2021 11:50 AM
2	News Chamber Fb	1/19/2021 12:37 PM
3	Social media News tv Radio	1/13/2021 10:28 AM
4	Internet, Social Media, Radio	1/12/2021 8:30 AM
5	TV & Radio news, educational material	1/11/2021 9:27 PM
6	Internet, county website, mass notifications	1/11/2021 3:38 PM
7	tv news, radio, internet	1/11/2021 12:03 PM
8	TV news, Social Media, Internet	1/11/2021 11:29 AM
9	Internet, county website, news paper	1/9/2021 8:42 PM
10	Twitter, Facebook	1/8/2021 7:31 PM
11	TV, internet, mass notification	1/8/2021 5:33 PM
12	Tv news radio news social media	1/8/2021 5:22 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q7 Which of the following steps has your household taken to prepare for a local hazard event? Check all that apply.

Answered: 12 Skipped: 1



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

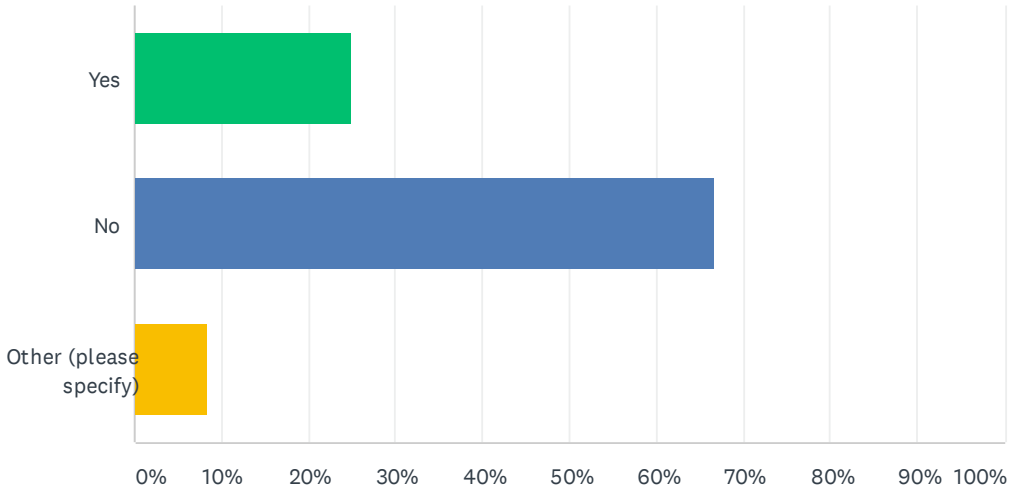
ANSWER CHOICES	RESPONSES	
Received first aid/CPR training	83.33%	10
Made an emergency plan	33.33%	4
Designated a meeting place	33.33%	4
Identified utility shutoffs	83.33%	10
Prepared a disaster supply kit	16.67%	2
Installed smoke detectors on each level of home	100.00%	12
Stored food and water	41.67%	5
Stored flashlights and batteries	83.33%	10
Stored a battery-operated radio	33.33%	4
Stored a fire extinguisher	66.67%	8
Stored medical supplies (first aid kit, medications)	58.33%	7
Registered to receive emergency alerts (i.e. ReadyErie, NY Alert)	58.33%	7
Purchased additional insurance to cover losses (i.e. flood insurance)	16.67%	2
Identified the location of the nearest emergency shelter	16.67%	2
Received emergency preparedness information from a government source	25.00%	3
Other (please specify)	0.00%	0
Total Respondents: 12		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q8 In the past, has your home been damaged by a hazard event? For example, the basement of your home flooded and damaged the hot water heater.

Answered: 12 Skipped: 1



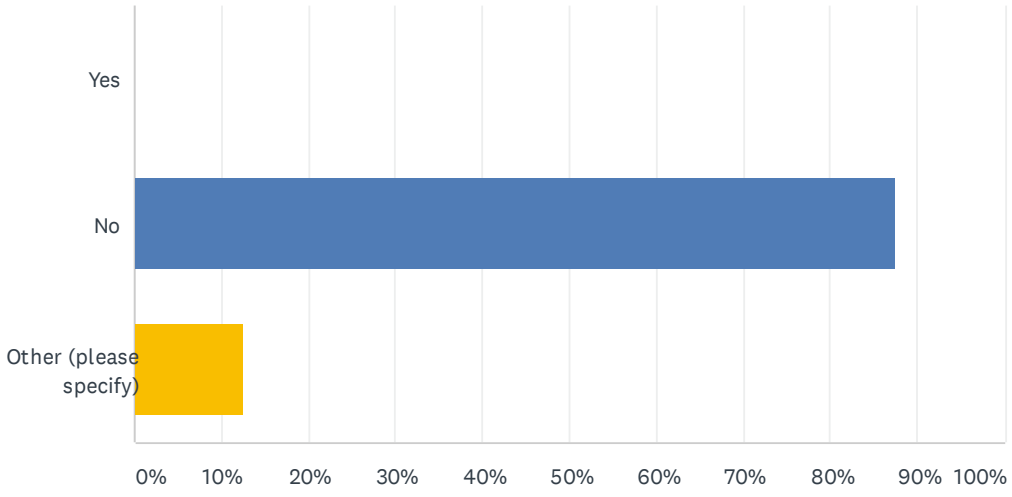
ANSWER CHOICES	RESPONSES	
Yes	25.00%	3
No	66.67%	8
Other (please specify)	8.33%	1
TOTAL		12

#	OTHER (PLEASE SPECIFY)	DATE
1	wind/roof shingle loss, snow/shovel the roof	1/11/2021 12:03 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q9 If you answered "yes" to question #8, did you report the damages to your insurance company or local officials?

Answered: 8 Skipped: 5



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	87.50%	7
Other (please specify)	12.50%	1
TOTAL		8

#	OTHER (PLEASE SPECIFY)	DATE
1	N/A	1/12/2021 8:30 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q10 If you answered "no" to question #9, why did you not report the damages?

Answered: 8 Skipped: 5

#	RESPONSES	DATE
1	Minimal after heavy rain. Took mitigation steps	1/29/2021 11:50 AM
2	None	1/19/2021 12:37 PM
3	Fixable, not necessary	1/13/2021 10:28 AM
4	N/A	1/12/2021 8:30 AM
5	was able to fix myself, a wash with the deductable	1/11/2021 12:03 PM
6	Na	1/9/2021 8:42 PM
7	Easy to clean up	1/8/2021 7:31 PM
8	It was minor and nothing was ruined	1/8/2021 5:22 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q11 Please explain the damage your structure sustained and when it occurred.

Answered: 7 Skipped: 6

#	RESPONSES	DATE
1	non essential items and rugs damaged	1/29/2021 11:50 AM
2	Na	1/13/2021 10:28 AM
3	N/A	1/12/2021 8:30 AM
4	replace shingles on a portion of roof from 60mph winds, needed to shovel the roof under 4+ feet of snow	1/11/2021 12:03 PM
5	Na	1/9/2021 8:42 PM
6	Flooding in basement not sure when	1/8/2021 7:31 PM
7	Flooded basement October 2019	1/8/2021 5:22 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q12 In the last 10 years, were you evacuated from your home as a result of a disaster (e.g. flooding)? If so, how long were you displaced? Did you go to a shelter?

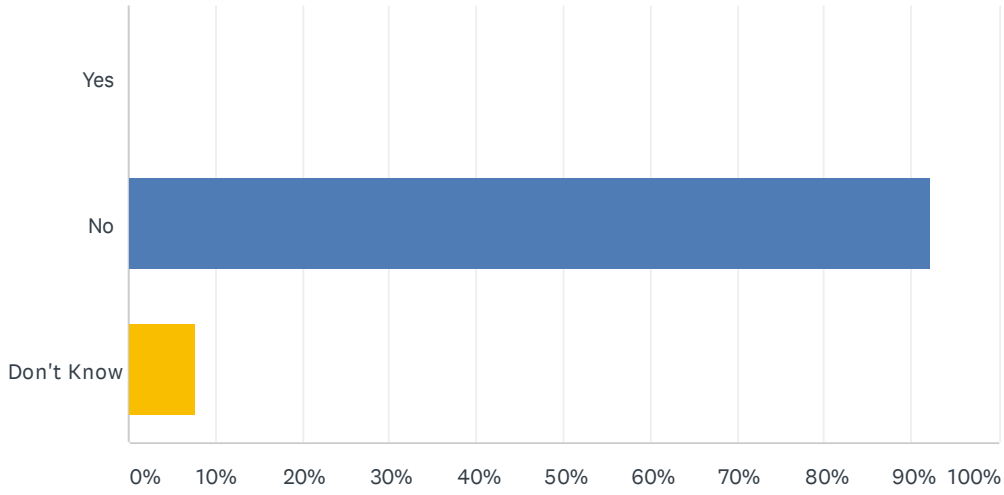
Answered: 12 Skipped: 1

#	RESPONSES	DATE
1	No	1/29/2021 11:50 AM
2	NO	1/27/2021 9:02 AM
3	No	1/13/2021 10:28 AM
4	No	1/12/2021 8:30 AM
5	No	1/11/2021 9:27 PM
6	No	1/11/2021 3:38 PM
7	no	1/11/2021 12:03 PM
8	NO	1/11/2021 11:29 AM
9	No	1/9/2021 8:42 PM
10	No	1/8/2021 7:31 PM
11	no	1/8/2021 5:33 PM
12	No	1/8/2021 5:22 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q13 To the best of your knowledge, is your property located in a designated floodplain? If you do not know, click here to find out.

Answered: 13 Skipped: 0

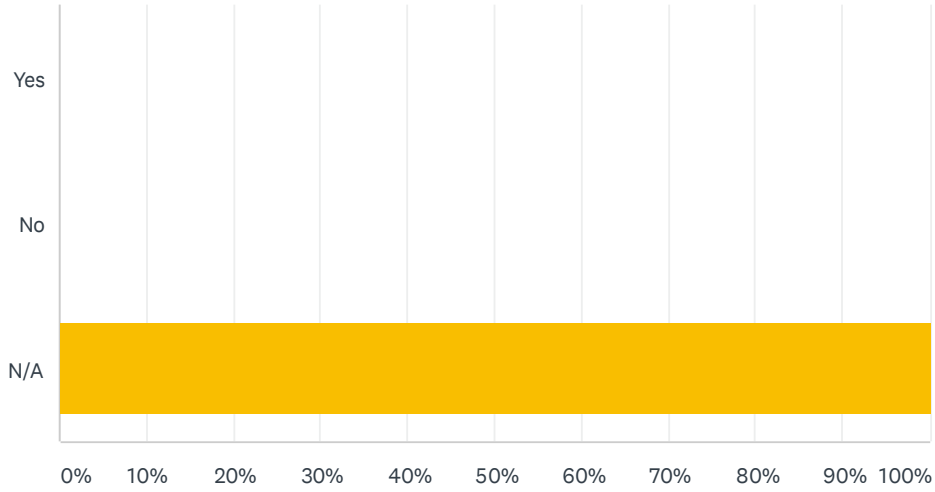


ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	92.31%	12
Don't Know	7.69%	1
TOTAL		13

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q14 If your property is in the floodplain, do you have flood insurance?

Answered: 11 Skipped: 2

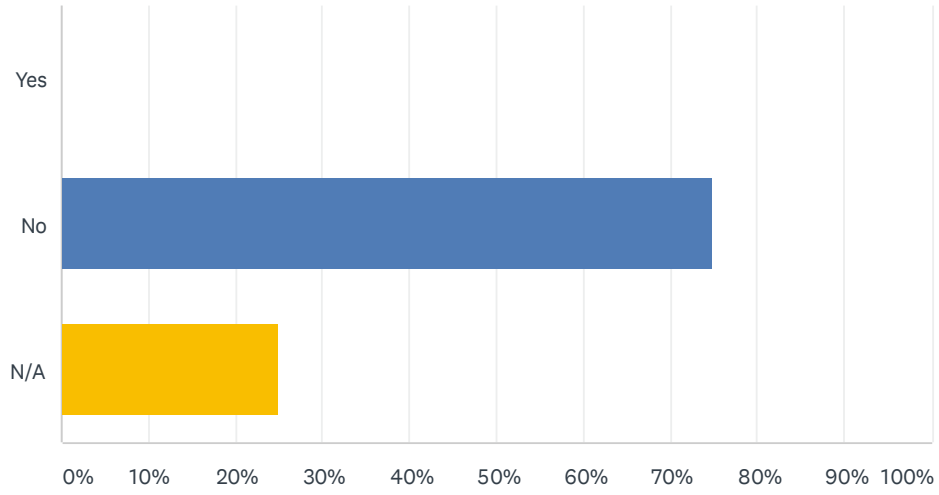


ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	0.00%	0
N/A	100.00%	11
TOTAL		11

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q15 If your property is located outside of the floodplain, do you have flood insurance?

Answered: 12 Skipped: 1

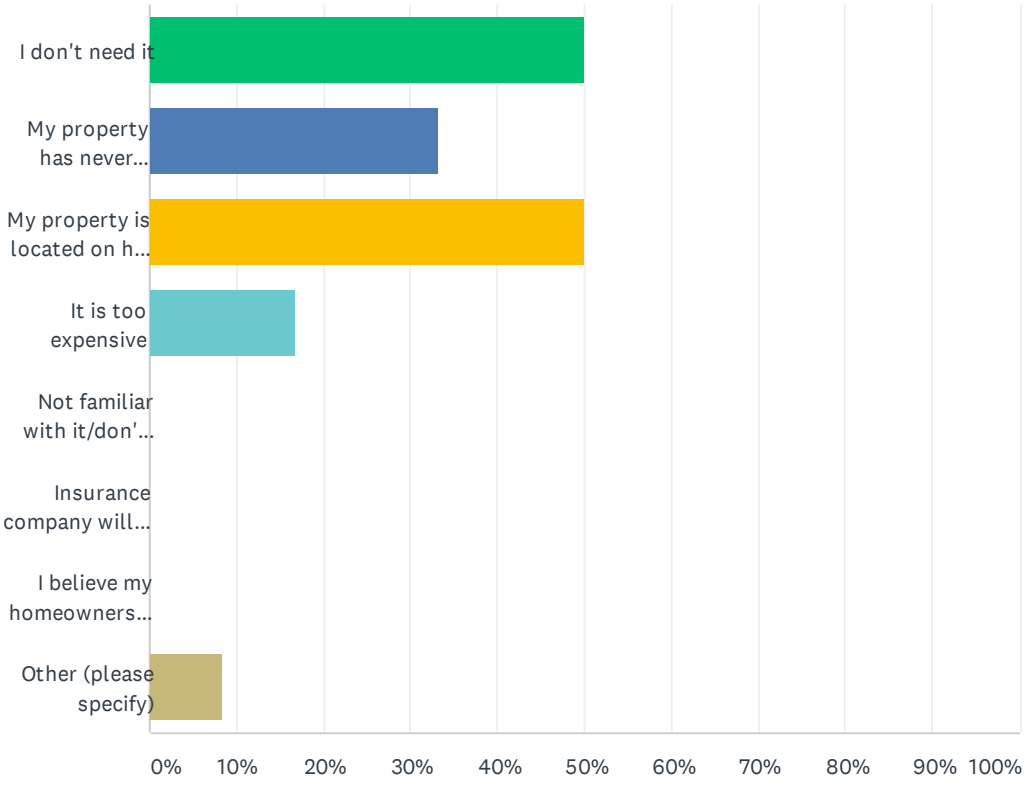


ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	75.00%	9
N/A	25.00%	3
TOTAL		12

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q16 If you do NOT have flood insurance, why not? Check all that apply.

Answered: 12 Skipped: 1



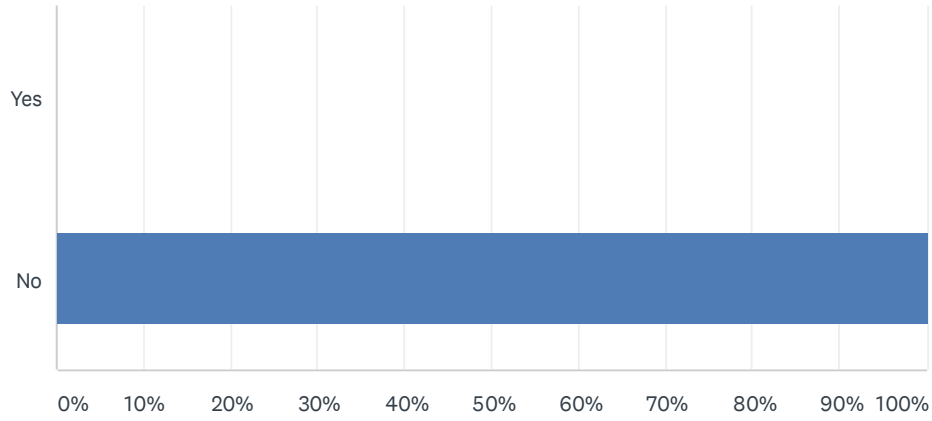
ANSWER CHOICES	RESPONSES	
I don't need it	50.00%	6
My property has never flooded	33.33%	4
My property is located on high ground	50.00%	6
It is too expensive	16.67%	2
Not familiar with it/don't know about it	0.00%	0
Insurance company will not provide	0.00%	0
I believe my homeowners insurance will cover me	0.00%	0
Other (please specify)	8.33%	1
Total Respondents: 12		

#	OTHER (PLEASE SPECIFY)	DATE
1	Insurance for sump pump failure	1/11/2021 3:38 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q17 Do you or did you have problems getting homeowners/renters insurance due to risks from hazards?

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	13
TOTAL		13

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q18 If you answered "yes" to the previous question, please identify the hazard risk that caused you to have problems obtaining homeowners/renters insurance.

Answered: 3 Skipped: 10

#	RESPONSES	DATE
1	Na	1/13/2021 10:28 AM
2	Na	1/9/2021 8:42 PM
3	N a	1/8/2021 7:31 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q19 Please identify any specific vulnerabilities that you are aware of in Erie County (e.g. floodprone areas or specific properties, critical facilities that lack backup power, etc.). Please list street names and other specific identifiers if possible.

Answered: 5 Skipped: 8

#	RESPONSES	DATE
1	Due to development, poor drainage areas have developed in Amherst, Cheektowaga, Hamburg. Area around house floods during rain, melting event but has not flooded house 5166 Pittsburg St, Hamburg, NY	1/11/2021 9:36 PM
2	to many to list Lake erie shore, high lake laves and wind events, Cattaraugus Creek watershed Gowanda flooding, Eighteenmile Creek watershed Boston/ Hamburg flooding, Buffalo Creek watershed West Seneca flooding, Tonawanda Creek watershed Newstead/ Clarence/Ameherst flooding - Ice jam on all streams see NYSDEC new studies comming out	1/11/2021 12:18 PM
3	Not sure	1/9/2021 8:44 PM
4	N a	1/8/2021 7:33 PM
5	flood prone - viaduct on Rt 5 south of old Bethlehem Steel plant	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q20 Please identify any specific vulnerabilities that you are aware of in the municipality you live in (e.g. floodprone areas or specific properties, critical facilities that lack backup power, etc.). Please list street names and other specific identifiers if possible.You can also plot these vulnerabilities on a map using a simple mapping tool that was developed for this planning process. Click here.

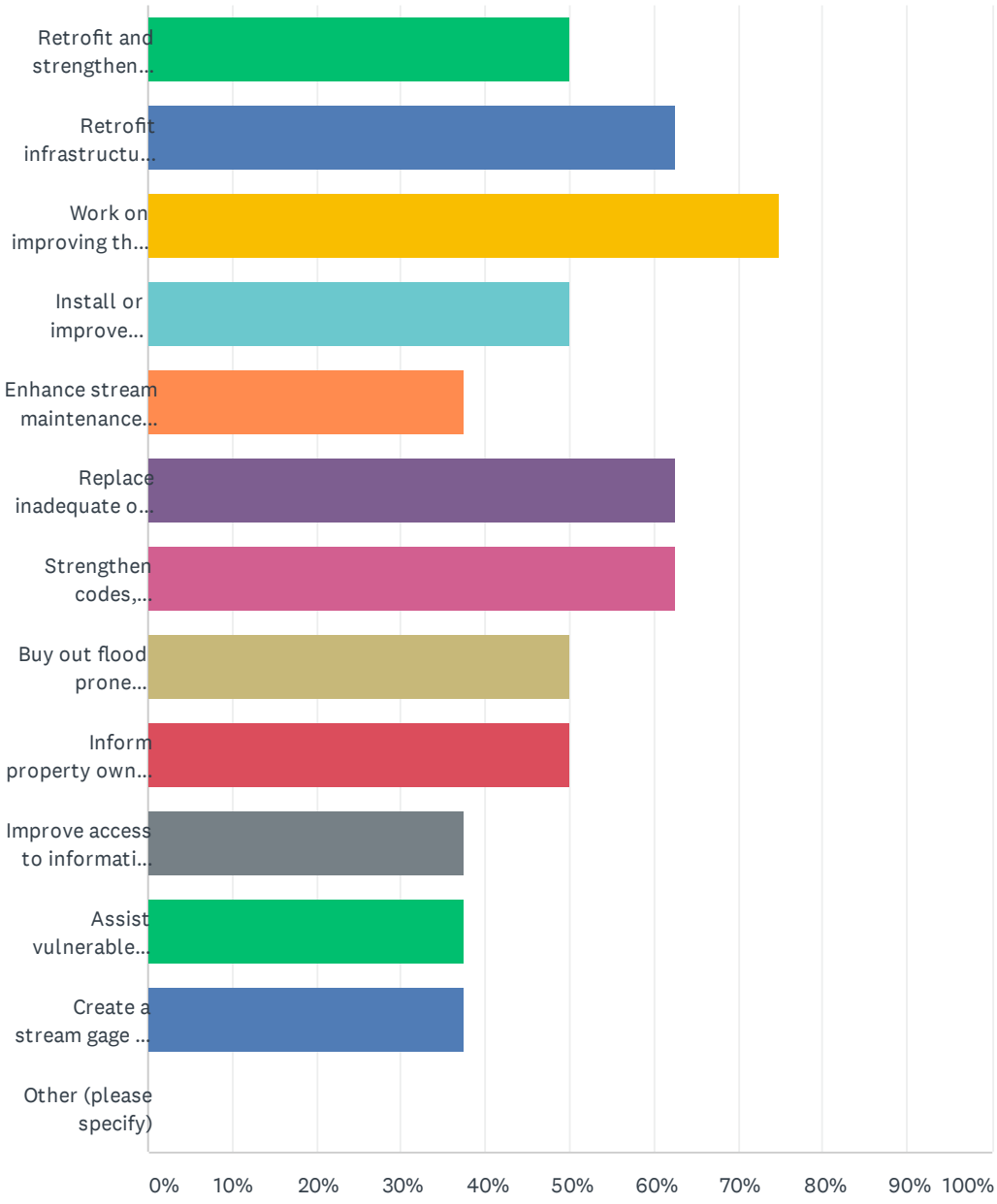
Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Water treatment plant.	1/29/2021 11:54 AM
2	Na	1/9/2021 8:44 PM
3	N a	1/8/2021 7:33 PM
4	I don't know of any	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q21 What types of projects do you believe local, county, state, or federal government agencies could be doing to reduce the damage and disruption of disasters in Erie County? Select your top three choices.

Answered: 8 Skipped: 5



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

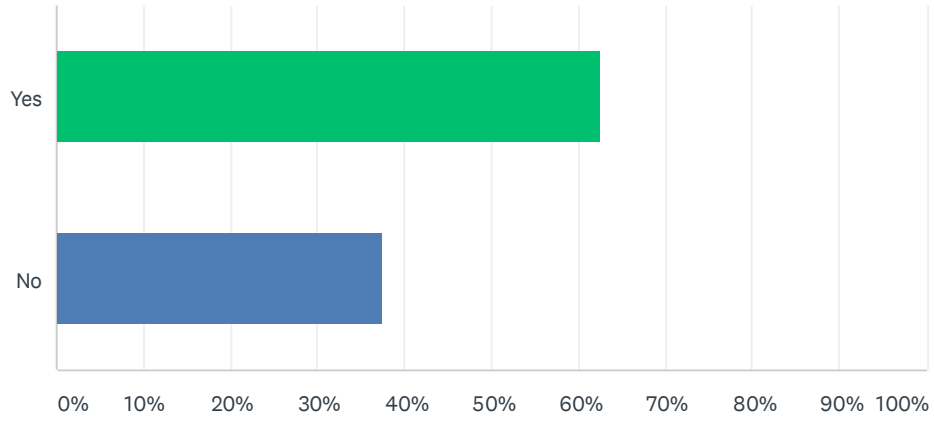
ANSWER CHOICES	RESPONSES	
Retrofit and strengthen essential facilities such as police, schools, and hospitals	50.00%	4
Retrofit infrastructure, such as elevating roadways and improving drainage systems	62.50%	5
Work on improving the damage resistance of utilities (electricity, communications, water/wastewater facilities etc.)	75.00%	6
Install or improve protective structures, such as floodwalls, levees, bulkheads, and firebreaks	50.00%	4
Enhance stream maintenance programs/projects	37.50%	3
Replace inadequate or vulnerable bridges and causeways	62.50%	5
Strengthen codes, ordinances and plans to require higher hazard risk management standards and/or provide greater control over development in high hazard areas	62.50%	5
Buy out flood prone properties and maintain as open space	50.00%	4
Inform property owners of ways they can mitigate damage to their properties	50.00%	4
Improve access to information about hazard risks and high-hazard areas	37.50%	3
Assist vulnerable property owners with securing funding to mitigate their properties	37.50%	3
Create a stream gage and weather monitoring program to provide more accurate data and warnings	37.50%	3
Other (please specify)	0.00%	0
Total Respondents: 8		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q22 Do you feel that your municipality is doing enough towards flood prevention and mitigation or prevention/mitigation from other hazards?

Answered: 8 Skipped: 5



ANSWER CHOICES	RESPONSES	
Yes	62.50%	5
No	37.50%	3
TOTAL		8

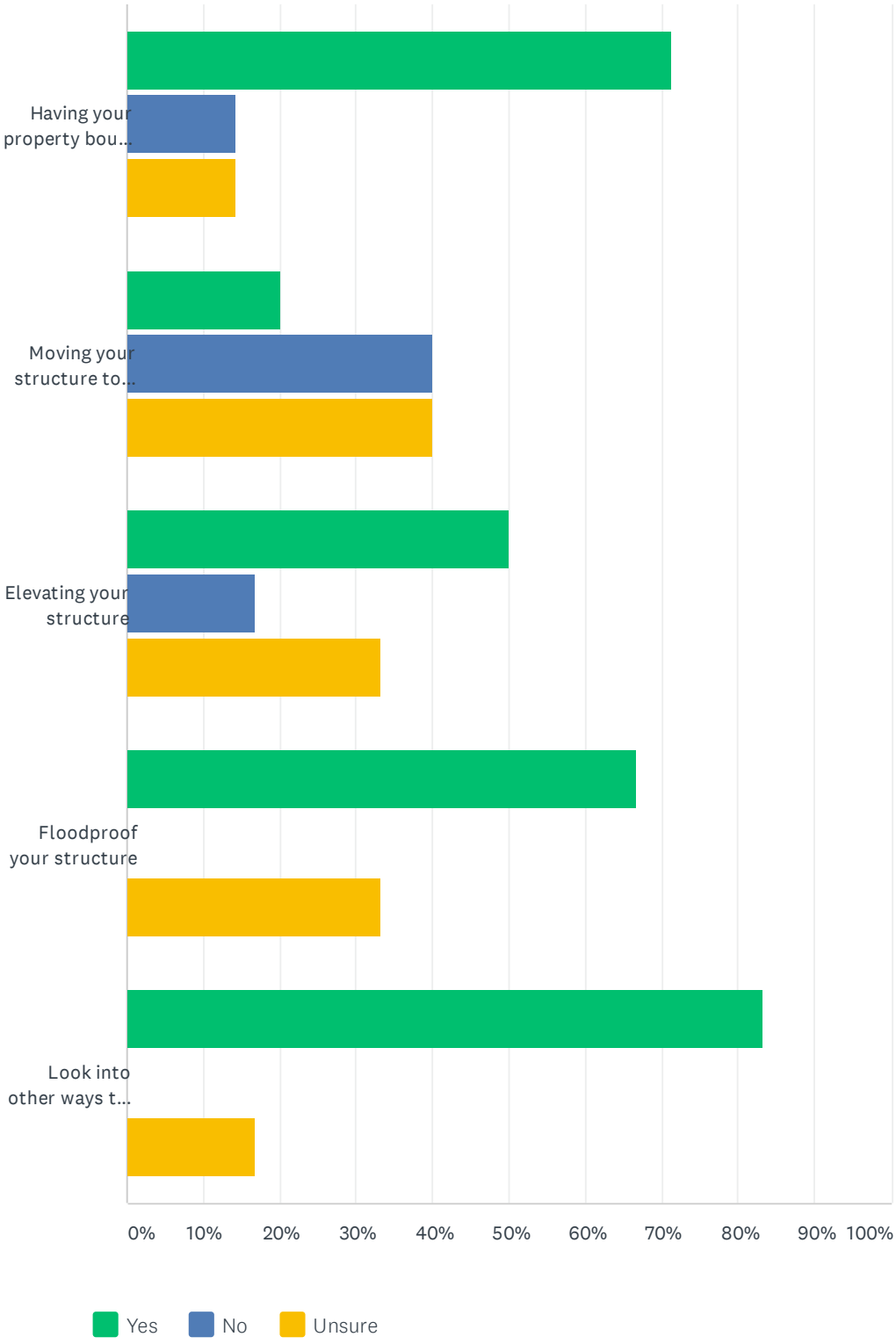
#	PLEASE PROVIDE DETAILS FOR YOUR ANSWER.	DATE
1	It's been an ongoing process through my 61 years of living in Hamburg. Development (buildings and pavement) does not allow the water to go anywhere during extreme rain/wind/snow melt events	1/11/2021 9:36 PM
2	Yes but Wales is still very rural and there is not a big development push	1/11/2021 12:18 PM
3	Yes, they cleaned out a drainage ditch and replaced a culvert at the end of Olympic Ave to address a reported flooding concern.	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q23 If your property were located in a designated high-hazard area (for example, NFIP flood zone) or had received repeated damages from a disaster event, would you consider any of the following options?If your response is dependent on certain factors, such as the funding source, please indicate those factors in the following question.

Answered: 7 Skipped: 6

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

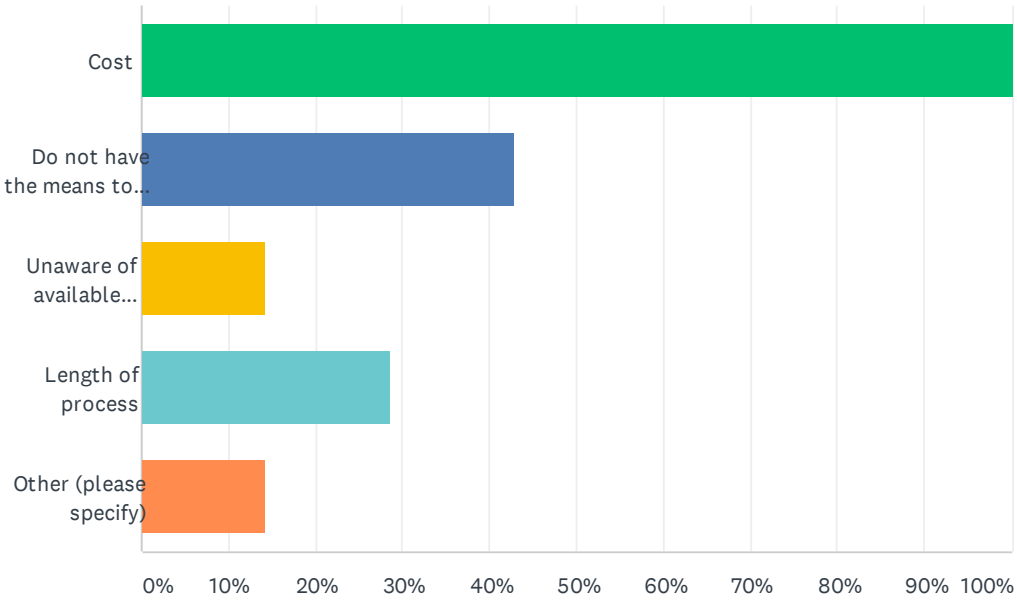
	YES	NO	UNSURE	TOTAL
Having your property bought out	71.43% 5	14.29% 1	14.29% 1	7
Moving your structure to another property or a less risky part of your property	20.00% 1	40.00% 2	40.00% 2	5
Elevating your structure	50.00% 3	16.67% 1	33.33% 2	6
Floodproof your structure	66.67% 4	0.00% 0	33.33% 2	6
Look into other ways to mitigate	83.33% 5	0.00% 0	16.67% 1	6

#	OTHER (PLEASE SPECIFY)	DATE
1	I wouldn't live in one of those areas	1/11/2021 9:36 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q24 Please select the factor(s) that would influence your decision on the mitigation options listed above (buyout/acquisition, relocation, or elevation).

Answered: 7 Skipped: 6



ANSWER CHOICES	RESPONSES	
Cost	100.00%	7
Do not have the means to move/relocate	42.86%	3
Unaware of available programs	14.29%	1
Length of process	28.57%	2
Other (please specify)	14.29%	1
Total Respondents: 7		

#	OTHER (PLEASE SPECIFY)	DATE
1	finding a location to relocate to	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q25 If you have already had to spend money to mitigate your property, how much have you spent and on what measures?

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Secure basement floor drains	1/29/2021 11:54 AM
2	N/A	1/11/2021 9:36 PM
3	N a	1/8/2021 7:33 PM
4	I'm having a whole house back up generator installed for ~$10K	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q26 Which (if any) incentives would motivate you to spend money on protecting your home from the possible impacts of a disaster? Such as lower interest rates, grant funding, waivers, etc.

Answered: 6 Skipped: 7

#	RESPONSES	DATE
1	grants	1/29/2021 11:54 AM
2	Protection of property	1/11/2021 9:36 PM
3	Grant funding	1/11/2021 3:42 PM
4	Grant	1/9/2021 8:44 PM
5	N a	1/8/2021 7:33 PM
6	Assistance in identifying mitigation measures and options, pricing, financing	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q27 Please list any additional types of projects you believe local, county, state, or federal government agencies could be doing to reduce the damage and disruption in Erie County.

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Education for idiot people	1/11/2021 9:36 PM
2	Electronic	1/9/2021 8:44 PM
3	N a	1/8/2021 7:33 PM
4	Keep investing in the reliability of the electric supply system and the quick restoration of electriity when it goes out. The other primary untilities (gas and water) are very reliable. More people and systems rely on internet, a reliable internet that can handle increased traffic is needed. Personally, my internet is good, but I'm thinking about Buffalo.	1/8/2021 6:21 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q28 Do you have any other comments, questions, or concerns regarding hazard mitigation in Erie County?

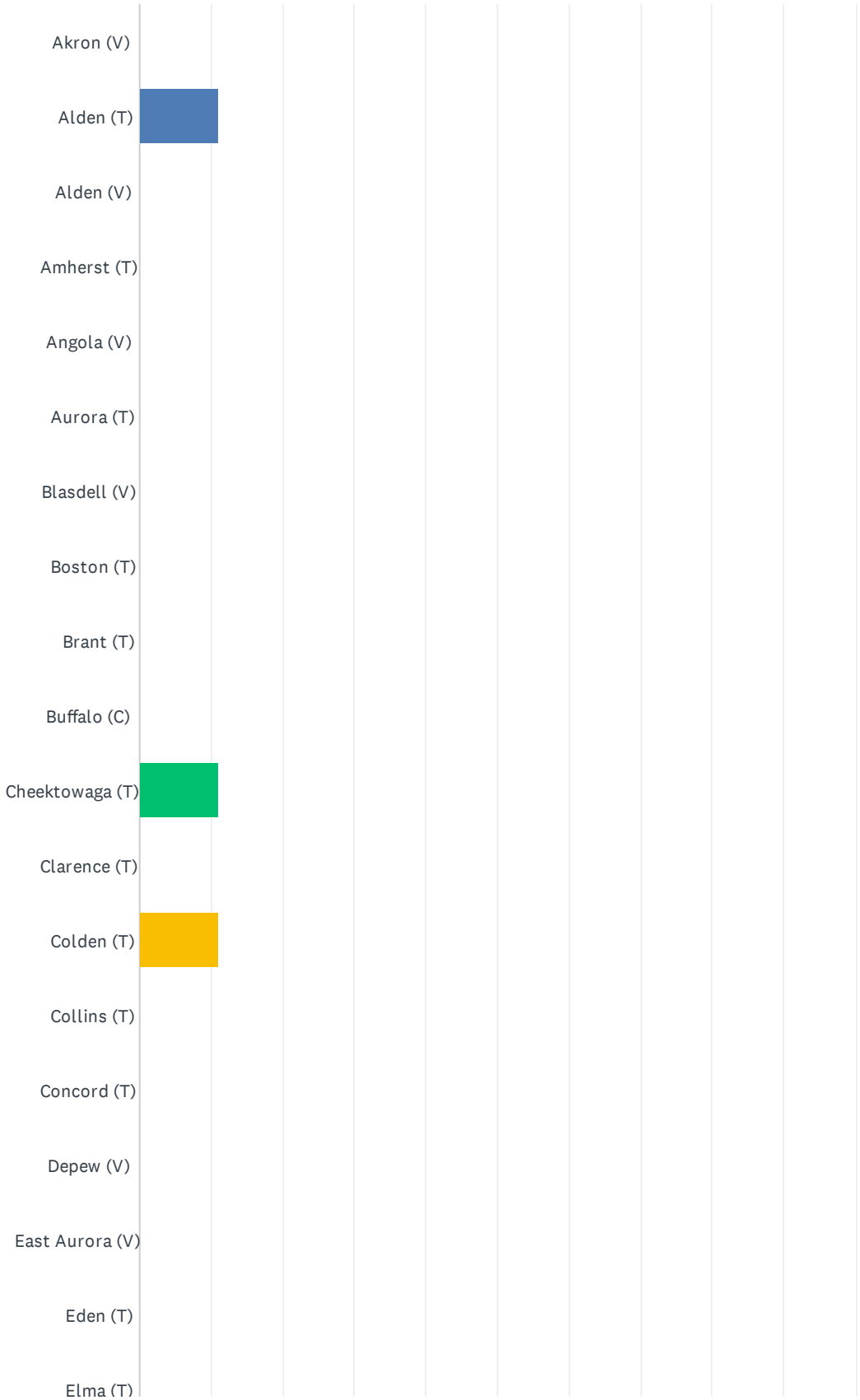
Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Global warming is here; must develop more ecological programs to benefit the earth	1/11/2021 9:36 PM
2	Electrical grid. Roads	1/9/2021 8:44 PM
3	N a	1/8/2021 7:33 PM
4	Thank you for reaching out for input.	1/8/2021 6:21 PM

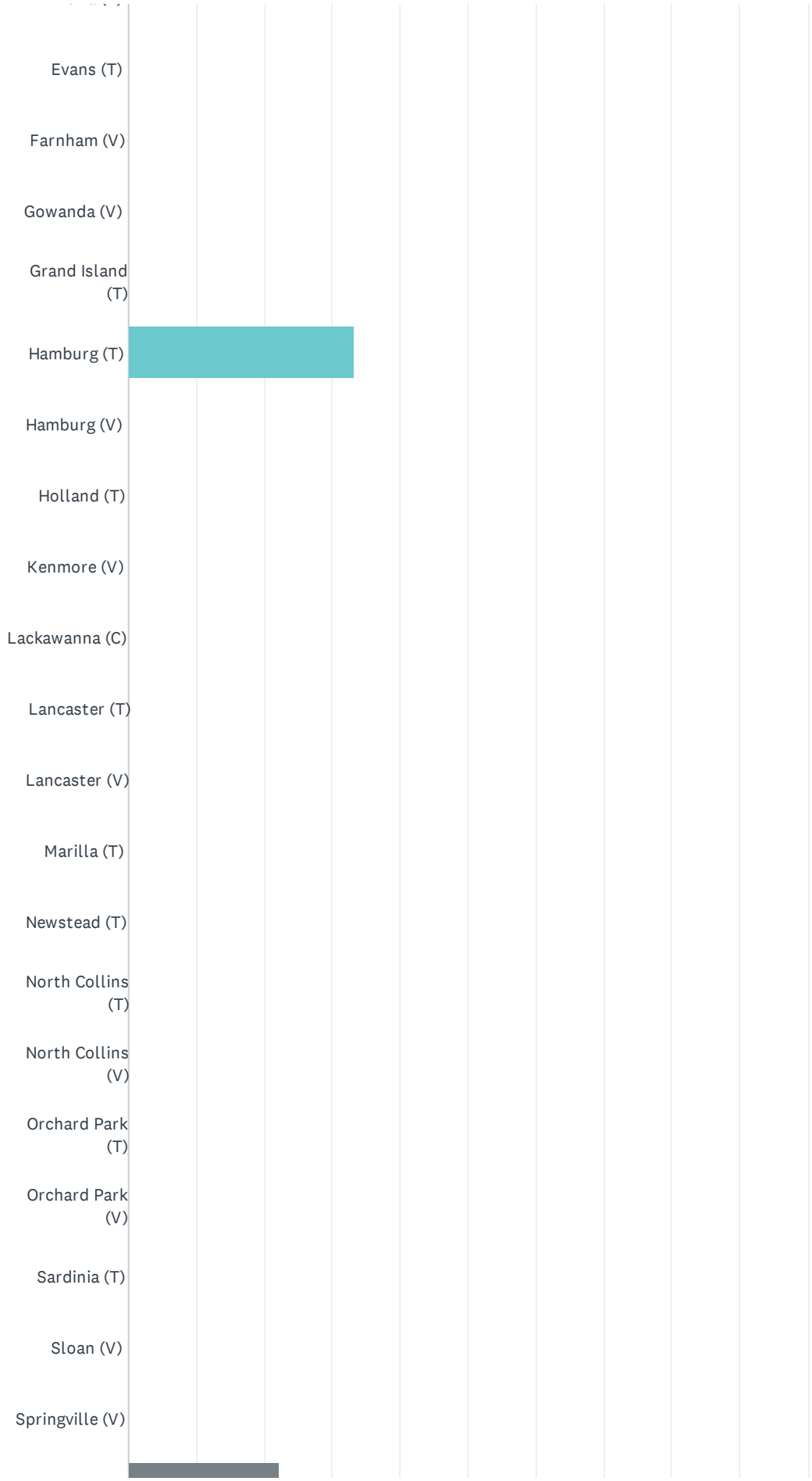
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q29 Please indicate the municipality in which you live:

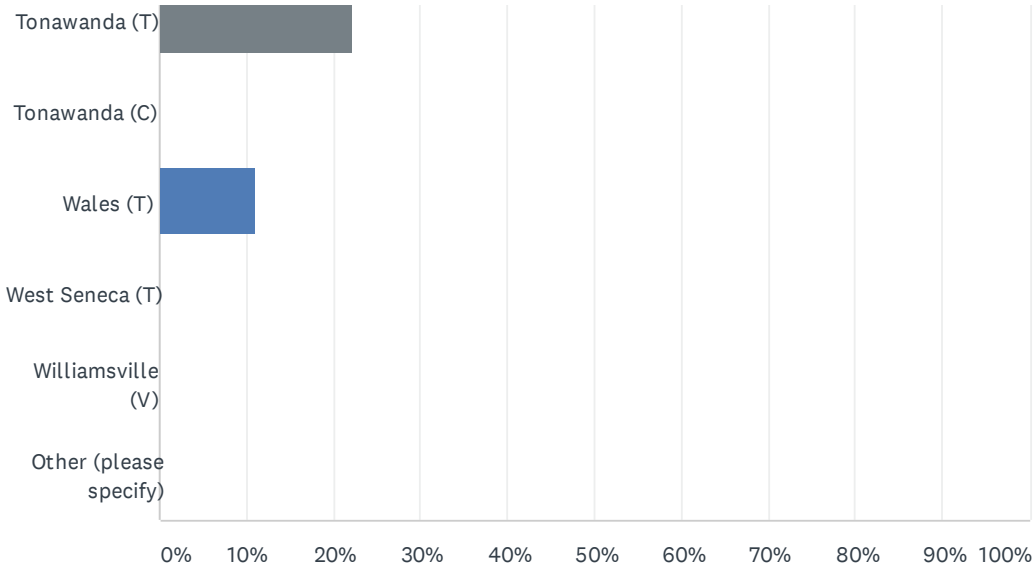
Answered: 9 Skipped: 4



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

ANSWER CHOICES	RESPONSES	
Akron (V)	0.00%	0
Alden (T)	11.11%	1
Alden (V)	0.00%	0
Amherst (T)	0.00%	0
Angola (V)	0.00%	0
Aurora (T)	0.00%	0
Blasdell (V)	0.00%	0
Boston (T)	0.00%	0
Brant (T)	0.00%	0
Buffalo (C)	0.00%	0
Cheektowaga (T)	11.11%	1
Clarence (T)	0.00%	0
Colden (T)	11.11%	1
Collins (T)	0.00%	0
Concord (T)	0.00%	0
Depew (V)	0.00%	0
East Aurora (V)	0.00%	0
Eden (T)	0.00%	0
Elma (T)	0.00%	0
Evans (T)	0.00%	0
Farnham (V)	0.00%	0
Gowanda (V)	0.00%	0
Grand Island (T)	0.00%	0
Hamburg (T)	33.33%	3
Hamburg (V)	0.00%	0
Holland (T)	0.00%	0
Kenmore (V)	0.00%	0
Lackawanna (C)	0.00%	0
Lancaster (T)	0.00%	0
Lancaster (V)	0.00%	0
Marilla (T)	0.00%	0
Newstead (T)	0.00%	0

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

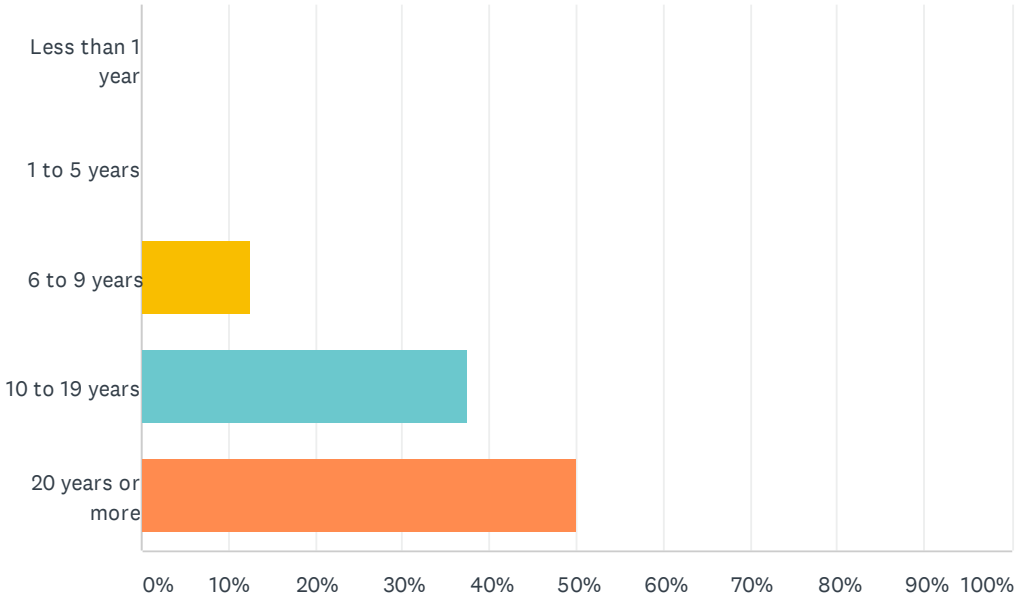
North Collins (T)	0.00%	0
North Collins (V)	0.00%	0
Orchard Park (T)	0.00%	0
Orchard Park (V)	0.00%	0
Sardinia (T)	0.00%	0
Sloan (V)	0.00%	0
Springville (V)	0.00%	0
Tonawanda (T)	22.22%	2
Tonawanda (C)	0.00%	0
Wales (T)	11.11%	1
West Seneca (T)	0.00%	0
Williamsville (V)	0.00%	0
Other (please specify)	0.00%	0
TOTAL		9

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q30 How long have you lived here?

Answered: 8 Skipped: 5

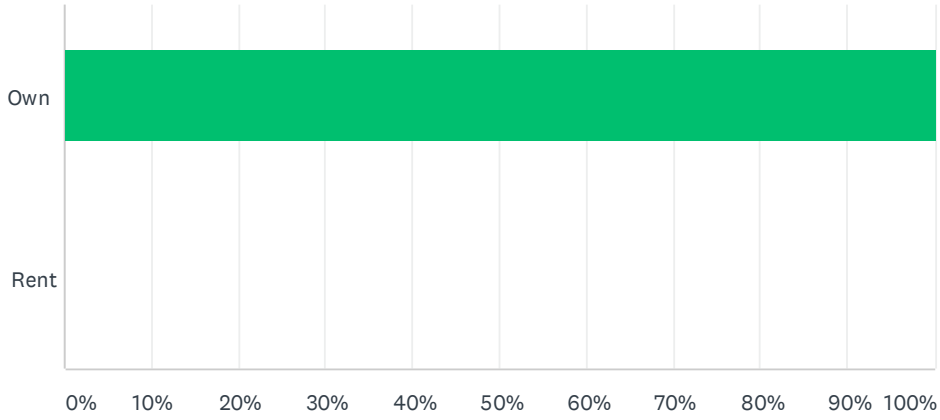


ANSWER CHOICES	RESPONSES	
Less than 1 year	0.00%	0
1 to 5 years	0.00%	0
6 to 9 years	12.50%	1
10 to 19 years	37.50%	3
20 years or more	50.00%	4
TOTAL		8

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q31 Do you own or rent your place of residence?

Answered: 8 Skipped: 5

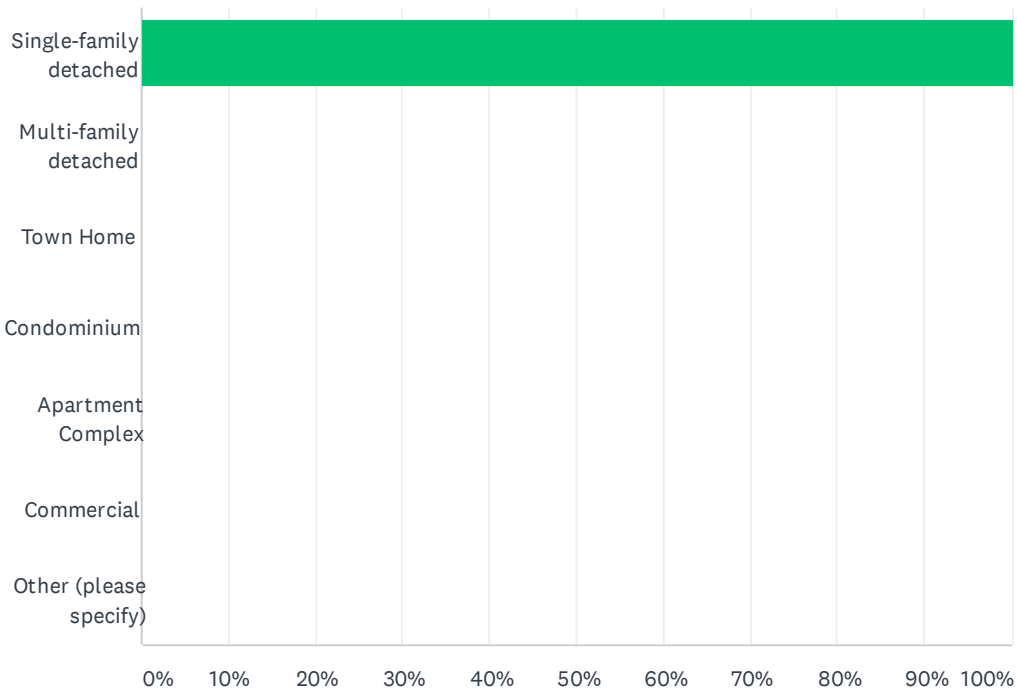


ANSWER CHOICES	RESPONSES	
Own	100.00%	8
Rent	0.00%	0
TOTAL		8

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q32 What type of residence do you live in?

Answered: 8 Skipped: 5



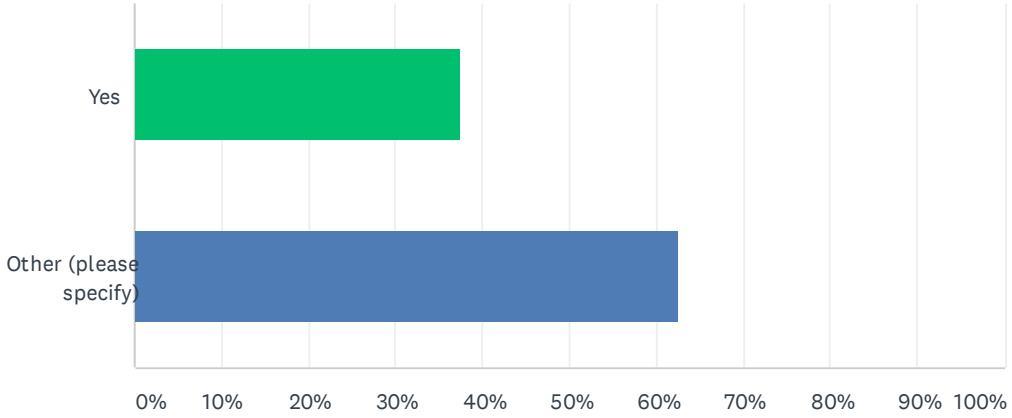
ANSWER CHOICES	RESPONSES	
Single-family detached	100.00%	8
Multi-family detached	0.00%	0
Town Home	0.00%	0
Condominium	0.00%	0
Apartment Complex	0.00%	0
Commercial	0.00%	0
Other (please specify)	0.00%	0
TOTAL		8

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q33 If you received real estate disclosure information when you moved into your current residents, did your real estate agent or landlord explain the implications of living in a hazard risk zone and did you understand the information they presented?

Answered: 8 Skipped: 5



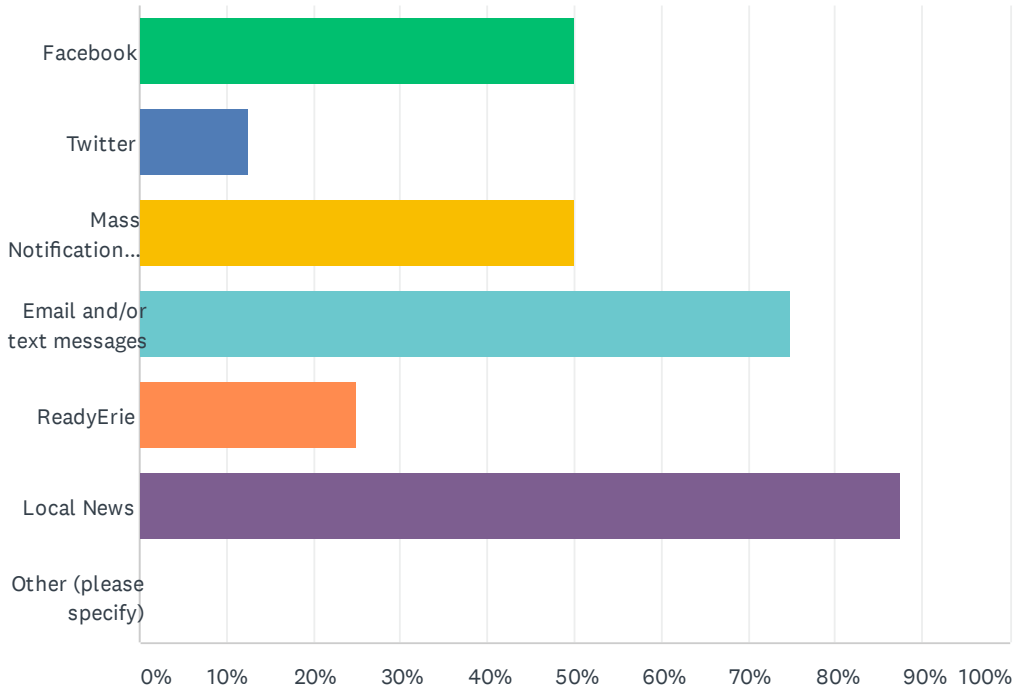
ANSWER CHOICES	RESPONSES	
Yes	37.50%	3
Other (please specify)	62.50%	5
TOTAL		8

#	OTHER (PLEASE SPECIFY)	DATE
1	no	1/29/2021 11:55 AM
2	N/A parents purchased in 1955	1/11/2021 9:38 PM
3	No	1/11/2021 3:43 PM
4	No	1/8/2021 7:33 PM
5	We only discussed that we are not in a flood zone.	1/8/2021 6:23 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q34 Which of the following digital media outlets do you use and/or subscribe to receive general news and information about Erie County? Check all that apply.

Answered: 8 Skipped: 5



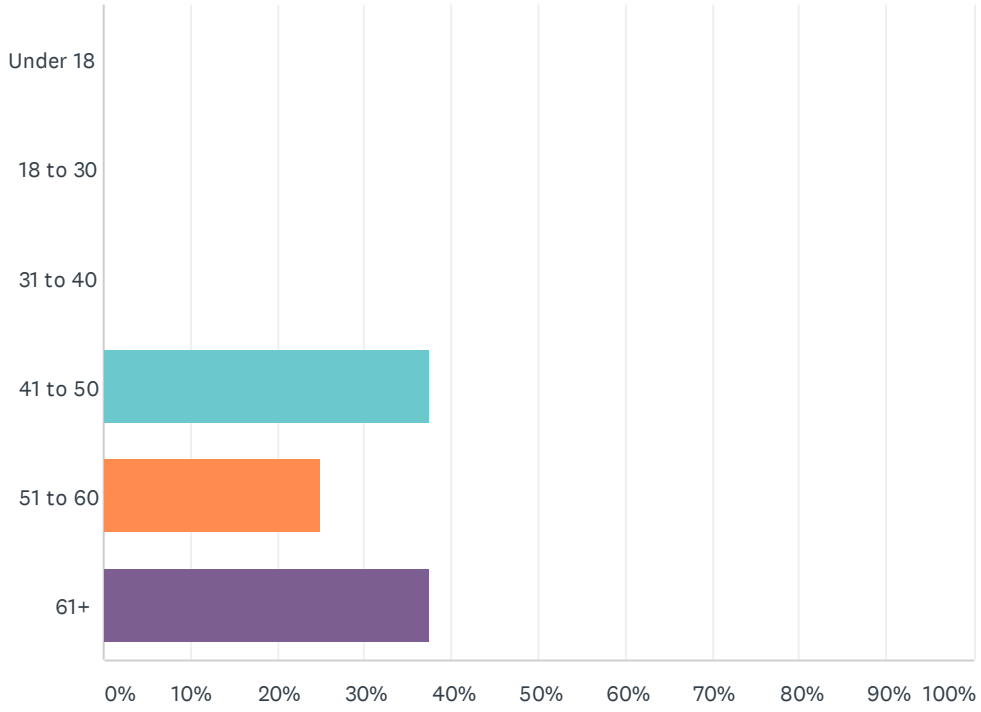
ANSWER CHOICES	RESPONSES	
Facebook	50.00%	4
Twitter	12.50%	1
Mass Notification System	50.00%	4
Email and/or text messages	75.00%	6
ReadyErie	25.00%	2
Local News	87.50%	7
Other (please specify)	0.00%	0
Total Respondents: 8		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q35 Please indicate your age range:

Answered: 8 Skipped: 5



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18 to 30	0.00%	0
31 to 40	0.00%	0
41 to 50	37.50%	3
51 to 60	25.00%	2
61+	37.50%	3
TOTAL		8

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
Subject: Please distribute
Date: Friday, January 8, 2021 5:10:47 PM

Sent to LEPC, Disaster Preparedness Advisory Board, Fire Advisory Board, emergency managers, and elected officials

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Good evening,
Please send out the email below to your schools, the business community, nursing homes, hospitals/healthcare facilities, police/fire/EMS agencies within your municipalities.

Thank you!

To Erie County's Stakeholder Community:

Hello! As you know, Erie County is updating its Hazard Mitigation Plan (HMP). The HMP will analyze the hazards faced by the county and its municipalities, residents, and businesses, and will identify a strategy for minimizing the vulnerability to these hazards. You may remember being invited to the Planning Partnership Kickoff webinars that were held on November 18 and 19, 2020. You can find out more about the HMP and the planning process here: https://www.eriecountynyhmp.com/.

I would like to invite you to provide more input into the planning process. We have developed a short survey about the county and the risks it faces. We would greatly appreciate it if you would complete the survey and otherwise participate in this important endeavor. The survey can be found here:
https://www.surveymonkey.com/r/ErieCountyStakeholder

We would appreciate it if you would complete the survey by January 29, 2021.

Please reach out if you have any questions. Thank you very much!

Have a great day!

Melissa

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

Erie County, along with its cities, towns, and villages, are in the process of updating the Hazard Mitigation Plan (HMP) in order to be eligible for federal grant funding for public and private mitigation projects. The HMP provides a "blueprint" by which participating jurisdictions can make coordinated, cost-effective efforts towards reducing losses from natural and human-caused disasters.

The following survey is designed to help identify general needs for hazard mitigation and resiliency within Erie County from your perspective, as well as to identify specific projects that may be included in the mitigation plan. Given the current COVID-19 pandemic, there are questions specific to this hazard at the end of the survey to help inform future decision making.

Please take a few minutes to answer the following questions and provide feedback on potential mitigation that affects your assets, infrastructure, and/or services within Erie County. Provide as much details as possible to support your choice in the comments box. Where possible, identify specific areas that need to be improved and your suggestions for possible improvements. If there are other important issues that you feel are not covered by this survey.

More information about this planning process and additional mitigation resources may be found at the Erie County Hazard Mitigation Plan website by going to: https://www.eriecountynyhmp.com/

Thank you for supporting the update of this planning process!

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

General Information

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan. Please note that individual answers will not be published in the plan.

1. Name of your department/office/institution

2. Name and Title of Respondent

3. What is your position/title/role with your department/office/institution?

4. Please provide your contact information.

Email Address

Phone Number

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

What is your/your organization's role in your community?

5. What category does your facility operation/service fall under?

Other (please specify)

6. Based on the above category, please provide additional description and information as to what your organization does or offers (please explain)

7. Please identify the location of your facility(ies) and/ or primary service area. You may choose more than one if your service area covers multiple communities, or “ERIE COUNTY (entire area)” if your service area is county-wide:

- [ ] Erie County (entire area)
- [ ] Akron (V)
- [ ] Alden (T)
- [ ] Alden (V)
- [ ] Amherst (T)
- [ ] Angola (V)
- [ ] Aurora (T)
- [ ] Blasdell (V)
- [ ] Boston (T)
- [ ] Brant (T)
- [ ] Buffalo (C)
- [ ] Cheektowaga (T)
- [ ] Clarence (T)
- [ ] Colden (T)
- [ ] Collins (T)
- [ ] Concord (T)
- [ ] Depew (V)
- [ ] East Aurora (V)
- [ ] Eden (T)
- [ ] Elma (T)
- [ ] Evans (T)
- [ ] Farnham (V)
- [ ] Gowanda (V)
- [ ] Grand Island (T)
- [ ] Hamburg (T)
- [ ] Hamburg (V)
- [ ] Holland (T)
- [ ] Kenmore (V)
- [ ] Lackawanna (C)
- [ ] Lancaster (T)
- [ ] Lancaster (V)
- [ ] Marilla (T)
- [ ] Newstead (T)
- [ ] North Collins (T)
- [ ] North Collins (V)
- [ ] Orchard Park (T)
- [ ] Orchard Park (V)
- [ ] Sardinia (T)
- [ ] Sloan (V)
- [ ] Springville (V)
- [ ] Tonawanda (C)
- [ ] Tonawanda (T)
- [ ] Wales (T)
- [ ] West Seneca (T)
- [ ] Williamsville (V)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

8. Does your organization maintain or manage any of the following within your designated service area? If not, answer “No” at the bottom, otherwise check all that apply.

- [ ] Buildings
- [ ] Roads
- [ ] Bridges
- [ ] Other (please specify)
- [ ] Water/Sewer
- [ ] Stormwater
- [ ] No

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

Hazard/Damage Identification

9. Looking back at previous hazard events, have buildings/facilities/ structures you have worked in and/ or are responsible for been impacted by a hazard (ex. damage/closures/etc.)?

- ◯ Yes
- ◯ No
- ◯ Don't Know

10. If you answered “Yes” to the above question, in your own words please describe the type of event that caused or is causing (if recurring) damage and loss of service/ property. If quantifiable data is available, please provide that as well (number of damaged structures, monetary loss, etc.) (please explain)

11. What areas (in which you work) do you believe to be the most vulnerable to hazards? What are these hazards? (please explain).

12. Is/ are the facility(ies) that you work in or are responsible for adequately prepared to withstand disasters? If your work involves working at multiple facilities, please provide a brief description in the “other” category, describing which facilities are most vulnerable.

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

13. Based on experience, do you think the transportation infrastructure serving your facility(ies) is adequately designed and equipped to withstand closures and damage due to hazards, and are able to provide long-term support for your community's needs? If not, please indicate why not.

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

14. Overall, do you think the utility infrastructure and service (specifically electricity and communication) are sufficiently equipped/ designed to withstand disasters and has/ have the ability to continue to provide uninterrupted service to your facility(ies)? If not, please indicate why not.

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

15. Are you aware of the number and location of vulnerable populations in your community/operating area?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

Community Preparedness

16. Do you think that local public education and awareness programs are effective at informing vulnerable populations on what they should do to prepare for and reduce personal risk to disasters?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

17. Do you think that the public, particularly vulnerable populations, are aware of, understands, and takes advantage of emergency warning and notification systems and service (mass notification system, audible alerts, text services, etc.)?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

18. To your knowledge, are development and land use decisions made with consideration to exposure and or increased of hazard risks?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

19. Do you believe that local government understands, supports, and possesses adequate resources for hazard risk reduction efforts in the community?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

20. Do you believe private businesses in your community (construction companies, supply companies, etc.) play a direct critical role in your organization's operation and daily function?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

21. Does your organization have/ or is part of an emergency response plan?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

22. If you answered yes above, does the plan cover potential impacts to your operations including pandemic?

- ◯ Yes
- ◯ No, we do not need one
- ◯ No, but we will need guidance on how to develop
- ◯ Don't Know
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

23. If your organization is part of an emergency response plan, does your organization have a defined role or responsibility within the plan?

- ○ Yes
- ○ No
- ○ Don't Know
- ○ Other (please specify)

24. Is your organization covered by any of the following plans? Check all that apply

- ☐ Continuity of Operations Plan
- ☐ Continuity of Government Plan
- ☐ Emergency Operations Plan
- ☐ Other (please specify)
- ☐ Business Continuity Plan
- ☐ None
- ☐ Don't Know

25. Do you believe your organization is equipped and resilient enough to handle a disaster?

- ○ Yes
- ○ No
- ○ Maybe
- ○ Don't Know
- ○ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

Project Identification

26. Can you identify projects or programs that will reduce your facility/organization's vulnerability to damages and losses, including loss of operation/service, to hazard events? (Please explain)

27. Can you identify projects or programs that have been recently been implemented to reduce your community's vulnerability, damage and losses, including loss of operation/service, to hazard events? (please explain)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Stakeholder Survey

COVID-19

COVID-19 has shed light onto our community's strengths and weaknesses. Please answer the following questions.

28. How has your organization been involved in response to this pandemic? (please explain)

29. How do you believe COVID-19 will reshape your organization's practices/ business framework? (ex. Have employees wear masks during flu season, improve sanitation practices, conduct work remotely whenever possible, etc.) (please explain)

30. What specific services/ infrastructure needs to be built/ improved in your community in order to mitigate damage we have experienced from this pandemic? (please explain)

31. Please share any challenges and obstacles you are facing (you can select more than one)

- [ ] Availability of cleaning supplies
- [ ] Availability of personal protective equipment
- [ ] Clear messaging
- [ ] Finding medical professionals
- [ ] Waste disposal
- [ ] Other (please specify)
- [ ] Contingency/back-up plan for staffing
- [ ] Tracking information
- [ ] Access to community officials
- [ ] Receiving accurate information regarding current situation/resources available

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

32. Do you have procedures/protocols in place to return back to standard operations after the pandemic (e.g. cleaning protocols and frequency, occupancy limits, etc.)?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Final Thoughts

33. Do you have any questions or comments for Erie County?

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q1 Name of your department/office/institution

Answered: 77 Skipped: 0

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	town of concord	1/28/2021 7:07 PM
2	Eden Town Board	1/28/2021 4:49 PM
3	Town of Lancaster O.E.M	1/27/2021 1:42 PM
4	Village of North Collins, Mayor's Office	1/27/2021 1:39 PM
5	Town of Lancaster Highway	1/27/2021 12:49 PM
6	Town of Lancaster	1/27/2021 10:51 AM
7	Moog Incorporated	1/26/2021 2:29 PM
8	Region 9 NYSDEC - Buffalo Regional Office, Division of Water	1/26/2021 12:29 PM
9	Administration Office WSCSD	1/26/2021 8:32 AM
10	Supervisor of the Town of Collins	1/21/2021 3:30 PM
11	Buffalo Surgery Center, LLC	1/21/2021 3:04 PM
12	DuPont	1/21/2021 11:32 AM
13	Town and Village of Orchard Park	1/21/2021 11:05 AM
14	Alden Central School District	1/20/2021 5:30 PM
15	Orchard Park Fire District	1/19/2021 9:23 PM
16	AMR Walden Fire District (Cheektowaga)	1/19/2021 2:01 PM
17	Alternative Care Services of WNY/Alden's Meals on Wheels	1/19/2021 1:32 PM
18	Snap Fitness	1/19/2021 11:40 AM
19	Eden CSD	1/19/2021 10:44 AM
20	Town of Tonawanda Water Plant	1/18/2021 1:41 PM
21	Clarence Center Fire Company	1/14/2021 6:10 PM
22	North Amherst Fire Company	1/14/2021 5:09 PM
23	Kenmore Town of Tonawanda Union Free School District	1/14/2021 2:47 PM
24	Kenmore-Town of Tonawanda Union Free School District	1/14/2021 8:28 AM
25	Fiddlers Green Manor	1/13/2021 1:34 PM
26	Buffalo Police Department	1/13/2021 12:01 PM
27	Springville-Griffith Institute Central School District	1/13/2021 11:07 AM
28	East Concord fire Dept	1/13/2021 8:40 AM
29	Cheektowaga Police Department	1/13/2021 8:30 AM
30	Sumitomo Rubber USA	1/13/2021 7:52 AM
31	Niagara Frontier Transportation Authority	1/13/2021 7:39 AM
32	Tonawanda CSD	1/12/2021 11:37 AM
33	Kaleida Health	1/12/2021 9:59 AM
34	Rescue Hose #1	1/12/2021 9:54 AM
35	Elma Fire Company	1/12/2021 8:24 AM
36	Marilla fire co	1/12/2021 3:33 AM
37	Brighton Fire Company	1/11/2021 9:10 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

38	Alden Fire Dept.	1/11/2021 8:14 PM
39	Emergency Medicine	1/11/2021 7:21 PM
40	Harris Hill VFC	1/11/2021 5:38 PM
41	Erie Community College, EMT Department	1/11/2021 4:58 PM
42	Swormville Fire	1/11/2021 4:58 PM
43	Boston Youth Soccer League	1/11/2021 4:19 PM
44	Village of Blasdell	1/11/2021 2:26 PM
45	County Line Stone	1/11/2021 2:21 PM
46	Akron Music Studios	1/11/2021 1:31 PM
47	Town of Newstead	1/11/2021 1:03 PM
48	Lake Shore Central School District	1/11/2021 12:46 PM
49	Town of Tonawanda Highway Department	1/11/2021 12:26 PM
50	Greater Buffalo Niagara Regional Transportation Council	1/11/2021 12:19 PM
51	Windom Volunteer Fire Company	1/11/2021 12:09 PM
52	Tonawanda City School District	1/11/2021 11:59 AM
53	Akron Central School District	1/11/2021 11:48 AM
54	Village of Akron	1/11/2021 11:46 AM
55	Orchard Park Fire District EMS	1/11/2021 11:24 AM
56	Brighton Fire District No. 5	1/11/2021 11:07 AM
57	Town of Tonawanda Paramedics	1/11/2021 10:57 AM
58	Lake Erie Watershed Protection Alliance	1/11/2021 10:57 AM
59	Unifrax	1/11/2021 10:45 AM
60	City of Tonawanda Office of Emergency Management	1/11/2021 10:36 AM
61	Sheridan Park Fire	1/11/2021 10:20 AM
62	NOCO Energy Corp	1/11/2021 10:18 AM
63	Evonik	1/11/2021 10:09 AM
64	Orchard Park Fire Company	1/11/2021 9:59 AM
65	Town of Grand Island	1/11/2021 9:41 AM
66	Iroquois CSD	1/11/2021 9:18 AM
67	SUNY Erie	1/11/2021 8:12 AM
68	Buffalo Surgery Center	1/11/2021 7:05 AM
69	Chaffee-Sardinia Fire Company	1/10/2021 6:05 PM
70	Town of Marilla	1/10/2021 5:42 PM
71	Town of sardinia highway department	1/10/2021 10:14 AM
72	Erie and Niagara county HazMat instructor for more a than 30 years	1/9/2021 10:11 PM
73	Twin District Vol Fire Co	1/9/2021 5:12 PM
74	Town of Sardinia OEM	1/9/2021 12:00 PM
75	Spring Brook fire district # 1	1/9/2021 7:28 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

76	Town of Sardinia	1/9/2021 7:08 AM
77	Village of Hamburg Dept. Of Emergency Services	1/8/2021 6:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q2 Name and Title of Respondent

Answered: 77 Skipped: 0

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	jim jozwiak planning board	1/28/2021 7:07 PM
2	Susan Wilhelm	1/28/2021 4:49 PM
3	Ronald Rozler	1/27/2021 1:42 PM
4	Jan Hutchinson, Clerk/Treasurer	1/27/2021 1:39 PM
5	Daniel Amatura	1/27/2021 12:49 PM
6	Ronald Ruffino, Sr. - Supervisor	1/27/2021 10:51 AM
7	Robin Young	1/26/2021 2:29 PM
8	Molly Bebak, EIT; Assistant Environmental Engineer	1/26/2021 12:29 PM
9	Tracy Spagnolo, Director of Pupil Personnel Services	1/26/2021 8:32 AM
10	Kenneth E. Martin, Town Supervisor	1/21/2021 3:30 PM
11	Dorothy L. Zimdahl/Administrator Lauren Piaskowski/LEPC Representative from Center	1/21/2021 3:04 PM
12	Joe Wachala - Corian Technical Advisor	1/21/2021 11:32 AM
13	Richard J. Mrugalski, Emergency Manager	1/21/2021 11:05 AM
14	Adam Stoltman Superintendent of Schools	1/20/2021 5:30 PM
15	Jay Knavel	1/19/2021 9:23 PM
16	Paramedic Commissioner	1/19/2021 2:01 PM
17	Debra Woods Board President	1/19/2021 1:32 PM
18	Melanie Pieszala - Operations Manager	1/19/2021 11:40 AM
19	Jeffrey Sortisio, Superintendent	1/19/2021 10:44 AM
20	Joshua Strauss	1/18/2021 1:41 PM
21	Chief Benjamin Hodge	1/14/2021 6:10 PM
22	James Rozbicki Fire Captain	1/14/2021 5:09 PM
23	Timothy E. Ames Director of Facilities	1/14/2021 2:47 PM
24	Nicole Morasco Assistant Superintendent of Finance	1/14/2021 8:28 AM
25	Dawn Chateaux- administrator	1/13/2021 1:34 PM
26	Michael Palizay - Lieutenant	1/13/2021 12:01 PM
27	Kimberly Moritz, Superintendent of Schools	1/13/2021 11:07 AM
28	Lori Ploetz....3rd asst Chief	1/13/2021 8:40 AM
29	Assistant Chief of Police Brian Gould	1/13/2021 8:30 AM
30	Russell Jackman Fire Chief	1/13/2021 7:52 AM
31	Jim Lavelle Manager, Safety & Security	1/13/2021 7:39 AM
32	Ronald Wasik Director of Facilities/Operations	1/12/2021 11:37 AM
33	Timothy Kornacki	1/12/2021 9:59 AM
34	Tom Nichols, FF/EMT	1/12/2021 9:54 AM
35	David Zaporowski, Fire Chief	1/12/2021 8:24 AM
36	Kathleen Brem, EMT	1/12/2021 3:33 AM
37	Steven Dabney, Chief	1/11/2021 9:10 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

38	Todd Gaffney, CME coordinator, CPR instructor, fire instructor	1/11/2021 8:14 PM
39	Dr Joshua Lynch	1/11/2021 7:21 PM
40	Laura Schreiber- Board of Director	1/11/2021 5:38 PM
41	Abigail Harning, Professor	1/11/2021 4:58 PM
42	Garry Daigler Ff/EMT	1/11/2021 4:58 PM
43	Jessica Blesy, president and treasure	1/11/2021 4:19 PM
44	Joseph Fox Emergency Manager	1/11/2021 2:26 PM
45	Brad Buyers , Vice President	1/11/2021 2:21 PM
46	Stacey Nicastro, Owner/President	1/11/2021 1:31 PM
47	David L. Cummings Supervisor	1/11/2021 1:03 PM
48	Charles Galluzzo	1/11/2021 12:46 PM
49	Steve Overbeck, Administrative Aide	1/11/2021 12:26 PM
50	Lisa Kenney Smart Mobility Advisor	1/11/2021 12:19 PM
51	Aaron Jarka	1/11/2021 12:09 PM
52	Timothy A. Oldenburg, Ed.D.	1/11/2021 11:59 AM
53	Patrick D. McCabe Superintendent of Schools	1/11/2021 11:48 AM
54	Jayne DeTine Village Clerk	1/11/2021 11:46 AM
55	Eric Knavel - Director of EMS Operations	1/11/2021 11:24 AM
56	Robert Sanford, Chairman Board of Commissioners	1/11/2021 11:07 AM
57	Diona Baumgartner, Paramedic	1/11/2021 10:57 AM
58	Joanna Panasiewicz, Coordinator	1/11/2021 10:57 AM
59	Mary Pokorski, HSE Engineer	1/11/2021 10:45 AM
60	Mark Banks, Deputy director (Acting Director)	1/11/2021 10:36 AM
61	Nate Montague -Fire Chief	1/11/2021 10:20 AM
62	Kevin Galas Regional Operations Manager North	1/11/2021 10:18 AM
63	Thomas R. Nowak Safety/Security Coordinator	1/11/2021 10:09 AM
64	John Newell Chief	1/11/2021 9:59 AM
65	John C. Whitney, P.E. Town Supervisor	1/11/2021 9:41 AM
66	Douglas Scofield, Superintendent of Schools	1/11/2021 9:18 AM
67	Mark F. Pacholec/ Interim AVP of Campus Safety and Security	1/11/2021 8:12 AM
68	Lauren Piaskowski, Administrative Assistant	1/11/2021 7:05 AM
69	Ronald Kenyon, Fire Chief	1/10/2021 6:05 PM
70	Earl Gingerich, Jr. Town Supervisor	1/10/2021 5:42 PM
71	Donald Hopkins. Highway superintendent	1/10/2021 10:14 AM
72	Guy M. Zaczek Retired Corporate Training for several local colleges	1/9/2021 10:11 PM
73	Michael Hyde - Chief	1/9/2021 5:12 PM
74	Jerry Whittington - Emergency Manager	1/9/2021 12:00 PM
75	Santo Tedesco Jr. Chief	1/9/2021 7:28 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

76	Beverly Gambino - Supervisor	1/9/2021 7:08 AM
77	Dean A. Messing, Asst. Village Disaster Coordinator	1/8/2021 6:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q3 What is your position/title/role with your department/office/institution?

Answered: 77 Skipped: 0

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	board member	1/28/2021 7:07 PM
2	Council person	1/28/2021 4:49 PM
3	Disaster Coordinator / Emergency Manager	1/27/2021 1:42 PM
4	Assistant to Mayor, Clerk, Treasurer, Notary, Registrar, Tax Collector for Village and School District, assistant to DPW, Police, and Fire departments.	1/27/2021 1:39 PM
5	Highway Supt.	1/27/2021 12:49 PM
6	Supervisor	1/27/2021 10:51 AM
7	Environmental Compliance Manager	1/26/2021 2:29 PM
8	Environmental Engineer-Individual SDPES regulation	1/26/2021 12:29 PM
9	Oversee Mental Health/Social Emotional, Safety (Safety Plans and Emergency Evacuations/Protocols), Registration, McKinney Vento Liaison, Title IX Officer, Residency. Oversee staff - Nurses, Social Workers, Counselors	1/26/2021 8:32 AM
10	Town Supervisor	1/21/2021 3:30 PM
11	Dorothy Zimdahl / Facility Administrator Lauren Piaskowski / Administrative Assistant & LEPC Rep	1/21/2021 3:04 PM
12	operations - Emergency response	1/21/2021 11:32 AM
13	Part time Emergency Manager for Town and Village.	1/21/2021 11:05 AM
14	Superintendent	1/20/2021 5:30 PM
15	District Fire Chief	1/19/2021 9:23 PM
16	Paramedic Commissioner	1/19/2021 2:01 PM
17	Volunteer and Board President	1/19/2021 1:32 PM
18	Operations Manager	1/19/2021 11:40 AM
19	Superintendent	1/19/2021 10:44 AM
20	Operations Foreman/Environmental Lab Director	1/18/2021 1:41 PM
21	Fire Chief	1/14/2021 6:10 PM
22	Fire Captain	1/14/2021 5:09 PM
23	Director of Facilities	1/14/2021 2:47 PM
24	My position oversees non-instructional operations at the District including safety.	1/14/2021 8:28 AM
25	Administrator	1/13/2021 1:34 PM
26	Planning & Analysis	1/13/2021 12:01 PM
27	Superintendent of Schools	1/13/2021 11:07 AM
28	Asst Chief. 9-3. EMS chief	1/13/2021 8:40 AM
29	Assistant Chief of Police	1/13/2021 8:30 AM
30	Fire Chief for the Emergency Response Team Safety Engineer for plant	1/13/2021 7:52 AM
31	Manage Safety and Security for Rail, Bus, and 2 area airports	1/13/2021 7:39 AM
32	Director of Facilities/Operations Provide support for school operations	1/12/2021 11:37 AM
33	Director of Emergency Management	1/12/2021 9:59 AM
34	FF/EMT	1/12/2021 9:54 AM
35	Fire Chief	1/12/2021 8:24 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

36	Advanced level EMT	1/12/2021 3:33 AM
37	Fire Chief	1/11/2021 9:10 PM
38	EMT, Firerfighter	1/11/2021 8:14 PM
39	Attending Physician, EMS liaison , EMS faculty	1/11/2021 7:21 PM
40	Board of Director	1/11/2021 5:38 PM
41	Department Chair and provision of EMS training.	1/11/2021 4:58 PM
42	FF/EMT	1/11/2021 4:58 PM
43	present and treasure	1/11/2021 4:19 PM
44	Emergency Manager	1/11/2021 2:26 PM
45	Vice President	1/11/2021 2:21 PM
46	Business Owner	1/11/2021 1:31 PM
47	Supervisor	1/11/2021 1:03 PM
48	Superintendent	1/11/2021 12:46 PM
49	Administrative Aide	1/11/2021 12:26 PM
50	Regional transportation planning	1/11/2021 12:19 PM
51	Fire Chief	1/11/2021 12:09 PM
52	Superintendent of Schools	1/11/2021 11:59 AM
53	Superintendent of Schols	1/11/2021 11:48 AM
54	Village Clerk	1/11/2021 11:46 AM
55	I am the director of the EMS side of the Fire District.	1/11/2021 11:24 AM
56	Policy makers.	1/11/2021 11:07 AM
57	Paramedic	1/11/2021 10:57 AM
58	LEWPA Coordinator and Senior Environmental Compliance Specialist for Erie County Department of Environment and Planning	1/11/2021 10:57 AM
59	Health, safety, and environmental engineer	1/11/2021 10:45 AM
60	Deputy Director(Acting Director)	1/11/2021 10:36 AM
61	Chief	1/11/2021 10:20 AM
62	Transportation Management Regional operations Tonawanda, Lockport, Akron, Syracuse and Albany	1/11/2021 10:18 AM
63	Emergency Response/Safety/Security	1/11/2021 10:09 AM
64	Chief of the Fire Company	1/11/2021 9:59 AM
65	See above	1/11/2021 9:41 AM
66	Superintendent	1/11/2021 9:18 AM
67	Chief of Police	1/11/2021 8:12 AM
68	Administrative Assistant/Fire Marshal/Credentialing	1/11/2021 7:05 AM
69	Fire Chief	1/10/2021 6:05 PM
70	Same as above	1/10/2021 5:42 PM
71	Highway superintendent	1/10/2021 10:14 AM
72	Currently retired but still doing Emergency Response Initial and Refresher Training	1/9/2021 10:11 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

73	Department Chief	1/9/2021 5:12 PM
74	Emergency Management	1/9/2021 12:00 PM
75	Chief	1/9/2021 7:28 AM
76	Town Supervisor	1/9/2021 7:08 AM
77	assistant Director	1/8/2021 6:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q4 Please provide your contact information.

Answered: 77 Skipped: 0

ANSWER CHOICES	RESPONSES	
Name	0.00%	0
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	77
Phone Number	100.00%	77

#	NAME	DATE
	There are no responses.	

#	COMPANY	DATE
	There are no responses.	

#	ADDRESS	DATE
	There are no responses.	

#	ADDRESS 2	DATE
	There are no responses.	

#	CITY/TOWN	DATE
	There are no responses.	

#	STATE/PROVINCE	DATE
	There are no responses.	

#	ZIP/POSTAL CODE	DATE
	There are no responses.	

#	COUNTRY	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	EMAIL ADDRESS	DATE
1	jimbojoz@hotmail.com	1/28/2021 7:07 PM
2	susanwilhelm12@gmail.com	1/28/2021 4:49 PM
3	rrozler@lancasterny.gov	1/27/2021 1:42 PM
4	VillageClerk@VillageofNorthCollins.org	1/27/2021 1:39 PM
5	damatura@lancasterny.gov	1/27/2021 12:49 PM
6	rruffino@lancasterny.gov	1/27/2021 10:51 AM
7	ryoung@moog.com	1/26/2021 2:29 PM
8	molly.bebak@dec.ny.gov	1/26/2021 12:29 PM
9	tspagnolo@wscschools.org	1/26/2021 8:32 AM
10	ken.martin@townofcollins.com	1/21/2021 3:30 PM
11	dzimdahl@excelsiorortho.com	1/21/2021 3:04 PM
12	Joseph.j.wachala@dupont.com	1/21/2021 11:32 AM
13	mrugalskir@orchardparkny.org	1/21/2021 11:05 AM
14	astoltman@aldenschools.org	1/20/2021 5:30 PM
15	jknavel@opfiredistrict.org	1/19/2021 9:23 PM
16	bro33dude@gmail.com	1/19/2021 2:01 PM
17	aldensmealsonwheels@verizon.net	1/19/2021 1:32 PM
18	ncrealty42@gmail.com	1/19/2021 11:40 AM
19	jsortisio@edencsd.org	1/19/2021 10:44 AM
20	jstrauss@tonawanda.ny.us	1/18/2021 1:41 PM
21	Chief@ccvfc.org	1/14/2021 6:10 PM
22	jrozbicki2@northamherstfire.com	1/14/2021 5:09 PM
23	tames@ktufsd.org	1/14/2021 2:47 PM
24	nmorasco@ktufsd.org	1/14/2021 8:28 AM
25	dclabeaux@fgmanor.com	1/13/2021 1:34 PM
26	mjpalizay@bpdny.org	1/13/2021 12:01 PM
27	kmoritz@springvillegi.org	1/13/2021 11:07 AM
28	lploetz01@gmail.com	1/13/2021 8:40 AM
29	bgould@tocny.org	1/13/2021 8:30 AM
30	russell_jackman@sumitomorubber-usa.com	1/13/2021 7:52 AM
31	james.lavelle@nfta.com	1/13/2021 7:39 AM
32	RWasik@tonacsd.org	1/12/2021 11:37 AM
33	tkornacki@kaleidahealth.org	1/12/2021 9:59 AM
34	TomNichols45@gmail.com	1/12/2021 9:54 AM
35	zap2072@msn.com	1/12/2021 8:24 AM
36	kbrem@rochester.rr.com	1/12/2021 3:33 AM
37	dabs21nike@gmail.com	1/11/2021 9:10 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

38	tgaffney3@rochester.rr.com	1/11/2021 8:14 PM
39	jjlynch2@Gmail.com	1/11/2021 7:21 PM
40	hhvfc16@gmail.com	1/11/2021 5:38 PM
41	harning@ecc.edu	1/11/2021 4:58 PM
42	garryrdaigler@gmail.com	1/11/2021 4:58 PM
43	bostonyouthsoccerleague@gmail.com	1/11/2021 4:19 PM
44	JWFOX44SR@YAHOO.COM	1/11/2021 2:26 PM
45	brad@clstone.us	1/11/2021 2:21 PM
46	akron.ms@gmail.com	1/11/2021 1:31 PM
47	dcummings@townofnewstead.com	1/11/2021 1:03 PM
48	charles.galluzzo@lscsd.org	1/11/2021 12:46 PM
49	soverbeck@tonawanda.ny.us	1/11/2021 12:26 PM
50	lkenney@gbnrtc.org	1/11/2021 12:19 PM
51	ajarka@opfiredistrict.org	1/11/2021 12:09 PM
52	toldenburg@tonacsd.org	1/11/2021 11:59 AM
53	pmccabe@akronk12.org	1/11/2021 11:48 AM
54	jdetine@akronvillage.us	1/11/2021 11:46 AM
55	eknavel@opfdems.org	1/11/2021 11:24 AM
56	rrsanford79@gmail.com	1/11/2021 11:07 AM
57	dibaumgartner@tonawanda.ny.us	1/11/2021 10:57 AM
58	Joanna.Panasiewicz@erie.gov	1/11/2021 10:57 AM
59	mpokorski@unifrax.com	1/11/2021 10:45 AM
60	mbanks@tonawandacityfd.com	1/11/2021 10:36 AM
61	nmontague87@aim.com	1/11/2021 10:20 AM
62	kgalas@noco.com	1/11/2021 10:18 AM
63	thomas.nowak@evonik.com	1/11/2021 10:09 AM
64	jnewell@opfiredistrict.org	1/11/2021 9:59 AM
65	jwhitney@grand-island.ny.us	1/11/2021 9:41 AM
66	dscofield@iroquoiscsd.org	1/11/2021 9:18 AM
67	pacholec@ecc.edu	1/11/2021 8:12 AM
68	lpiaskowski@excelsiorortho.com	1/11/2021 7:05 AM
69	ronaldkenyon1@aol.com	1/10/2021 6:05 PM
70	egingerich@townofmarilla.com	1/10/2021 5:42 PM
71	donaldhopkins56@yahoo.com	1/10/2021 10:14 AM
72	zaczek@prodigy.net	1/9/2021 10:11 PM
73	chief@twindistrict.com	1/9/2021 5:12 PM
74	gerard.whittington@erie.gov	1/9/2021 12:00 PM
75	stedesco75sbfd@gmail.com	1/9/2021 7:28 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

76	beverlygambino@outlook.com	1/9/2021 7:08 AM
77	messingdean@rocketmail.com	1/8/2021 6:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	PHONE NUMBER	DATE
1	7169985469	1/28/2021 7:07 PM
2	7169832795	1/28/2021 4:49 PM
3	7162258949	1/27/2021 1:42 PM
4	17163373160	1/27/2021 1:39 PM
5	7166836426	1/27/2021 12:49 PM
6	7166831610	1/27/2021 10:51 AM
7	716-687-4157	1/26/2021 2:29 PM
8	(716)851-7070	1/26/2021 12:29 PM
9	7166773156	1/26/2021 8:32 AM
10	17165324874	1/21/2021 3:30 PM
11	7162506520	1/21/2021 3:04 PM
12	716-863-0426	1/21/2021 11:32 AM
13	716-545-0557	1/21/2021 11:05 AM
14	716-937-9116 ext 4171	1/20/2021 5:30 PM
15	716-662-2619	1/19/2021 9:23 PM
16	7162381477	1/19/2021 2:01 PM
17	7169377105	1/19/2021 1:32 PM
18	7162887245	1/19/2021 11:40 AM
19	7169923629	1/19/2021 10:44 AM
20	716390-8693	1/18/2021 1:41 PM
21	7168308989	1/14/2021 6:10 PM
22	716-909-2533	1/14/2021 5:09 PM
23	7168748475	1/14/2021 2:47 PM
24	716-874-8400 ext 20308	1/14/2021 8:28 AM
25	716-592-4781	1/13/2021 1:34 PM
26	7166048840	1/13/2021 12:01 PM
27	17162588361	1/13/2021 11:07 AM
28	7162007611	1/13/2021 8:40 AM
29	7166863955	1/13/2021 8:30 AM
30	7163770750	1/13/2021 7:52 AM
31	716-855-7647	1/13/2021 7:39 AM
32	7166948855	1/12/2021 11:37 AM
33	716-803-7270	1/12/2021 9:59 AM
34	7169829733	1/12/2021 9:54 AM
35	7163104026	1/12/2021 8:24 AM
36	716-369-4510	1/12/2021 3:33 AM
37	7169983359	1/11/2021 9:10 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

38	716 937 6349	1/11/2021 8:14 PM
39	17163086649	1/11/2021 7:21 PM
40	7166978415	1/11/2021 5:38 PM
41	7169828536	1/11/2021 4:58 PM
42	17169235709	1/11/2021 4:58 PM
43	7168090121	1/11/2021 4:19 PM
44	716-822-1921 Ext 16	1/11/2021 2:26 PM
45	716-542-5435	1/11/2021 2:21 PM
46	716-542-4757	1/11/2021 1:31 PM
47	7165749435	1/11/2021 1:03 PM
48	7169974064	1/11/2021 12:46 PM
49	7168758822	1/11/2021 12:26 PM
50	7168562026	1/11/2021 12:19 PM
51	716-903-2647	1/11/2021 12:09 PM
52	7166947784	1/11/2021 11:59 AM
53	7165425005	1/11/2021 11:48 AM
54	7165429636	1/11/2021 11:46 AM
55	(716)243-9891	1/11/2021 11:24 AM
56	716-770-7577	1/11/2021 11:07 AM
57	7168765300	1/11/2021 10:57 AM
58	7168588077	1/11/2021 10:57 AM
59	7162550148	1/11/2021 10:45 AM
60	716-983-7177 (m)	1/11/2021 10:36 AM
61	7164180458	1/11/2021 10:20 AM
62	716-435-7309	1/11/2021 10:18 AM
63	716-879-0458	1/11/2021 10:09 AM
64	716-359-0797	1/11/2021 9:59 AM
65	(716) 773-9600 ext. 616	1/11/2021 9:41 AM
66	7166523000	1/11/2021 9:18 AM
67	716-270-6600	1/11/2021 8:12 AM
68	7162506520	1/11/2021 7:05 AM
69	7169835318	1/10/2021 6:05 PM
70	716-652-7293	1/10/2021 5:42 PM
71	7165604212	1/10/2021 10:14 AM
72	716 282 8039	1/9/2021 10:11 PM
73	7166813118	1/9/2021 5:12 PM
74	7164322435	1/9/2021 12:00 PM
75	716-481-7909	1/9/2021 7:28 AM

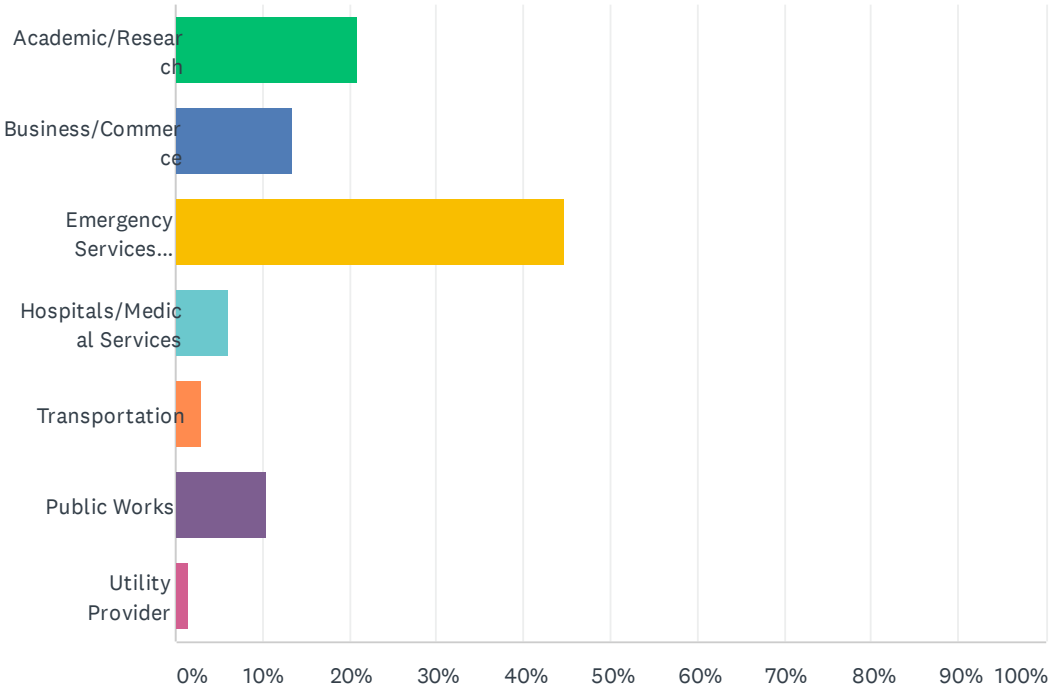
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

76	716-496-8900	1/9/2021 7:08 AM
77	17169835695	1/8/2021 6:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q5 What category does your facility operation/service fall under?

Answered: 67 Skipped: 10



ANSWER CHOICES	RESPONSES	
Academic/Research	20.90%	14
Business/Commerce	13.43%	9
Emergency Services (police, fire, EMS)	44.78%	30
Hospitals/Medical Services	5.97%	4
Transportation	2.99%	2
Public Works	10.45%	7
Utility Provider	1.49%	1
TOTAL		67

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	OTHER (PLEASE SPECIFY)	DATE
1	Manufacturing	1/26/2021 2:31 PM
2	Municipal Government	1/21/2021 3:34 PM
3	School District K-12	1/14/2021 2:49 PM
4	town government	1/11/2021 1:04 PM
5	Municipality	1/11/2021 11:48 AM
6	Environmental Intermuncipal Organization	1/11/2021 10:59 AM
7	Chemical Manufacturer	1/11/2021 10:11 AM
8	Municipal Government	1/11/2021 9:44 AM
9	Operations of the Town	1/10/2021 5:45 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q6 Based on the above category, please provide additional description and information as to what your organization does or offers (please explain)

Answered: 72 Skipped: 5

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	we look over pre plans for developments and business coming in	1/28/2021 7:08 PM
2	Town garbage contracted out.	1/28/2021 4:51 PM
3	The Village of North Collins has its own water system. Drawn from 2 wells, treated onsite, and delivered to water customers in our area.	1/27/2021 1:40 PM
4	Maintains Roads and drainage in the Town as well as picks up brush and leafs	1/27/2021 12:51 PM
5	We are an aerospace manufacturing company for flight controls hardware	1/26/2021 2:31 PM
6	regulatory	1/26/2021 12:31 PM
7	Educational: K-12 School District	1/26/2021 8:33 AM
8	Conduct business for the Town of Collins	1/21/2021 3:34 PM
9	Freestanding Ambulatory Surgery Center. We perform orthopaedic surgery, pain procedures and GI Endoscopy procedures. Open M-F. RN and ancillary staff. No overnight accommodations.	1/21/2021 3:07 PM
10	We make two different products: Corian - solid surface material Tedlar - film	1/21/2021 11:34 AM
11	Police Services	1/21/2021 11:07 AM
12	K-12 Public School	1/20/2021 5:31 PM
13	Fire Protection	1/19/2021 9:24 PM
14	Ems response Fire and ems response	1/19/2021 2:04 PM
15	Alden's Meals on Wheels is a local nutrition program designed to provide two well balanced, home cooked meals daily to disabled, homebound , elderly or those just recently home from the hospital or rehabilitation center.	1/19/2021 1:37 PM
16	Fitness Center	1/19/2021 11:40 AM
17	Pk-12 public school district	1/19/2021 10:47 AM
18	Water Treatment Plant - we take raw water from the Niagara River and treat it to make the public's drinking water	1/18/2021 1:42 PM
19	Fire and Emergency medical and rescue response	1/14/2021 6:12 PM
20	EMS, fire, special rescue	1/14/2021 5:10 PM
21	K-12 Education	1/14/2021 2:49 PM
22	PreK-12 Educational Institution	1/14/2021 8:30 AM
23	Long term care skilled facility	1/13/2021 1:36 PM
24	Law Enforcement / Emergency Response	1/13/2021 12:02 PM
25	We are a K-12 public school district.	1/13/2021 11:08 AM
26	Provides initial response to fire, first side and accidents. Also offers community service, shelter for emergencies	1/13/2021 8:43 AM
27	Full time law enforcement department	1/13/2021 8:31 AM
28	Manufacturers tires	1/13/2021 7:54 AM
29	We run the NFTA Metro Bus and Rail Systems in additon to BNIA and NFIA Airports	1/13/2021 7:40 AM
30	School district for the City of Tonawanda K-12	1/12/2021 11:39 AM
31	acute care, ambulatory surgery, long term care, home care	1/12/2021 9:59 AM
32	Fire & EMS	1/12/2021 9:55 AM
33	Fire/Rescue/EMS (Ambulance Service)	1/12/2021 8:25 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

34	Volunteer fire co	1/12/2021 3:34 AM
35	Brighton is one of 5 fire departments in the Town of Tonawanda.	1/11/2021 9:12 PM
36	fire, ems, scuba diving, swift water rescue	1/11/2021 8:17 PM
37	Emergency medicine, EMS/Police/Fire medical direction	1/11/2021 7:22 PM
38	Fire and EMS services to the Town of Clarence	1/11/2021 5:39 PM
39	EMT and Paramedic education programs.	1/11/2021 5:00 PM
40	Fire EMS Rescue operations	1/11/2021 4:59 PM
41	The Village of Blasdell offers Police, Fire & Ems Services	1/11/2021 2:27 PM
42	Limestone Quarry offering aggregates, blacktop, and agricultural lime to the WNY market	1/11/2021 2:23 PM
43	Musical Instrument sales and repairs, music lessons.	1/11/2021 1:32 PM
44	Oversees the town of Newstead	1/11/2021 1:04 PM
45	We provide P-12 instruction to students living in the Lake Shore Central School District	1/11/2021 12:47 PM
46	Highway road maintenance & surfacing; snow & ice removal; Tree planting/removal & maintenance and sanitation & recycling collection.	1/11/2021 12:28 PM
47	Transportation planning, coordinate NY and federal funds; link with transportation providers (NFTA, medical and non-emergency transport)	1/11/2021 12:20 PM
48	volunteer fire dept offering fire suppression and emergency medical services to the town of orchard park and mutual aid assistance to adjoining towns	1/11/2021 12:10 PM
49	UPK-12 public school district	1/11/2021 11:59 AM
50	UPK-Grade 12 School District	1/11/2021 11:49 AM
51	Provides utilities and services for the residents of the Village of Akron	1/11/2021 11:48 AM
52	We provide EMS transport and support to the Fire District.	1/11/2021 11:25 AM
53	Fire protection, Extrication, Haz-Mat level one response, public education and other requested services.	1/11/2021 11:10 AM
54	The mission of the Lake Erie Watershed Protection Alliance is to foster collaboration and partnerships within the watershed to address regional water quality and quantity concerns and in doing so, protect and enhance our Lake Erie resource. The mission will be furthered through the implementation of the following objectives: -Support existing federal and state Lake Erie restoration initiatives or recommendations -Implement a watershed management approach to protecting water quality -Leverage community assets and other support -Reduce point source and non-point source water pollution -Protect and enhance swimming, fishing, and other recreational activities -Reduce the impacts and costs of flooding -Conserve, protect, and restore natural habitat -Identify, prioritize, and quantify specific problems and their solutions in support of the mission -Build community stewardship through education and outreach to improve community awareness of the value and importance of Lake Erie and to increase community involvement in preserving the lake as a resource -Address failing and outdated municipal infrastructure needs www.erie.gov/lewpa	1/11/2021 10:59 AM
55	Emergency Medical operations	1/11/2021 10:58 AM
56	Manufacturing plant of high-performance specialty fibers	1/11/2021 10:47 AM
57	Plan for, mitigates, and manages disaster situations for the City of Tonawanda	1/11/2021 10:38 AM
58	Fire protection	1/11/2021 10:21 AM
59	Chemical Manufacturer	1/11/2021 10:11 AM
60	Fire Protection EMS Auto Extrication Tech Rescue (rope rescue, ice water rescue)	1/11/2021 10:00 AM
61	All aspects of Town government including, Water and Wastewater treatment, Parks and Recreation, Highway maintenance and municipal government services	1/11/2021 9:44 AM

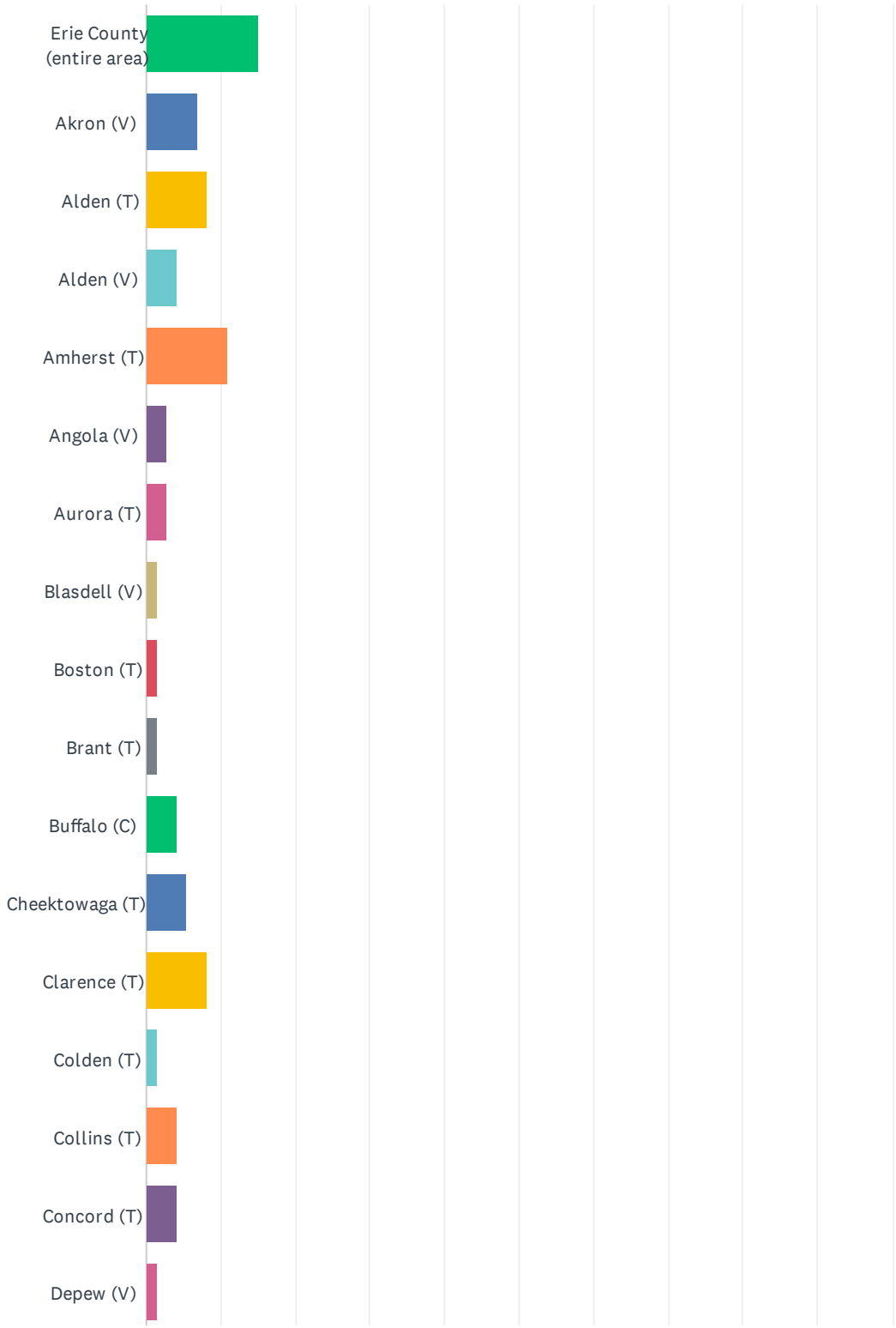
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

62	K-12 grade public education	1/11/2021 9:19 AM
63	Community college	1/11/2021 8:12 AM
64	Ambulatory Surgery Care- Orthopedics, GI, Pain Management	1/11/2021 7:05 AM
65	Our fire company provides fire suppression, rescue and emergency medical services to the Town of Sardinia.	1/10/2021 6:06 PM
66	Town Business	1/10/2021 5:45 PM
67	Highway and park maintenance	1/10/2021 10:16 AM
68	Typically I'm paid by colleges but am an expert in Chemical Process, writing Emergency Response Plans, and challenging current organizations to practice what they already have in their plans.	1/9/2021 10:17 PM
69	Fire & EMS	1/9/2021 5:14 PM
70	Emergency Management	1/9/2021 12:02 PM
71	Provides fire protection within our district. (town of Elma)	1/9/2021 7:30 AM
72	Assists with Emergency Services	1/8/2021 6:36 PM

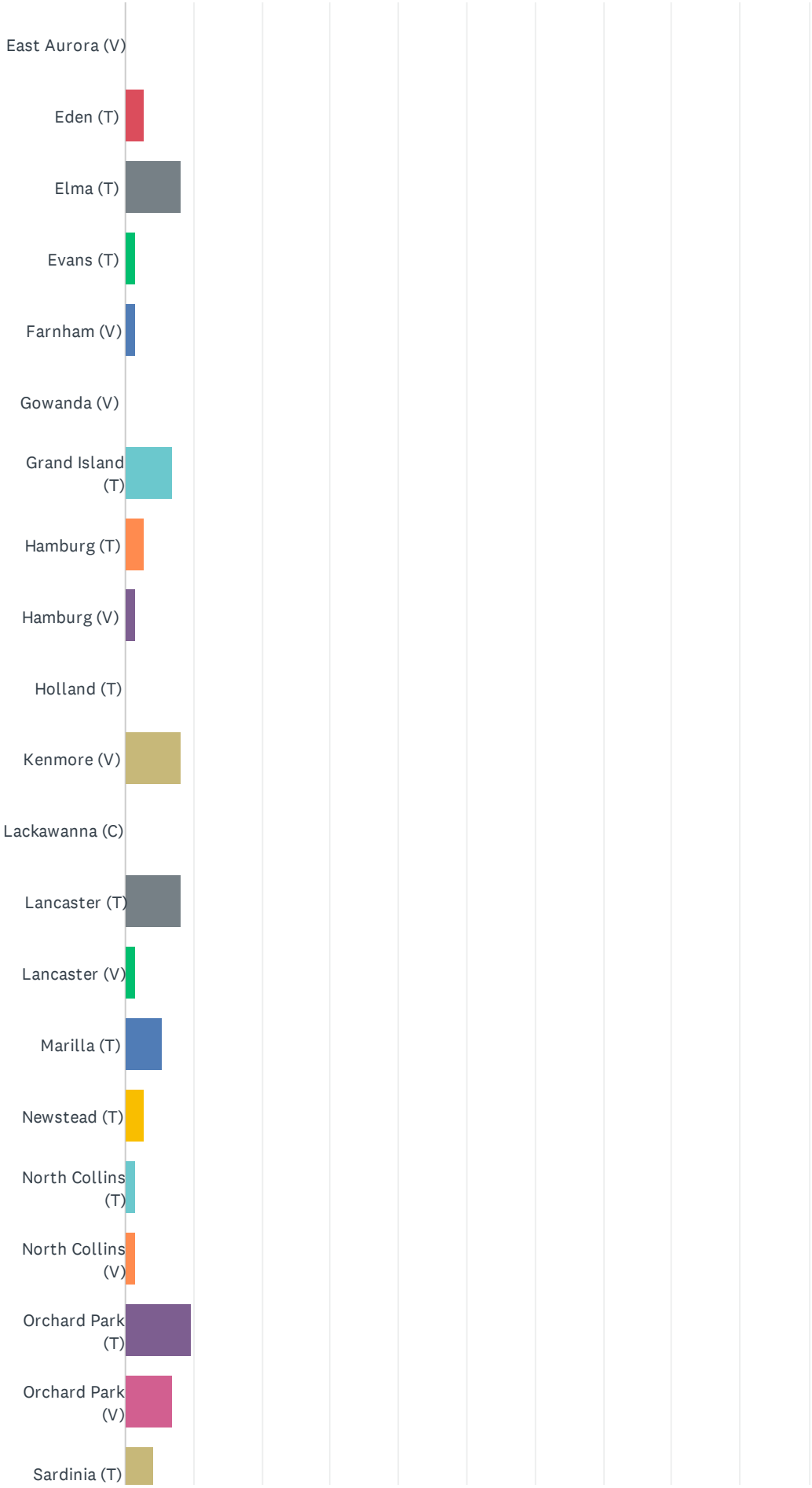
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q7 Please identify the location of your facility(ies) and/ or primary service area. You may choose more than one if your service area covers multiple communities, or “ERIE COUNTY (entire area)” if your service area is county-wide:

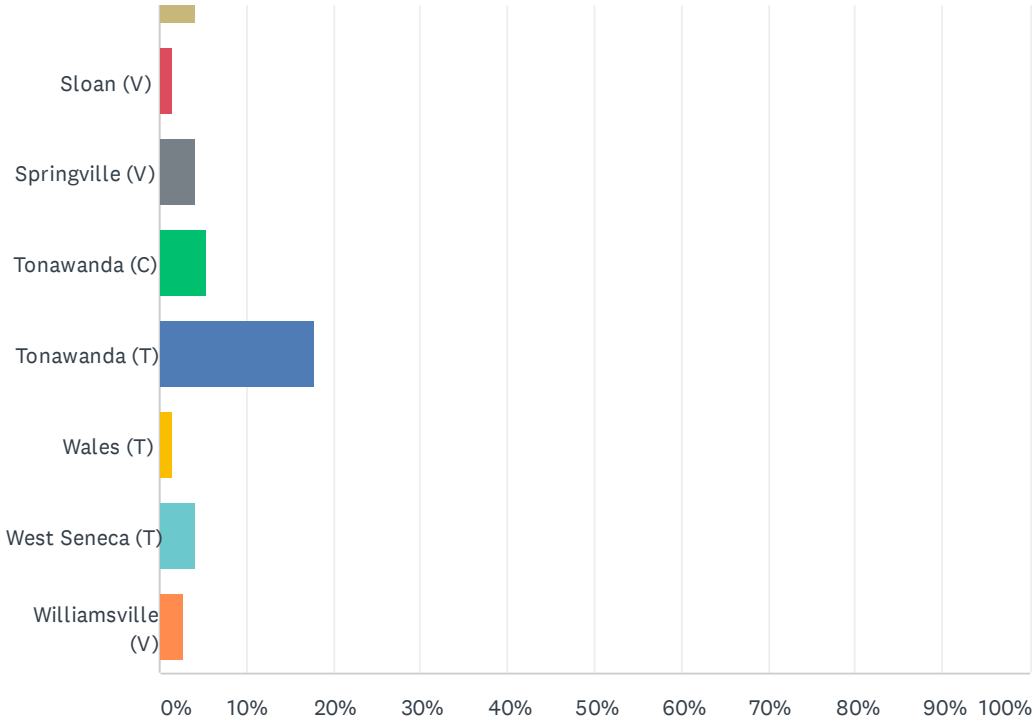
Answered: 73 Skipped: 4



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

ANSWER CHOICES	RESPONSES	
Erie County (entire area)	15.07%	11
Akron (V)	6.85%	5
Alden (T)	8.22%	6
Alden (V)	4.11%	3
Amherst (T)	10.96%	8
Angola (V)	2.74%	2
Aurora (T)	2.74%	2
Blasdell (V)	1.37%	1
Boston (T)	1.37%	1
Brant (T)	1.37%	1
Buffalo (C)	4.11%	3
Cheektowaga (T)	5.48%	4
Clarence (T)	8.22%	6
Colden (T)	1.37%	1
Collins (T)	4.11%	3
Concord (T)	4.11%	3
Depew (V)	1.37%	1
East Aurora (V)	0.00%	0
Eden (T)	2.74%	2
Elma (T)	8.22%	6
Evans (T)	1.37%	1
Farnham (V)	1.37%	1
Gowanda (V)	0.00%	0
Grand Island (T)	6.85%	5
Hamburg (T)	2.74%	2
Hamburg (V)	1.37%	1
Holland (T)	0.00%	0
Kenmore (V)	8.22%	6
Lackawanna (C)	0.00%	0
Lancaster (T)	8.22%	6
Lancaster (V)	1.37%	1
Marilla (T)	5.48%	4

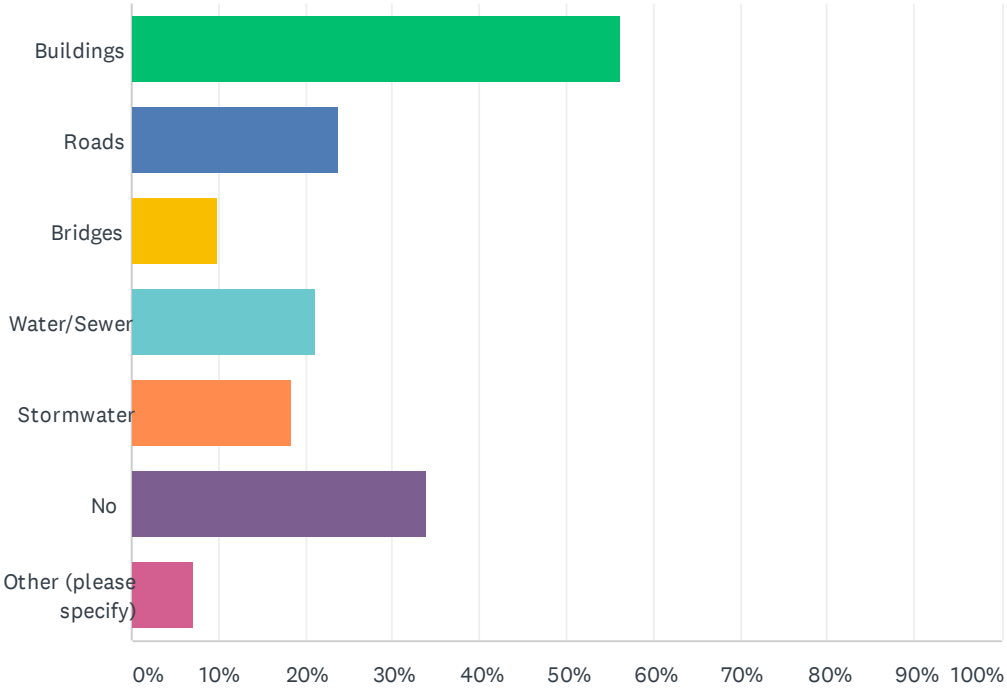
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Newstead (T)	2.74%	2
North Collins (T)	1.37%	1
North Collins (V)	1.37%	1
Orchard Park (T)	9.59%	7
Orchard Park (V)	6.85%	5
Sardinia (T)	4.11%	3
Sloan (V)	1.37%	1
Springville (V)	4.11%	3
Tonawanda (C)	5.48%	4
Tonawanda (T)	17.81%	13
Wales (T)	1.37%	1
West Seneca (T)	4.11%	3
Williamsville (V)	2.74%	2
Total Respondents: 73		

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q8 Does your organization maintain or manage any of the following within your designated service area? If not, answer “No” at the bottom, otherwise check all that apply.

Answered: 71 Skipped: 6



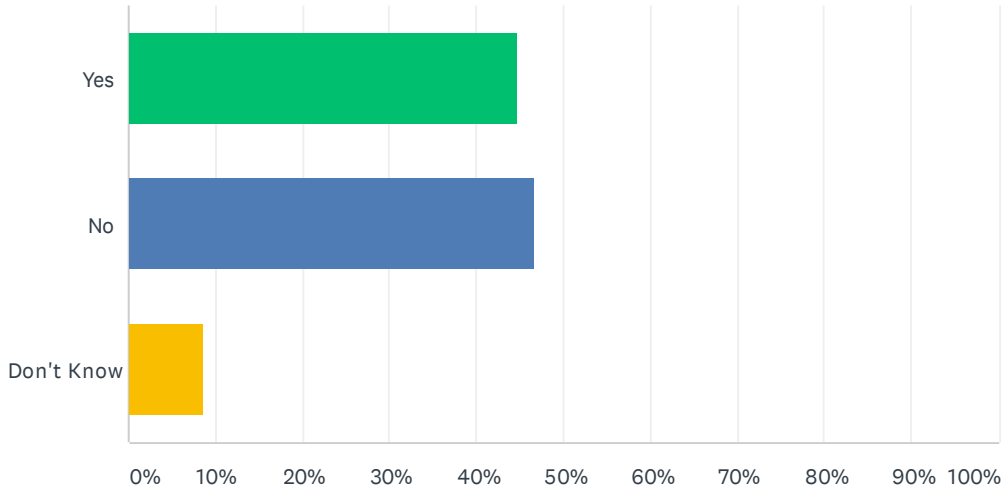
ANSWER CHOICES	RESPONSES	
Buildings	56.34%	40
Roads	23.94%	17
Bridges	9.86%	7
Water/Sewer	21.13%	15
Stormwater	18.31%	13
No	33.80%	24
Other (please specify)	7.04%	5
Total Respondents: 71		

#	OTHER (PLEASE SPECIFY)	DATE
1	regulates maintenance and management of sewer	1/26/2021 12:31 PM
2	no	1/11/2021 2:27 PM
3	Air Emissions, Quarry Discharge,	1/11/2021 2:23 PM
4	Special Events, Manmade or Nautural Disasters	1/11/2021 10:38 AM
5	Colleges, Nursing Homes, Logistics	1/9/2021 10:17 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q9 Looking back at previous hazard events, have buildings/facilities/ structures you have worked in and/ or are responsible for been impacted by a hazard (ex. damage/closures/etc.)?

Answered: 58 Skipped: 19



ANSWER CHOICES	RESPONSES	
Yes	44.83%	26
No	46.55%	27
Don't Know	8.62%	5
TOTAL		58

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q10 If you answered “Yes” to the above question, in your own words please describe the type of event that caused or is causing (if recurring) damage and loss of service/ property. If quantifiable data is available, please provide that as well (number of damaged structures, monetary loss, etc.) (please explain)

Answered: 33 Skipped: 44

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	Snow storm, wind storm caused loss of power at our DPW Garage and, at the time, we didn't have a generator at that facility. That caused our water system to not work. We have since added a generator to keep that from happening again. It also prompted us to have a generator installed at the municipal building that houses the Fire Department, the Police Department, and the Mayor/Clerk.	1/27/2021 1:48 PM
2	NA	1/26/2021 2:38 PM
3	Electric Power Outages - Schools needed to close; Snow Storms - Closures due to weather, Rain - roof damage and leakage	1/26/2021 8:41 AM
4	Heavy rain event caused flooding of Town Water District pump house. No physical damage, just mud and debris cleanup required.	1/21/2021 3:41 PM
5	Primarily impacted in the past by weather closures; currently services are impacted by the COVID-19 Pandemic	1/21/2021 3:14 PM
6	years ago we had a fire in the CCMC area, town responded and put it out	1/21/2021 11:37 AM
7	Several buildings were damaged during snow storm a few years ago.	1/20/2021 5:34 PM
8	The pandemic has required a significant change in how buildings are cleaned and maintained.	1/19/2021 10:54 AM
9	N/A	1/18/2021 1:47 PM
10	Water main breaks, roof damage, heat loss	1/14/2021 2:53 PM
11	We had significant erosion of our Colden Elementary property due to Cazenovia Creek. The remediation work that we completed was at a cost of almost $500,000.	1/13/2021 11:12 AM
12	Not sure if this fits, but the greatest challenge to us actually being able to provide our services is when the snow is too deep to keep the roads open. It is challenging when we continue to get calls for emergency assistance, yet the snow prohibits us from making it to the location.	1/13/2021 8:34 AM
13	N/A	1/13/2021 7:56 AM
14	Damage to infrastructure has caused the authority to shut down rail service for various amounts of time. ex. damage to overhead catenary system.	1/13/2021 7:45 AM
15	Weather events cause closure, wind damage to buildings, heavy rains flood basements and cause roofs to leak, significant snowfalls result in closures and roof issues.	1/12/2021 11:47 AM
16	WATER DAMAGE FROM BURST WATER LINES.	1/12/2021 10:20 AM
17	Na	1/12/2021 9:59 AM
18	loss of power, doors snowed in from storm and snow sliding off roof. roof damage, minor flooding.	1/11/2021 8:27 PM
19	Fire, collapse, etc	1/11/2021 7:23 PM
20	I am unable to provide specifics.	1/11/2021 5:04 PM
21	Flooding of a storage building located next to a creek. When creek overflows during heavy rain storms the building may be impacted	1/11/2021 2:31 PM
22	N/A	1/11/2021 2:24 PM
23	Winter storms have forced me to close down my retail business, resulting in loss of sales.	1/11/2021 1:42 PM
24	n/a	1/11/2021 1:05 PM
25	snow / blizzard event. unsure as to exact number of structures involved roughly 24 of the top of my head	1/11/2021 12:17 PM
26	The only thing that comes to mind is road closures. They affect our response route which affects our response time. I do not have any quantifiable data to support that at this time.	1/11/2021 11:56 AM
27	Severe wind led to roof and building damage. October "Surprise" storm led to loss of power, downed trees	1/11/2021 10:06 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

28	We have had weather events cause structural damage during large snow/ice events and also during high wind events.	1/11/2021 10:03 AM
29	Weather closures preventing students and staff from reporting, We are also an emergency shelter	1/11/2021 9:23 AM
30	Closures due to weather events	1/11/2021 8:14 AM
31	We have in the past suffered electrical power outages in our buildings which has had a negative effect on our service.	1/10/2021 6:09 PM
32	No	1/10/2021 5:48 PM
33	????	1/9/2021 7:36 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q11 What areas (in which you work) do you believe to be the most vulnerable to hazards? What are these hazards? (please explain).

Answered: 46 Skipped: 31

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	ditches filling in and the cattaragus creek erosion or flooding	1/28/2021 7:10 PM
2	Barns	1/28/2021 4:52 PM
3	Chemical spills, flooding, oxygen depletion, combustible dust, fires	1/26/2021 2:38 PM
4	Cafeteria - Equipment (Gas and Water damage if ever any) Work Shop areas (Buildings and Grounds / Transportation Department - due to the nature of the work done in these areas. Custodial Areas - Due to chemicals/waste COVID-19 Testing facility - due to waste / nature of purpose for testing Potential Science Labs - due to working with chemicals or other wastes used for academic purposes Roof Tops - If not updated and sealed - Weather	1/26/2021 8:41 AM
5	Flood damage along streams.	1/21/2021 3:41 PM
6	Natural disasters: loss of power, loss of water, weather emergencies	1/21/2021 3:14 PM
7	Power grid and aging infrastructure	1/21/2021 11:23 AM
8	Natural disaster, train accident with chemicals that would cause potential evacuation	1/20/2021 5:34 PM
9	Classrooms and common areas are most vulnerable to exposure	1/19/2021 10:54 AM
10	Terrorist Acts due to the fact we provide drinking water to the general public; Chlorine Leaks - Chlorine is used as a water disinfectant and can become a hazard to the public if equipment failure, etc.	1/18/2021 1:47 PM
11	Residential houses along Tonawanda Creek and Ransom Creek susceptible to flooding from creek // rare event	1/14/2021 5:22 PM
12	Power outages, heat loss, water breaks	1/14/2021 2:53 PM
13	Likely only the continued creek erosion at Colden Elementary.	1/13/2021 11:12 AM
14	Generally the entire town at times.	1/13/2021 8:34 AM
15	All area's tons of rubber very high fire load	1/13/2021 7:56 AM
16	Bus/Rail System- both are "open" systems which allow passengers to simply pay a fare in order to ride.	1/13/2021 7:45 AM
17	Older buildings are at significant risk to these weather events	1/12/2021 11:47 AM
18	Water damage from leaking roof infrastructure is an unknown variable	1/12/2021 10:20 AM
19	We're firefighters	1/12/2021 9:59 AM
20	Closed roads I suppose	1/12/2021 3:35 AM
21	the town has railroad tracks with chemicals on trains, flooding on major creeks, flat roofs on businesses	1/11/2021 8:27 PM
22	Chemical storage, etc	1/11/2021 7:23 PM
23	I don't think our campuses have unique vulnerabilities.	1/11/2021 5:04 PM
24	Loss of utilities and communications during emergency response	1/11/2021 5:02 PM
25	A creek that sometimes overflows during heavy rain storms	1/11/2021 2:31 PM
26	Our biggest hazard is snow loading during major events	1/11/2021 2:24 PM
27	The only known hazards related to my business are the naturally occurring cold Buffalo Winters, which happen every year.	1/11/2021 1:42 PM
28	?	1/11/2021 1:05 PM
29	Roads & trees are the most vulnerable to natural disasters - snow & wind storms, etc.	1/11/2021 12:30 PM
30	Evacuation of vulnerable residents and/or accessing vulnerable residents to provide food and medical services	1/11/2021 12:22 PM
31	Road closures.	1/11/2021 11:56 AM

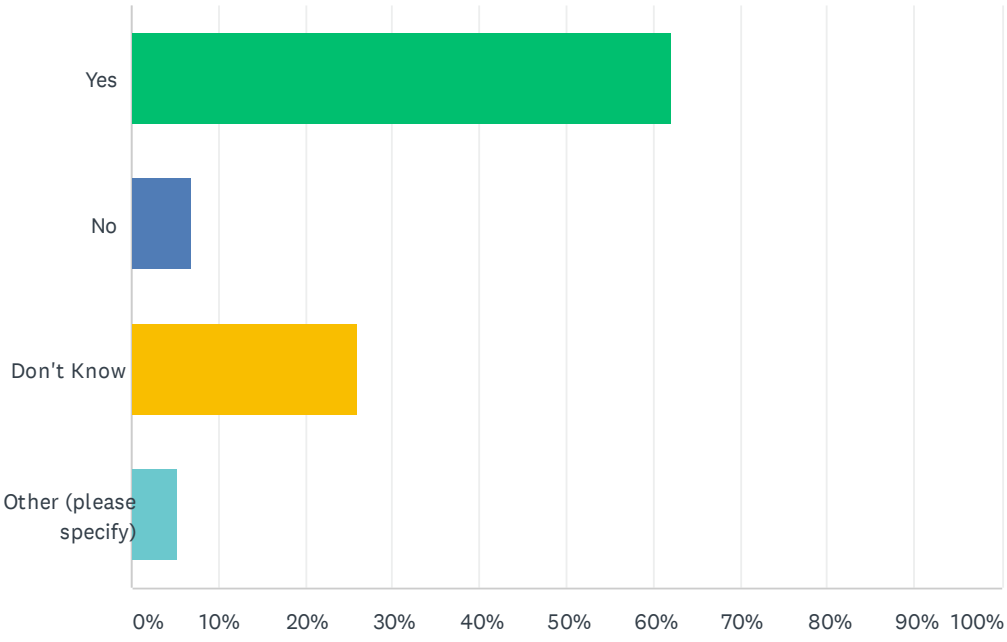
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

32	Staff shoratges due to COVID-19 isolation and quaretine orders School closures due to weather emergencies and viral spread	1/11/2021 11:52 AM
33	Coastal areas including streamside areas from flooding and erosion.	1/11/2021 11:01 AM
34	Water availability- only water source to plant is Town of Tonawanda	1/11/2021 10:55 AM
35	chemical leaks fro Railroad derailment	1/11/2021 10:42 AM
36	weather, power outages	1/11/2021 10:15 AM
37	Not provided by the Town but probably downed power lines. Due to the amount of dead Ash trees, this is a liability	1/11/2021 10:06 AM
38	N/A	1/11/2021 10:03 AM
39	Road conditions	1/11/2021 9:23 AM
40	Power losses	1/11/2021 8:14 AM
41	One of the greatest hazards that we face is operating on or near roadways, especially in bad weather.	1/10/2021 6:09 PM
42	Government Corruption	1/10/2021 5:48 PM
43	A hazardous chemical release is on the top of my list. Erie county has Ammonia and Niagara has Chlorine plus dozens more if you have been in those facilities.	1/9/2021 10:23 PM
44	roads - closures and inability to get apparatus to emergency events	1/9/2021 5:17 PM
45	Trees from wind storms	1/9/2021 7:36 AM
46	Wind damage - power outage	1/8/2021 6:41 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q12 Is/ are the facility(ies) that you work in or are responsible for adequately prepared to withstand disasters? If your work involves working at multiple facilities, please provide a brief description in the “other” category, describing which facilities are most vulnerable.

Answered: 58 Skipped: 19



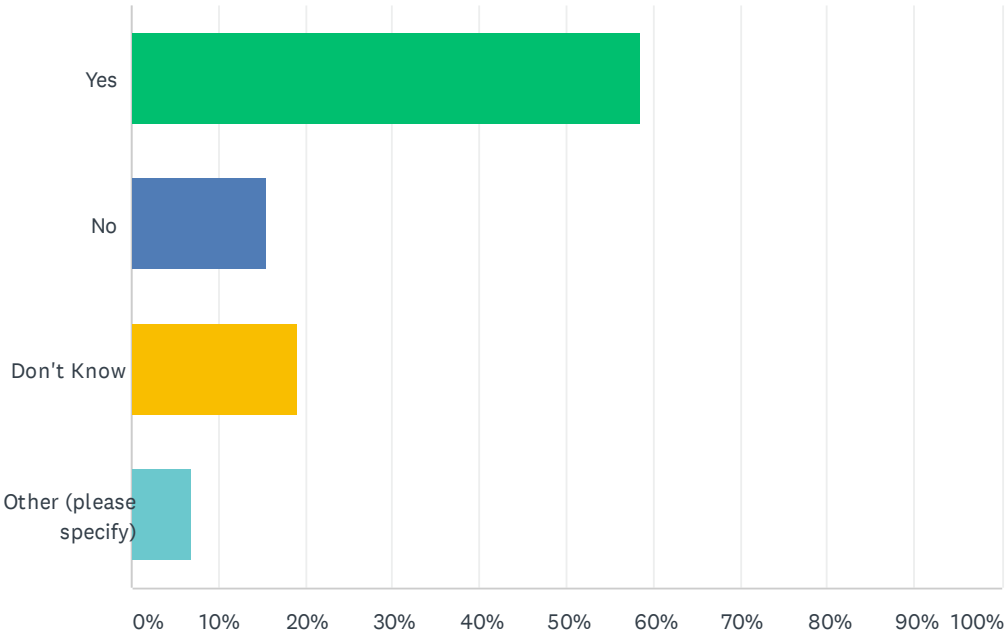
ANSWER CHOICES	RESPONSES	
Yes	62.07%	36
No	6.90%	4
Don't Know	25.86%	15
Other (please specify)	5.17%	3
TOTAL		58

#	OTHER (PLEASE SPECIFY)	DATE
1	I think that depends on the type of disaster, power outage, some of our buildings some do not, wind-should not be a problem, snow-should not be a problem, etc.	1/21/2021 11:23 AM
2	Depends on event	1/20/2021 5:34 PM
3	About half are and half don't have a clue	1/9/2021 10:23 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q13 Based on experience, do you think the transportation infrastructure serving your facility(ies) is adequately designed and equipped to withstand closures and damage due to hazards, and are able to provide long-term support for your community's needs? If not, please indicate why not.

Answered: 58 Skipped: 19



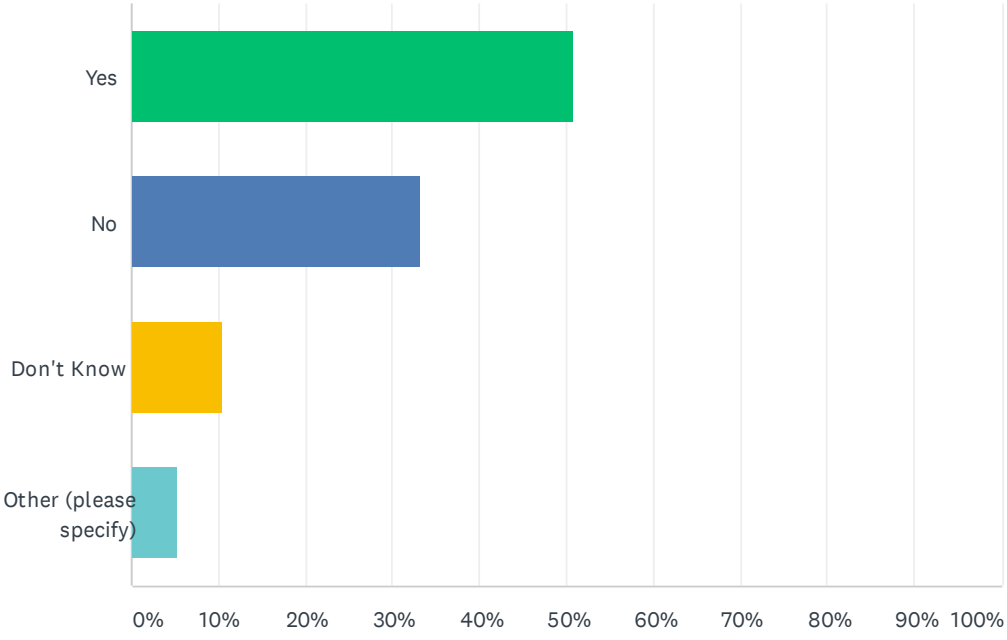
ANSWER CHOICES	RESPONSES	
Yes	58.62%	34
No	15.52%	9
Don't Know	18.97%	11
Other (please specify)	6.90%	4
TOTAL		58

#	OTHER (PLEASE SPECIFY)	DATE
1	No- Pirson Pkwy (plant location) leads to dead end, only one outlet	1/11/2021 10:55 AM
2	Yes however major snow storms can distupt of delay the transportation network	1/11/2021 10:42 AM
3	It significantly depends on the event	1/11/2021 9:23 AM
4	Only assist where needed in emergencies	1/8/2021 6:41 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q14 Overall, do you think the utility infrastructure and service (specifically electricity and communication) are sufficiently equipped/ designed to withstand disasters and has/ have the ability to continue to provide uninterrupted service to your facility(ies)? If not, please indicate why not.

Answered: 57 Skipped: 20



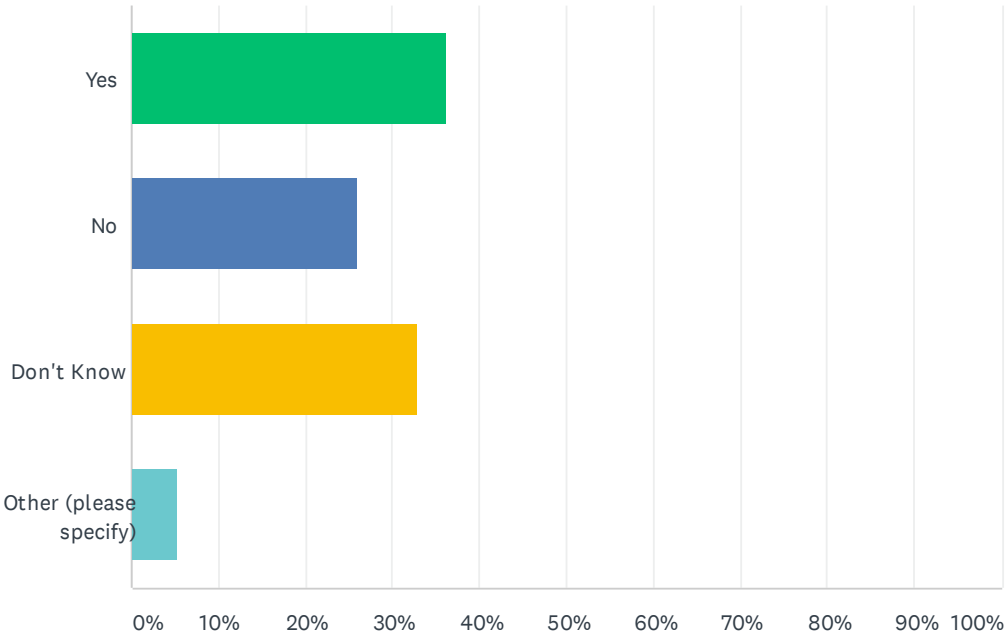
ANSWER CHOICES	RESPONSES	
Yes	50.88%	29
No	33.33%	19
Don't Know	10.53%	6
Other (please specify)	5.26%	3
TOTAL		57

#	OTHER (PLEASE SPECIFY)	DATE
1	not responsible for electricity or communication	1/27/2021 12:53 PM
2	I don't thnk the electricity infrastructure is solid, but we have a backup generator.	1/11/2021 11:56 AM
3	We would need to rely on our generators	1/11/2021 9:23 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q15 Are you aware of the number and location of vulnerable populations in your community/operating area?

Answered: 58 Skipped: 19



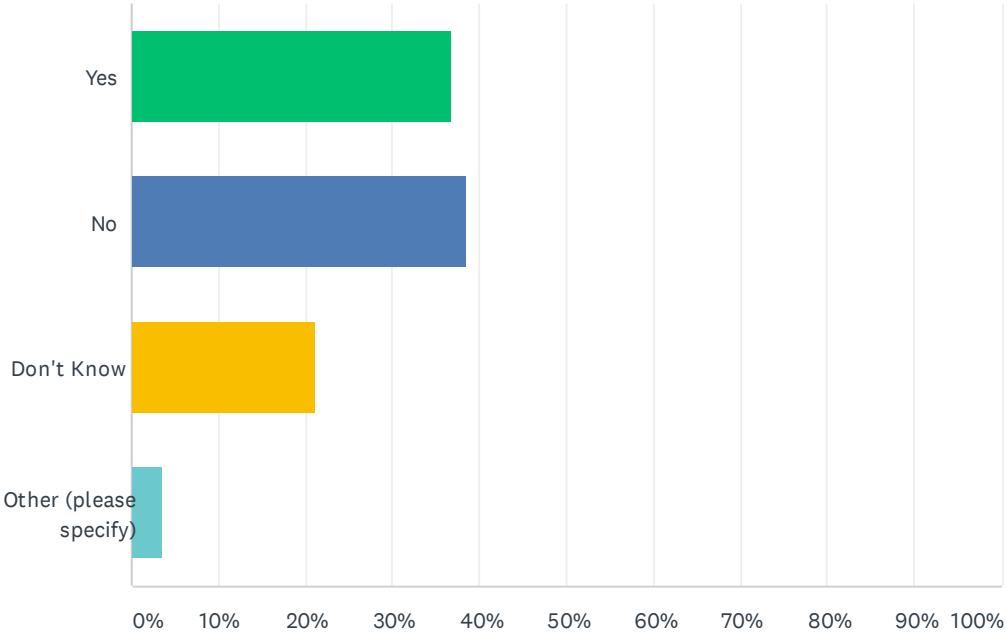
ANSWER CHOICES	RESPONSES	
Yes	36.21%	21
No	25.86%	15
Don't Know	32.76%	19
Other (please specify)	5.17%	3
TOTAL		58

#	OTHER (PLEASE SPECIFY)	DATE
1	If this question is in particular related to potential hazards, I'm unsure of the vulnerable populations related to the topic of this survey.	1/13/2021 11:12 AM
2	We track special needs persons however the list is not complete for all residents with needs in the City.	1/11/2021 10:42 AM
3	does not apply	1/11/2021 8:14 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q16 Do you think that local public education and awareness programs are effective at informing vulnerable populations on what they should do to prepare for and reduce personal risk to disasters?

Answered: 57 Skipped: 20



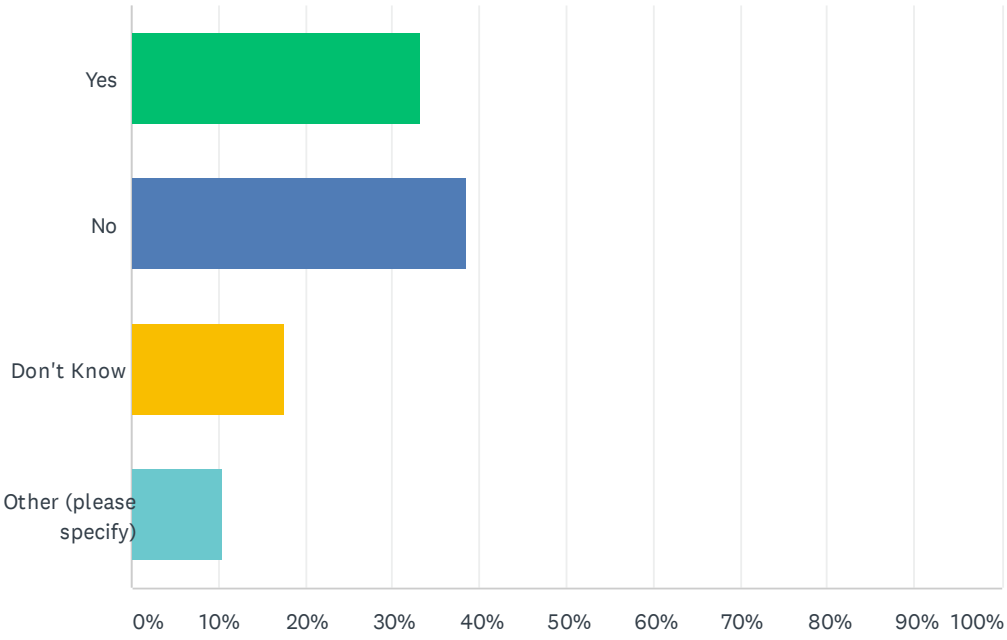
ANSWER CHOICES	RESPONSES	
Yes	36.84%	21
No	38.60%	22
Don't Know	21.05%	12
Other (please specify)	3.51%	2
TOTAL		57

#	OTHER (PLEASE SPECIFY)	DATE
1	For the most part yes	1/13/2021 8:52 AM
2	They do inform the public but they need more focus on individuals taking it seriously and not waiting to the last minute	1/11/2021 9:27 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q17 Do you think that the public, particularly vulnerable populations, are aware of, understands, and takes advantage of emergency warning and notification systems and service (mass notification system, audible alerts, text services, etc.)?

Answered: 57 Skipped: 20



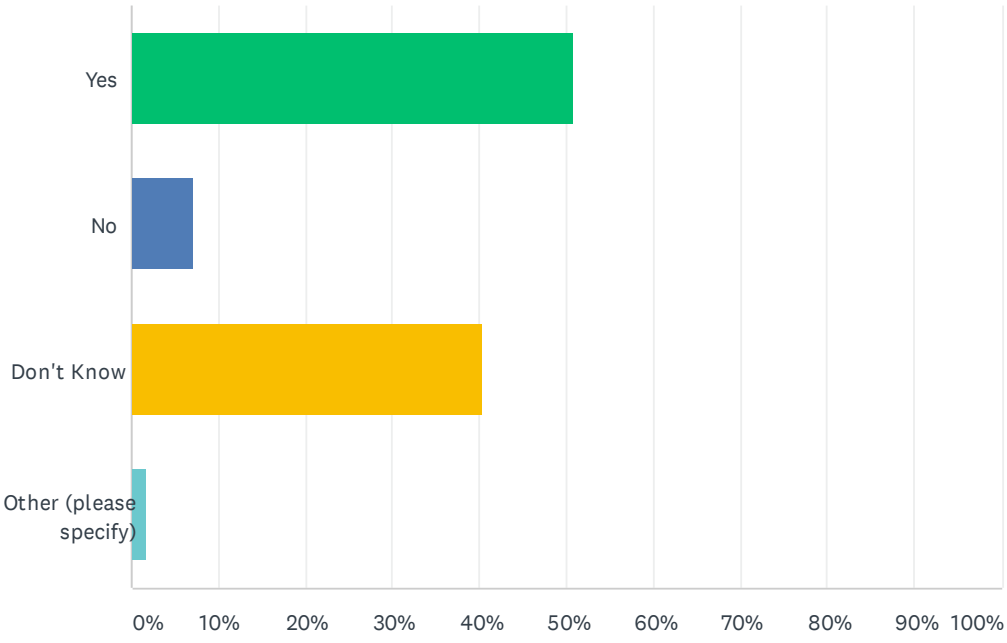
ANSWER CHOICES	RESPONSES	
Yes	33.33%	19
No	38.60%	22
Don't Know	17.54%	10
Other (please specify)	10.53%	6
TOTAL		57

#	OTHER (PLEASE SPECIFY)	DATE
1	I'm aware that the town supervisor sends out messages, as I have signed up to receive them	1/26/2021 2:47 PM
2	Depends on the resources available to the vulnerable populations. (Poverty / Elderly / Physically Handicapped / Mentally Impaired)	1/26/2021 8:49 AM
3	With community assistance, I believe this is accomplished	1/13/2021 8:52 AM
4	I think most people only pay attention to alerts that come through smart phones	1/11/2021 10:57 AM
5	Only at the last minute (last 6 hours)	1/11/2021 9:27 AM
6	Integrate this outcome with others already in place	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q18 To your knowledge, are development and land use decisions made with consideration to exposure and or increased of hazard risks?

Answered: 57 Skipped: 20



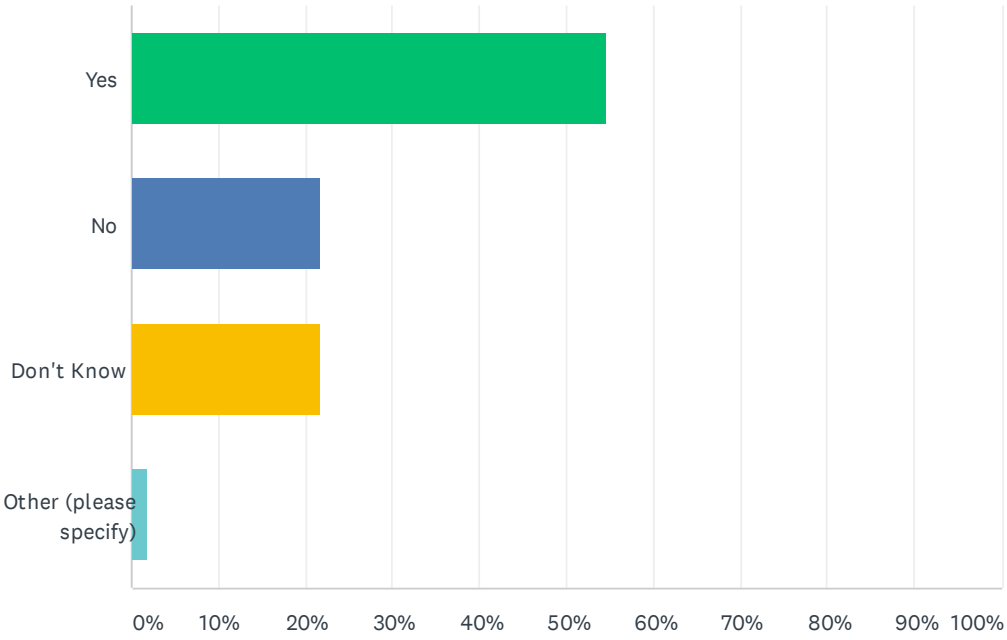
ANSWER CHOICES	RESPONSES	
Yes	50.88%	29
No	7.02%	4
Don't Know	40.35%	23
Other (please specify)	1.75%	1
TOTAL		57

#	OTHER (PLEASE SPECIFY)	DATE
1	Ask the neighbors downwind of Occidential Chemical, FMC and Tops Distribution	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q19 Do you believe that local government understands, supports, and possesses adequate resources for hazard risk reduction efforts in the community?

Answered: 55 Skipped: 22



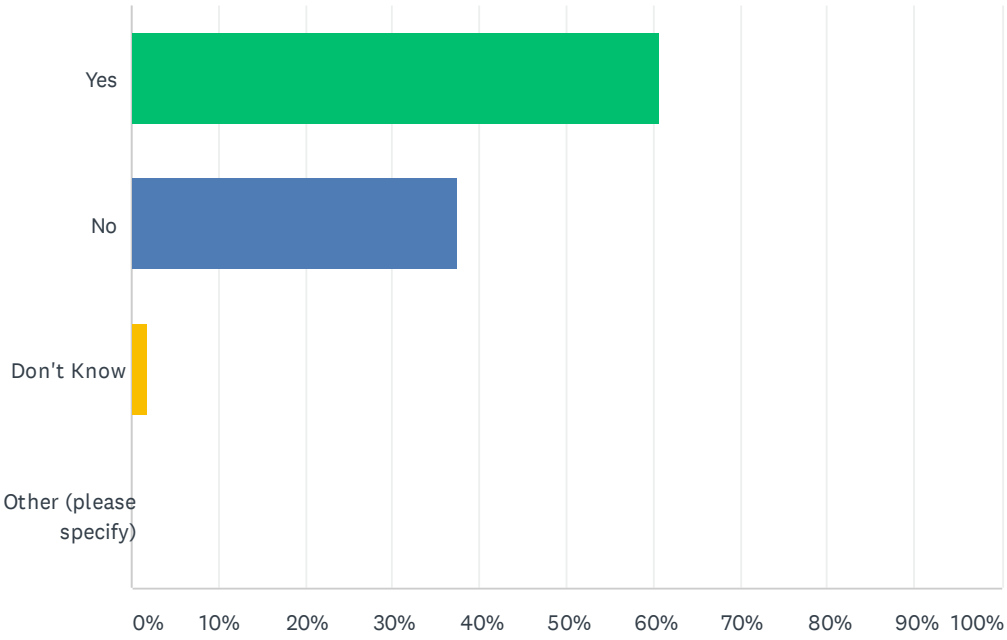
ANSWER CHOICES	RESPONSES	
Yes	54.55%	30
No	21.82%	12
Don't Know	21.82%	12
Other (please specify)	1.82%	1
TOTAL		55

#	OTHER (PLEASE SPECIFY)	DATE
1	Todays Gov is only Reactionary. This needs to be done Privately	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q20 Do you believe private businesses in your community (construction companies, supply companies, etc.) play a direct critical role in your organization's operation and daily function?

Answered: 56 Skipped: 21



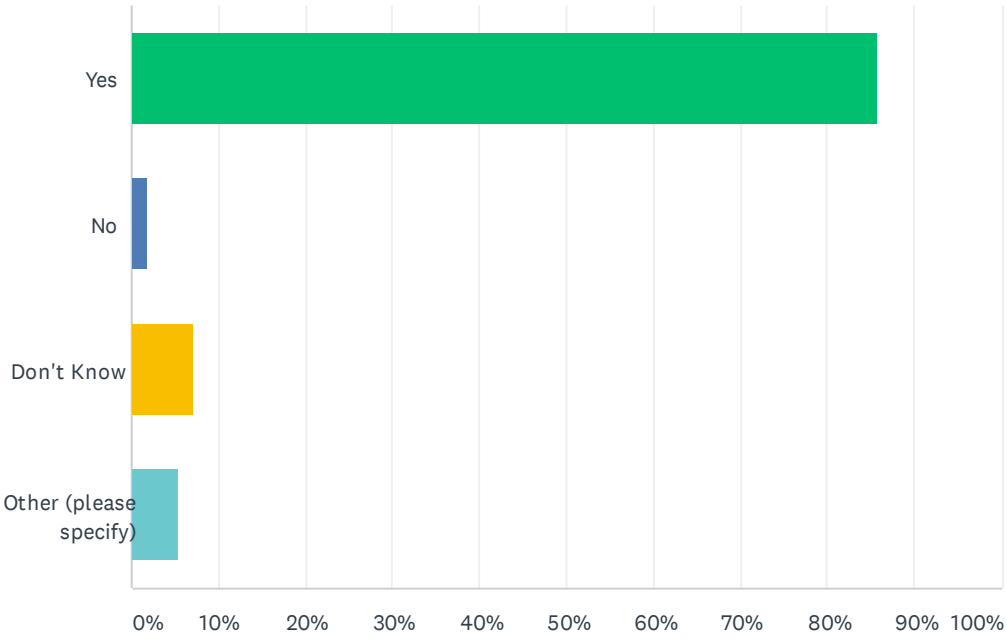
ANSWER CHOICES	RESPONSES	
Yes	60.71%	34
No	37.50%	21
Don't Know	1.79%	1
Other (please specify)	0.00%	0
TOTAL		56

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q21 Does your organization have/ or is part of an emergency response plan?

Answered: 56 Skipped: 21



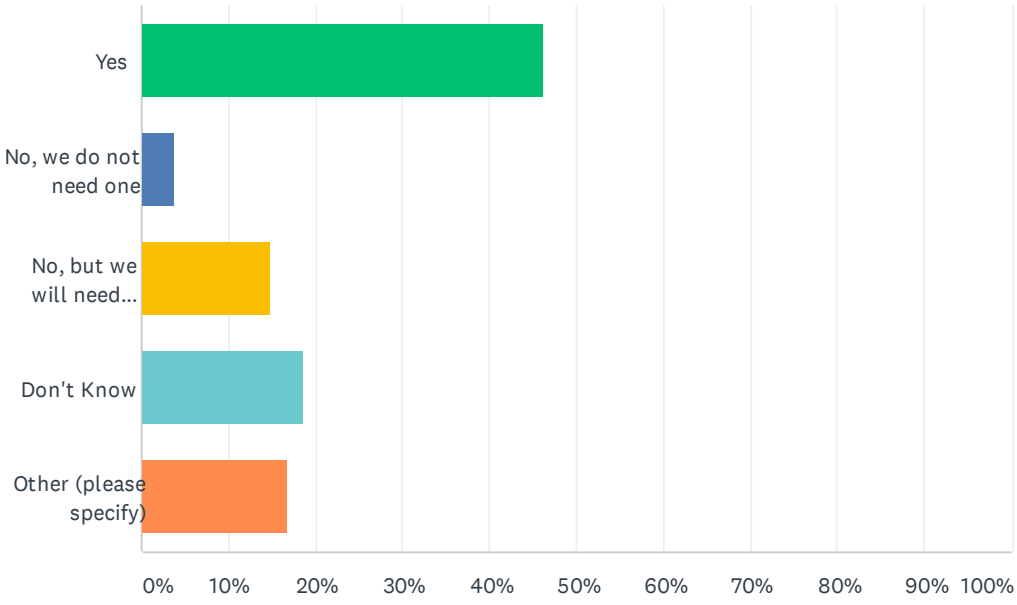
ANSWER CHOICES	RESPONSES	
Yes	85.71%	48
No	1.79%	1
Don't Know	7.14%	4
Other (please specify)	5.36%	3
TOTAL		56

#	OTHER (PLEASE SPECIFY)	DATE
1	I think so but I've never seen it.	1/27/2021 1:50 PM
2	Does not apply	1/11/2021 1:44 PM
3	Any company i do training for must have a plan.	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q22 If you answered yes above, does the plan cover potential impacts to your operations including pandemic?

Answered: 54 Skipped: 23



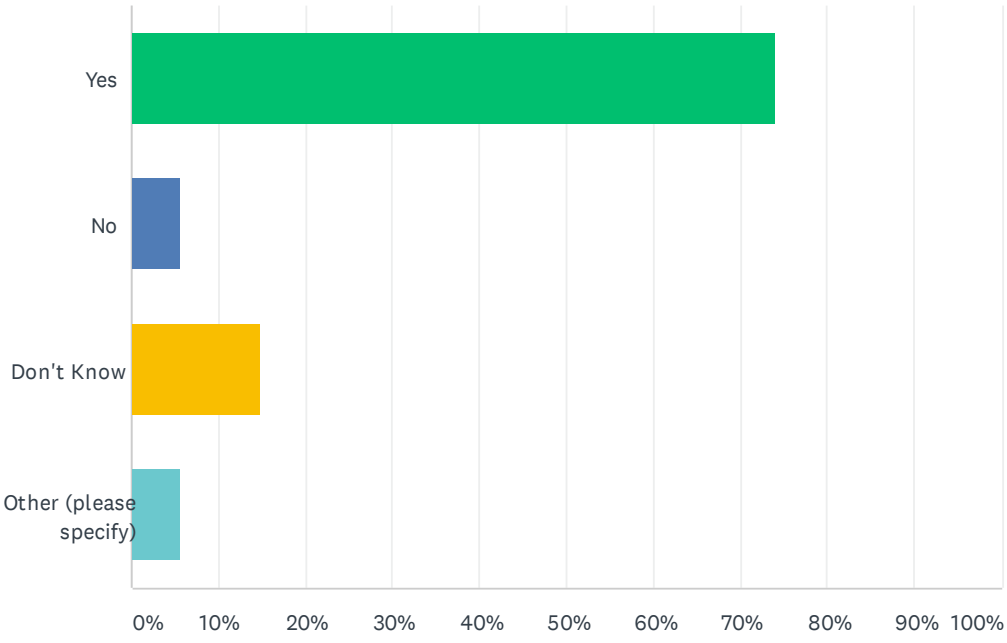
ANSWER CHOICES	RESPONSES	
Yes	46.30%	25
No, we do not need one	3.70%	2
No, but we will need guidance on how to develop	14.81%	8
Don't Know	18.52%	10
Other (please specify)	16.67%	9
TOTAL		54

#	OTHER (PLEASE SPECIFY)	DATE
1	In the process of working with Erie County and Local Officials on the Development of this plan to support a pandemic	1/26/2021 8:49 AM
2	We are in the process of completing this task	1/20/2021 5:36 PM
3	Not 100% positive pandemics are specifically addressed in the policy	1/13/2021 8:36 AM
4	Currently working on a plan to include pandemics	1/12/2021 11:52 AM
5	Pandemic not covered	1/12/2021 8:30 AM
6	No plan in place.	1/11/2021 1:44 PM
7	Each county should have one, not the Lake Erie watershed.	1/11/2021 11:03 AM
8	It has sections on health related situations. does not name pandemic specifically	1/11/2021 10:46 AM
9	In 25 years I have never seen one but I do own the Pandemic Plan outline from OSHA published about ten years ago.	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q23 If your organization is part of an emergency response plan, does your organization have a defined role or responsibility within the plan?

Answered: 54 Skipped: 23



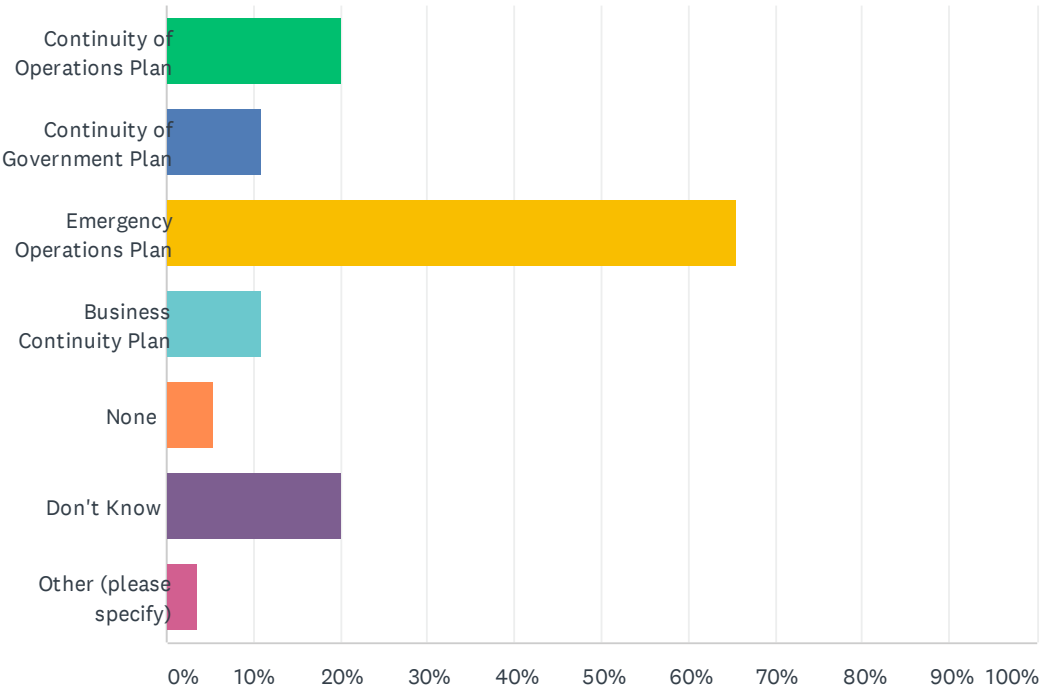
ANSWER CHOICES	RESPONSES	
Yes	74.07%	40
No	5.56%	3
Don't Know	14.81%	8
Other (please specify)	5.56%	3
TOTAL		54

#	OTHER (PLEASE SPECIFY)	DATE
1	we fall the transportation annex of the county plan	1/13/2021 7:51 AM
2	Does not apply	1/11/2021 1:44 PM
3	Many times plans have generic titles that NO one fills	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q24 Is your organization covered by any of the following plans? Check all that apply

Answered: 55 Skipped: 22



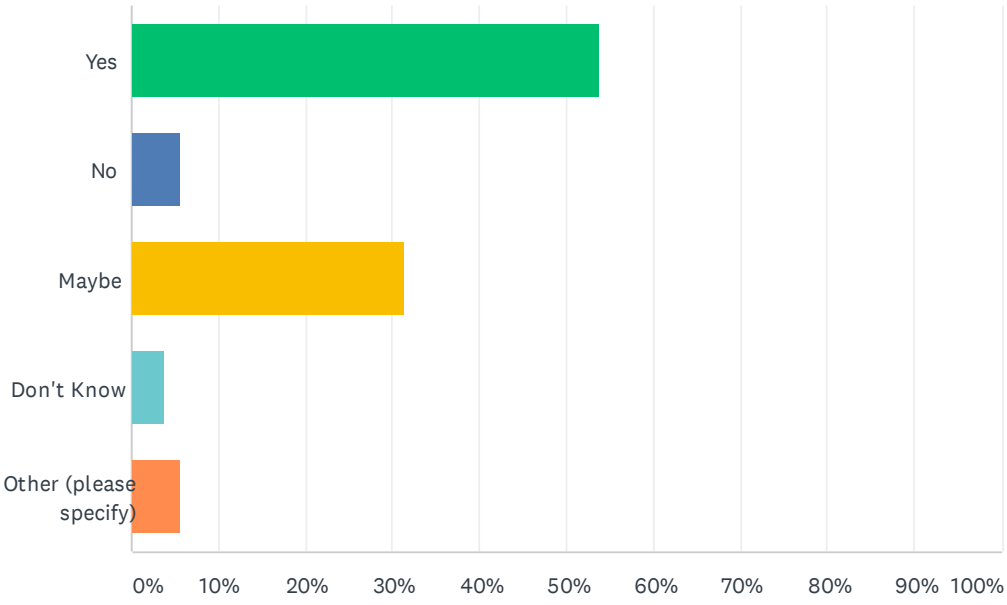
ANSWER CHOICES	RESPONSES	
Continuity of Operations Plan	20.00%	11
Continuity of Government Plan	10.91%	6
Emergency Operations Plan	65.45%	36
Business Continuity Plan	10.91%	6
None	5.45%	3
Don't Know	20.00%	11
Other (please specify)	3.64%	2
Total Respondents: 55		

#	OTHER (PLEASE SPECIFY)	DATE
1	National Fuel and National Grid Critical Supplier Response Plan	1/11/2021 2:25 PM
2	The best plans are integrated and practiced	1/9/2021 10:34 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q25 Do you believe your organization is equipped and resilient enough to handle a disaster?

Answered: 54 Skipped: 23



ANSWER CHOICES	RESPONSES	
Yes	53.70%	29
No	5.56%	3
Maybe	31.48%	17
Don't Know	3.70%	2
Other (please specify)	5.56%	3
TOTAL		54

#	OTHER (PLEASE SPECIFY)	DATE
1	Depends on the Disaster - The district has responded well to many unexpected situations well	1/26/2021 8:49 AM
2	Mutual aid if needed	1/13/2021 8:52 AM
3	N/A	1/11/2021 11:03 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q26 Can you identify projects or programs that will reduce your facility/organization’s vulnerability to damages and losses, including loss of operation/service, to hazard events? (Please explain)

Answered: 46 Skipped: 31

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	Our village maintains its own water, electric and sewer facilities which helps expedite emergency procedures	1/28/2021 7:14 PM
2	Bury electric lines would be helpful. Better information avenues for elderly	1/28/2021 4:55 PM
3	no	1/27/2021 12:55 PM
4	Improved emergency response plans to include active drills for all possible scenarios and contingencies	1/26/2021 2:50 PM
5	Capital Project - Approved 2019 - Updates will support facility and organization (Over the next 3-5 years GCN Staff training yearly - safety Erie 1 BOCES - safety team / consult Drills - practice emergency evacuations, fire drills and lockdowns Safety Meetings - School level - 1x/month and District 4x's/year	1/26/2021 8:58 AM
6	We perform Hazard and Vulnerability Assessments biannually to ensure that we are prepared for potential emergencies. We conduct drills and perform staff education.	1/21/2021 3:21 PM
7	we are installing new flammable storage tanks that have new fire protection and are insulated (the old tanks do not have the insulation) the insulation is for fire protection	1/21/2021 11:41 AM
8	All municipal buildings should have backup generators. Have the proper equipment and man power to over come different type of events that occur in our area.	1/21/2021 11:30 AM
9	No	1/20/2021 5:36 PM
10	The continue improvements in remote instruction/learning as well as improvements in connectivity have allowed our organization to continue instructing students during the pandemic.	1/19/2021 10:58 AM
11	The Town/County needs to put money into infrastructure and public buildings, repair/fix roofs, pumps, electrical upgrades at facility, update Chlorine leak detection, install Chlorine Scrubber system or put in Chlorine generators to make our own water disinfectant without the hazards to the public/employees	1/18/2021 1:52 PM
12	Training and situational awareness on the emergency response level	1/14/2021 6:16 PM
13	All employees required to complete right to know training annually.	1/14/2021 2:58 PM
14	Improved communication through enhanced connectivity, broadband to all rural areas in our community would be invaluable to us as a school system.	1/13/2021 11:14 AM
15	A mutual aid plan in place	1/13/2021 8:55 AM
16	Just making sure our dispatch center is able to operate from a remote location in the event of an event affecting our HQ.	1/13/2021 8:37 AM
17	Emergency response team - Certified fire fighters that have put out fire in the plant before causing damage. COVID team that cleans and makes a plan to keep us safe and socially distance.	1/13/2021 7:59 AM
18	hazard mitigation plan	1/13/2021 7:54 AM
19	we are working on redundant communication models to continue operations in a landline outage	1/12/2021 10:22 AM
20	No	1/12/2021 10:03 AM
21	N/A	1/12/2021 8:31 AM
22	No idea	1/12/2021 3:37 AM
23	back up generators and mutual aid, emergency coordinator for town,	1/11/2021 8:35 PM
24	pre-planning	1/11/2021 7:24 PM
25	Communication upgrade	1/11/2021 5:05 PM
26	no	1/11/2021 2:33 PM
27	Annual audits of data and IT infrastructure, Redundancy, cross training of staff for critical	1/11/2021 2:26 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

	roles, on site available power generation, on site water wells and access to advance first aid.	
28	None known.	1/11/2021 1:45 PM
29	?	1/11/2021 1:08 PM
30	DLAN Supply Program	1/11/2021 11:58 AM
31	Disrict and building level safety plans are updated annually. Montly meetig are held to review plans, conduct drills, and enhance communication between district and community agencies-police, fire, emergency coordinator	1/11/2021 11:55 AM
32	Existing Emergency Response Plan, Coordination w/ GIFC, Emergency power generation	1/11/2021 11:30 AM
33	LEWPA wants to make sure that the Resilient NY reports for local streams and their associated projects are part of the Erie County Hazard Mitigation Plan. For years we have been trying to organize resiliency projects and they are never in the County plans and are therefore not eligible for FEMA funding.	1/11/2021 11:06 AM
34	Back up water supply for town of Tonawanda Emergency outlet at the end of Pirson Pkwy in case inlet to street is blocked	1/11/2021 11:00 AM
35	Completed new generator installation at Fire head Quarters which also houses the EOC	1/11/2021 10:47 AM
36	Property Insurance, Local/National Code Compliance	1/11/2021 10:18 AM
37	Not at this time	1/11/2021 9:28 AM
38	redundancy in communications and power backups	1/11/2021 8:15 AM
39	Proposed automatic standby generator for the highway garage	1/10/2021 6:14 PM
40	1. We need to provide a better form of temporary electrical service at our Station #1. 2. We need better communication and a working plan with the New York State Department of Transportation.	1/10/2021 6:13 PM
41	Common Sense	1/10/2021 5:53 PM
42	Look at the WWW.CSB.GOV to see how they have successfully prevented future Chemical Disasters and emulate their programs.	1/9/2021 10:38 PM
43	communication infrastructure, power infrastructure and transportation upgrades	1/9/2021 5:28 PM
44	Better handle on vulnerable people within jurisdiction/ Power infrastructure/public utilities need updated infrastructure/ Better plans for Pandemic/working better with community businesses	1/9/2021 12:12 PM
45	none that I am aware of	1/9/2021 7:39 AM
46	Cannot identify	1/8/2021 6:44 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q27 Can you identify projects or programs that have been recently been implemented to reduce your community's vulnerability, damage and losses, including loss of operation/service, to hazard events? (please explain)

Answered: 34 Skipped: 43

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	electric has been updating the main transmission lines and the sewer department has refitted some of its equipment.	1/28/2021 7:14 PM
2	No	1/28/2021 4:55 PM
3	no	1/27/2021 12:55 PM
4	Business Continuity Plans have recently included active involvement with local volunteer fire departments.	1/26/2021 2:50 PM
5	Communication when needed to go out to the community when needed	1/26/2021 8:58 AM
6	At the water pump house that previously flooded, a project was completed to raise the height of the flood protection berm substantially.	1/21/2021 3:49 PM
7	Our major focus has been staff and patient safety during the current COVID-19 Pandemic. Screening patients in accordance with NYSDOH guidelines. Screening staff daily to minimize the chance that a COVID positive would occur.	1/21/2021 3:21 PM
8	new electrical switch gear, new fire protection for flammable tank truck unload	1/21/2021 11:41 AM
9	Dredging, rebuilding the face of the dam and building a new spillway for green lake.	1/21/2021 11:30 AM
10	No	1/20/2021 5:36 PM
11	Re-invention of educational instructional strategies as outlined above.	1/19/2021 10:58 AM
12	None	1/18/2021 1:52 PM
13	Life safety systems are monitored and inspected on a regular basis.	1/14/2021 2:58 PM
14	Tree trimming in the area as to not loose power during storms.	1/13/2021 8:55 AM
15	not sure	1/13/2021 7:54 AM
16	No	1/12/2021 10:03 AM
17	no	1/12/2021 8:31 AM
18	No	1/12/2021 3:37 AM
19	railroad repairs, stream bank work, ditch cleaning, tree trimming	1/11/2021 8:35 PM
20	no	1/11/2021 2:33 PM
21	better refinement of our disaster response plan and pandemic preparedness.	1/11/2021 2:26 PM
22	Disaster prevention loans, related to the pandemic, provided through the SBA.	1/11/2021 1:45 PM
23	Hazard Mitigation plan - County wide	1/11/2021 1:08 PM
24	Please see above	1/11/2021 11:30 AM
25	LEWPA has been trying to encourage municipalities to join the FEMA Community Rating System to reduce flooding risk.	1/11/2021 11:06 AM
26	No	1/11/2021 11:00 AM
27	Property Insurance, Local/National Code Compliance	1/11/2021 10:18 AM
28	Capital projects increasing our generator capacity	1/11/2021 9:28 AM
29	1. We have installed an automatic electrical generator at our Station #2. 2. We have upgraded our traffic control signage, but more is still needed.	1/10/2021 6:13 PM
30	We are in good shape	1/10/2021 5:53 PM
31	The NFTA has some local excellent training programs that should be used as a template for Erie County challenges.	1/9/2021 10:38 PM
32	N/A	1/9/2021 12:12 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

33	no	1/9/2021 7:39 AM
34	Covered through Public works and local fire Depts.	1/8/2021 6:44 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q28 How has your organization been involved in response to this pandemic? (please explain)

Answered: 50 Skipped: 27

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	planning board has not had input	1/28/2021 7:16 PM
2	Yes	1/28/2021 4:56 PM
3	Distributing masks to any in need.	1/27/2021 1:53 PM
4	n/a	1/27/2021 12:57 PM
5	Our organization has a Global Response Team that meets regularly and reviews all of the CDC guidelines	1/26/2021 2:56 PM
6	Team closely works with Erie County Department of Health, the CDC, Superintendents meet with Erie 1 BOCES with updates and support. Adhere to "Back to School" NYS School Reopening Guidance Secure necessary PPE for all staff and student Set up safe COVID-19 testing sites Understanding of Color and testing needs to remain open and have students in person / attendance instruction (Balanced with Hybrid instruction)	1/26/2021 9:11 AM
7	Closed down non-essential programs. Purchase and use of Required PPE masks. Use of sanitizers and purchase of a sanitizer fogger machine. Quarantines as needed.	1/21/2021 3:57 PM
8	We are governed by the COVID-19 directives and guidance of the NYSDOH. We screen all patients and staff; we have educated our staff vigorously and have ample supplies of PPE. We have tight controls on building access and infection control policies.	1/21/2021 3:33 PM
9	take temperature of every employee before entering the facility, ask health related questions. some people can work from home. will work with people who are quarrentining, everyone must wear a mask unless you are in your office with the door closed	1/21/2021 11:47 AM
10	Been instrumental in putting together policies for the Town. Distribution of PPE to Town and Village departments and to Orchard Park Fire District.	1/21/2021 11:42 AM
11	Yes, educating and feeding our familes	1/20/2021 5:39 PM
12	Our response has changed with the addition PPE and smaller crews to keep exposure to a minimum	1/19/2021 9:31 PM
13	We have continue to provide food service to all students, provided wifi capabilities where needed, provided devices including laptops and ipads to students and staff. We are testing students and staff on a weekly basis for Covid-19.	1/19/2021 11:13 AM
14	Asked about minimum manpower and what would happen if COVID outbreak at Water Plant	1/18/2021 1:56 PM
15	Direct emergency response	1/14/2021 6:17 PM
16	Yes // multiple calls in district for covid-19 positive patients	1/14/2021 5:30 PM
17	We have been following the direction from the Erie County Health Department, Governor and the CDC.	1/14/2021 3:08 PM
18	As a public school system our response has been driven by a responsibility to keep our students safe and to continue to educate all children. We've had nonstop work to respond to the needs of our families and to keep our students moving forward with education.	1/13/2021 11:17 AM
19	First aid response to individuals with covid or symptoms	1/13/2021 9:00 AM
20	Lots of challenges: never stopped our response, keeping adequate staff level, equipping officers with PPE, keeping dispatch operating.	1/13/2021 8:39 AM
21	We have a COVID team that meets daily and comes up with a plan to protect are employees will at work	1/13/2021 8:03 AM
22	we have continued to run service, but have implemented many passenger and employee requirements	1/13/2021 7:58 AM
23	yes, treating, testing, and vaccination of the public and staff	1/12/2021 10:39 AM
24	EMS	1/12/2021 10:06 AM
25	Responding to all Emergency requests 24/7	1/12/2021 8:36 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

26	Transporting patients to hospital	1/12/2021 3:39 AM
27	10 months	1/11/2021 8:42 PM
28	Yes - hospital, ER, vaccines, testing	1/11/2021 7:24 PM
29	Emergency EMS response	1/11/2021 5:08 PM
30	Proper PPE have been given to all employees all police fire and ems personnel. Ems personnel use proper approved protocols when responding to possible covid cases	1/11/2021 2:37 PM
31	We have maintained daily business operations through the pandemic taking precautions to limit exposure of employees to customers and each other.	1/11/2021 2:28 PM
32	Myy retail store was forced to close down for three and a half months, resulting in a loss of business income, as well as payroll for both of the company's employees. We were able to obtain a disaster protection loan through the SBA, but also had to utilize business credit cards to continue cash flow and keep the business in operation for the past several months.	1/11/2021 1:48 PM
33	yes, we are the town of Newstead and oversee the emergency management of the community	1/11/2021 1:11 PM
34	providing medical services, medical transport to appropriate medical facilities	1/11/2021 12:22 PM
35	We evaluate and transport sick patients. They have the potential to be Covid positive.	1/11/2021 12:00 PM
36	Yes- the district has created contigency plans for in-erson and remote learning. District conducts COVI-19 testing and is working with staff in planning for vaccinations	1/11/2021 11:58 AM
37	All employees and visitors have their temperature taken and we record who they are seeing for contact tracing. Masks are required to enter a building. Improved cleanig and disinfection practices, meetings are virtual.	1/11/2021 11:34 AM
38	N/A	1/11/2021 11:08 AM
39	Plant was shut down March-May. Continued daily monitoring of employees and visitors, COVID PPE, social distancing	1/11/2021 11:02 AM
40	EMTs and Medics respond daily to COVID 19 calls OEM is part of the PPE procurement process IAPs have been prepared on weekly basis Office tracks Governors last directions and implements changes as necessary	1/11/2021 10:51 AM
41	Essential/Critical Resource supplying other entities	1/11/2021 10:23 AM
42	Random testing of over 2500 individuals Contact tracing Collaboration with the DOH	1/11/2021 9:32 AM
43	yes-Code Blue Operations, EC testing sites, NYS testing site, EC vaccine site	1/11/2021 8:17 AM
44	1. We provide emergency medical service, including ambulance service, to our town. 2. We have worked to continually keep our members up-to-date on the pandemic and our response procedures.	1/10/2021 6:20 PM
45	Informing the residents	1/10/2021 5:58 PM
46	I now teach on line. In my book it is a win win. You really can profit form others disasters. And I mean that in a good way. Gov is not always the solution. Resilience comes from individuals also taking responsibility.	1/9/2021 10:55 PM
47	continuing to maintain ems response to support our community	1/9/2021 5:35 PM
48	Limited but EM and Town Supervisor speak frequently and PPE is provided	1/9/2021 12:18 PM
49	first on scene to any covid related patients that need E.M.S. (hospitalization.	1/9/2021 7:44 AM
50	Our Director has handled this.	1/8/2021 6:47 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q29 How do you believe COVID-19 will reshape your organization's practices/ business framework? (ex. Have employees wear masks during flu season, improve sanitation practices, conduct work remotely whenever possible, etc.) (please explain)

Answered: 52 Skipped: 25

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	wearing masks, social distance and remote learning like today	1/28/2021 7:16 PM
2	Yes	1/28/2021 4:56 PM
3	Created the ability to work remotely; prompted the Village to install a remote teller system so that the office could remain closed to the public and still get business accomplished; prompted the Village to purchase laptops for online training for staff to maintain needed certifications to accomplish their jobs.	1/27/2021 1:53 PM
4	continue to follow COVID guidelines	1/27/2021 12:57 PM
5	We have implemented several practices to keep everyone safe which include: mandatory mask wearing, social distancing, sanitizing, working remotely, etc.	1/26/2021 2:56 PM
6	Pro-active / Preventative measures. Follow Erie County DOH and CDC guidelines and recommendations. Increase cleaning and protocols for safety (Mask/Shields/gloves/gowns/polycarbonate Dividers) Daily Health Questionnaire Immediate plan for effective communication to staff/community using multiple modes The identification of "essential" employees	1/26/2021 9:11 AM
7	Increased use of sanitizing procedures.	1/21/2021 3:57 PM
8	We have done all of these things. We do feel that many of these changes will be permanent in nature.	1/21/2021 3:33 PM
9	less travel, will do more teams meetings. no gatherings for meetings over 6 people, teams meetings, mask wearing for the near future, work remotely, in the corian area we have 124 hand santizing stations	1/21/2021 11:47 AM
10	Has forced the Town to look at technology to address remote working and remote public meetings.	1/21/2021 11:42 AM
11	Still gatheting data	1/20/2021 5:39 PM
12	The use of masks and other PPE will probably be a large part of our future. A new look into sanitation.	1/19/2021 9:31 PM
13	Certainly we will continue to improve sanitation practices. Remote learning will play a larger role in the future. Meetings via zoom or other means in order to reduce the density of groups.	1/19/2021 11:13 AM
14	Nothing will change	1/18/2021 1:56 PM
15	Continuing use of masks in emergency calls and increased cleaning procedures	1/14/2021 6:17 PM
16	We will be more responsive and alert to specific patient conditions and certainly utilize PPE in more cases than prior to the pandemic	1/14/2021 5:30 PM
17	Disinfecting practices and policy implementation.	1/14/2021 3:08 PM
18	We've recognized a shift in our understanding of the ability to work remotely, the confirmation of the need to have our students in person and a vast improvement in our cleaning protocols that will help during flu season.	1/13/2021 11:17 AM
19	Decontamination of ambulance when needed	1/13/2021 9:00 AM
20	Better stockpile of PPE and equipment. Increasing remote work capabilities for some staff. Increasing remote work for some duties that don't require in person contact, including training.	1/13/2021 8:39 AM
21	I think keeping people socially distance will go on into the future	1/13/2021 8:03 AM
22	We have been successful with remote work for non-essential staff, improved sanitation measures in facilities,trains,buses, virtual meetings	1/13/2021 7:58 AM
23	more remote work, increased telehealth services, change in patient throughput and engineered barriers	1/12/2021 10:39 AM
24	No change	1/12/2021 10:06 AM
25	Masks are worn at all times and CDC Guidleines followed	1/12/2021 8:36 AM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

26	Masks, cleaning etc	1/12/2021 3:39 AM
27	improve cleaning	1/11/2021 8:42 PM
28	Virtual practices, increased hygiene	1/11/2021 7:24 PM
29	No	1/11/2021 5:08 PM
30	All employees have been instructed in proper procedure to follow	1/11/2021 2:37 PM
31	better overall daily hygine	1/11/2021 2:28 PM
32	Sanitation procedures have certainly improved, and will continually be under review and modification is necessary.	1/11/2021 1:48 PM
33	You gave the correct replies	1/11/2021 1:11 PM
34	Improved sanitation practices; staggered start times to maintain physical distancing; limiting access to our facility	1/11/2021 12:34 PM
35	still in progress	1/11/2021 12:22 PM
36	It already has.	1/11/2021 12:00 PM
37	Significant change on the integration of technology in operations and instruction. Incresased saniation schedules and enhanced practices	1/11/2021 11:58 AM
38	Please see above	1/11/2021 11:34 AM
39	remote work has become more integral and online resources for municipalities and elected officials.	1/11/2021 11:08 AM
40	Improved sanitation practices, increased staff working from home, more sick days utilized	1/11/2021 11:02 AM
41	Masks will become part of the health and safety ppe	1/11/2021 10:51 AM
42	All of the above	1/11/2021 10:23 AM
43	We have improved our HAVC system	1/11/2021 9:32 AM
44	conduct work remotely where operational efficient, develop redundancy in key psoitions	1/11/2021 8:17 AM
45	We have implemented several best practices for response to calls for service, including the proper wearing of PPE, social distancing and good sanitizing.	1/10/2021 6:20 PM
46	We do all of the things mentioned above. There are only myself and 3 employees	1/10/2021 6:16 PM
47	Return to normal after the pandemic	1/10/2021 5:58 PM
48	YOU MUST IMPROVE the HVAC systems before you do anything else. Not just the better filters but MUCH MUCH MUCH More outside make up air needs to be introduced into most all public buildings. And in work spaces keep the winter humidity at least 35%.	1/9/2021 10:55 PM
49	mandatory mask wearing	1/9/2021 5:35 PM
50	Yes Sanitation practices have changed for good Town Staff ability to work from home AAR needed to understand more from Town Supervisor and Town Clerk to understand challeges faced	1/9/2021 12:18 PM
51	Need to proceed with more caution to related air borne illnesses	1/9/2021 7:44 AM
52	Yes through our local fire depths.	1/8/2021 6:47 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q30 What specific services/ infrastructure needs to be built/ improved in your community in order to mitigate damage we have experienced from this pandemic? (please explain)

Answered: 37 Skipped: 40

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

#	RESPONSES	DATE
1	maybe better communication between medical and the govt agencies	1/28/2021 7:16 PM
2	none that I'm aware of	1/27/2021 12:57 PM
3	can't think of any at the moment	1/26/2021 2:56 PM
4	More support, access to resources (delivery of resources) and a consistent message from Erie County Government!!!!!!!! and Erie County Officials!!!!!!!!!!!!!!!!!! Erie County did not support the need to set up testing in schools effectively and efficiently. I understand the need for schools to autonomy in the process but clear consistent protocols and procedures should be supported by local government. Other counties have more support with testing, staff for testing and access to testing materials!!!!!!!!!	1/26/2021 9:11 AM
5	Community stocks of PPE need to be established and maintained; the Vaccine rollout was very poorly planned. There should been reach out to Centers like our who could have easily staffed vaccination clinics. There are many nurses and other staff here who would volunteer to assist in providing this service.	1/21/2021 3:33 PM
6	Improve hands free functions in Town bathroom facilities. Provide better work spaces.	1/21/2021 11:42 AM
7	Open line of communication instead of roadblocks and "blame game".	1/20/2021 5:39 PM
8	None that I am aware of	1/19/2021 11:13 AM
9	Town needs to put money into improving Water Plant and infrastructure, stop waiting until complete failure and then scramble to figure out how to fix things, need to hire more people as backups because it takes too long to train person and get appropriate licenses to run plant	1/18/2021 1:56 PM
10	Better access to testing and and quicker turnaround times on testing results	1/14/2021 6:17 PM
11	Distribution centers have been established so until they are utilized we cannot elaborate on improvements	1/14/2021 5:30 PM
12	Economic relief from incurred cost from PPE and equipment.	1/14/2021 3:08 PM
13	As a whole, our community is handling the pandemic the best we can	1/13/2021 9:00 AM
14	the pandemic has affected ridership and may continue to do so for a long time.	1/13/2021 7:58 AM
15	n/a	1/12/2021 10:39 AM
16	None	1/12/2021 10:06 AM
17	Improvement of Communication from the State to the County so that response can be more fluent	1/12/2021 8:36 AM
18	No idea	1/12/2021 3:39 AM
19	unknown	1/11/2021 8:42 PM
20	Improved supply chain and procurement	1/11/2021 5:08 PM
21	none	1/11/2021 2:37 PM
22	none	1/11/2021 2:28 PM
23	More flexibility within operating guidelines for individual businesses. Allow for more flexibility in payment of utilities. More loans and other emergency cash funding opportunities available for some small businesses.	1/11/2021 1:48 PM
24	need to check with emergency managers	1/11/2021 1:11 PM
25	None that I am aware of.	1/11/2021 12:00 PM
26	touchless fixtures, virtual meetings, on-line payments	1/11/2021 11:34 AM
27	better internet access and connectivity	1/11/2021 11:08 AM
28	Biggest risk to Unifrax is losing personnel to isolation/loss of work force	1/11/2021 11:02 AM
29	Unknown	1/11/2021 10:23 AM

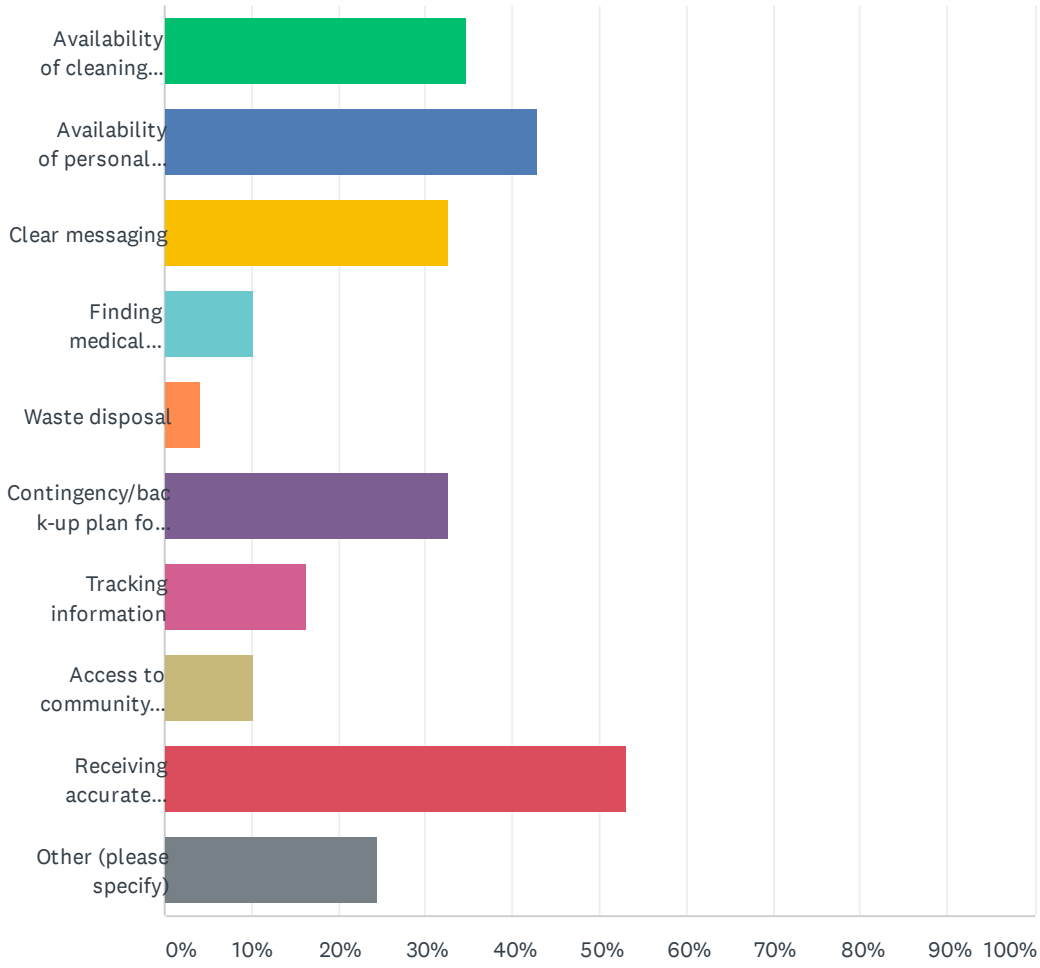
Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

30	In creased social support plus increased medical distribution facilities	1/11/2021 9:32 AM
31	N/A	1/11/2021 8:17 AM
32	Our fire company has faced, and will likely continue to face, a significant loss of revenue due to cancelled fundraising events. This, coupled with the added expenses that are needed to allow us to safely respond to calls for service, will have a long-lasting negative financial impact on our company.	1/10/2021 6:20 PM
33	None	1/10/2021 5:58 PM
34	Everyone who is over 65, and essential workers, and a front line medical professional needs to be given AN ACTUAL place, and priority number TO BE VACCINATED. The dates can change as supplies run low or higher but just knowing when will alleviate much distress in the community.	1/9/2021 10:55 PM
35	Unknown at this time	1/9/2021 12:18 PM
36	Having Erie County provide more P.P.E. to protect the front line workers and first on scene volunteers.	1/9/2021 7:44 AM
37	Unknown	1/8/2021 6:47 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q31 Please share any challenges and obstacles you are facing (you can select more than one)

Answered: 49 Skipped: 28



Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

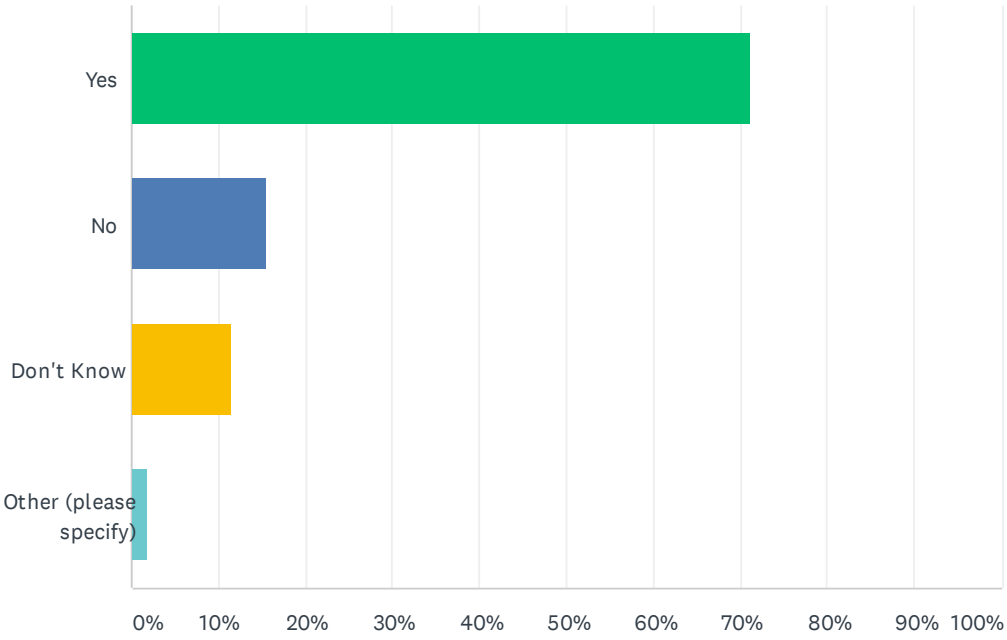
ANSWER CHOICES	RESPONSES	
Availability of cleaning supplies	34.69%	17
Availability of personal protective equipment	42.86%	21
Clear messaging	32.65%	16
Finding medical professionals	10.20%	5
Waste disposal	4.08%	2
Contingency/back-up plan for staffing	32.65%	16
Tracking information	16.33%	8
Access to community officials	10.20%	5
Receiving accurate information regarding current situation/resources available	53.06%	26
Other (please specify)	24.49%	12
Total Respondents: 49		

#	OTHER (PLEASE SPECIFY)	DATE
1	none at this time	1/26/2021 2:56 PM
2	N/A	1/14/2021 3:08 PM
3	PPE is expensive and difficult to come by	1/13/2021 9:00 AM
4	None at this time	1/13/2021 8:03 AM
5	getting people to respond	1/11/2021 8:42 PM
6	none	1/11/2021 2:37 PM
7	too many layers of goverment trying to intervene (local, state, federal).. poor coordination between them	1/11/2021 2:28 PM
8	None of above	1/11/2021 1:48 PM
9	N/A	1/11/2021 11:34 AM
10	So far we have been able to purchase the PPE that we need to continue to operate safely, but at a significantly higher cost than before.	1/10/2021 6:20 PM
11	We are good	1/10/2021 5:58 PM
12	Most organizations are doing pretty good considering	1/9/2021 10:55 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q32 Do you have procedures/protocols in place to return back to standard operations after the pandemic (e.g. cleaning protocols and frequency, occupancy limits, etc.)?

Answered: 52 Skipped: 25



ANSWER CHOICES	RESPONSES	
Yes	71.15%	37
No	15.38%	8
Don't Know	11.54%	6
Other (please specify)	1.92%	1
TOTAL		52

#	OTHER (PLEASE SPECIFY)	DATE
1	There are many improvement that we need to keep like Telemedicine. Too bad my dentist can't use it.	1/9/2021 10:55 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Q33 Do you have any questions or comments for Erie County?

Answered: 26 Skipped: 51

#	RESPONSES	DATE
1	meetings like this are very helpful for all as we are in uncharted territory and we all can learn from one another.	1/28/2021 7:17 PM
2	no	1/27/2021 12:57 PM
3	none at this time	1/26/2021 2:57 PM
4	Why are we still in an orange zone? Distinction of Color zones - (Yellow / Orange)	1/26/2021 9:12 AM
5	no	1/19/2021 9:32 PM
6	no	1/18/2021 1:56 PM
7	None	1/14/2021 3:09 PM
8	Not at this time	1/13/2021 9:01 AM
9	not at this time	1/13/2021 7:58 AM
10	No	1/12/2021 10:06 AM
11	no	1/12/2021 8:36 AM
12	No—open up!	1/12/2021 3:39 AM
13	no	1/11/2021 8:42 PM
14	no	1/11/2021 2:37 PM
15	None.	1/11/2021 1:48 PM
16	one, need help in getting our FEMA money that we submitted for in the summer of 2020.....	1/11/2021 1:11 PM
17	Keep fighting the good fight.	1/11/2021 12:00 PM
18	No, the County Executive has held regular on-line meetings	1/11/2021 11:35 AM
19	Tonawanda Creek, Ransom Creek, Ellicott Creek, Gott Creek, Cayuga Creek, Buffalo, Creek, Cazenovia Creek, Grannis Creek, and Eighteenmile Creek in Erie County will have Resilient NY flood mitigation assessments completed shortly and those projects could mitigate flooding issues. Please make sure they are referenced.	1/11/2021 11:11 AM
20	No	1/11/2021 11:02 AM
21	NO	1/11/2021 10:23 AM
22	Support by the county has been very good	1/11/2021 8:17 AM
23	On behalf of the entire fire company, thank you for what you have done for us.	1/10/2021 6:20 PM
24	When is the County going to stick up for the businesses that are in the orange zone and stop letting the State wrongfully keep parts of Erie County in the zone when other parts of the State is equally bad or worse. It is time to take unilateral action and declare orange zones to yellow zones on our own.	1/10/2021 6:04 PM
25	Erie and Niagara counties are actually doing pretty good as far as emergency response but that doesn't help you when the whole southern tier could care less about COVID 19. Pandemics know no political boundaries only in clusters of stupidity do they thrive.	1/9/2021 10:58 PM
26	None at this time.	1/8/2021 6:47 PM

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

From: Calhoun, Melissa J.
To: Schultz, Jonathan; Chris Baker (cjbaker@cattco.org); Butcher, Gregory; Tim Yaeger (tyaeger@co.genesee.ny.us); Brian Meyers
Cc: Subbio, Tony
Subject: Hazard Mitigation Plan
Date: Friday, January 8, 2021 5:12:16 PM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

To Erie County's Neighbors:

Hello! As you know, Erie County is updating its Hazard Mitigation Plan (HMP). The HMP will analyze the hazards faced by the county and its municipalities, residents, and businesses, and will identify a strategy for minimizing the vulnerability to these hazards. You may remember being invited to the Planning Partnership Kickoff webinars that were held on November 18 and 19, 2020. You can find out more about our HMP and the planning process here: https://www.eriecountynyhmp.com/.

I would like to invite you to provide input into the planning process, so that we can address issues that cross our borders and affect both our counties and communities. We have developed a short survey to gather this information. We would greatly appreciate it if you would complete the survey and otherwise participate in this important endeavor. The survey can be found here: https://www.surveymonkey.com/r/ErieCountyNeighbor

We would appreciate it if you would complete the survey by January 29, 2021.

Please reach out if you have any questions. Thank you very much!

Have a great day!

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Erie County, along with its municipalities, are in the process of updating the Hazard Mitigation Plan (HMP). Hazard mitigation is any action taken to reduce the loss of life and property by lessening the impact of disasters (natural, technological, and man-made). These include flooding, severe storms, severe winter storms, etc. The HMP provides a "blueprint" by which participating jurisdictions can make coordinated efforts towards reducing losses from natural hazards. It is required by the Federal Emergency Management Agency (FEMA) in order to be eligible for federal grant funding for public and private mitigation projects.

Due to your proximity to Erie County, the effects of many of these disasters would be similar in your county, and your involvement in this process could reap mutual benefits to both counties. By participating in the review of this plan, you will be engaging in the regional coordination of disaster mitigation planning, which is one of the intents of the Mitigation Planning Regulations (44 CFR 201).

The following survey is designed to help Erie County gain a better understanding of how their neighboring counties operate day-to-day and during an emergency and helps our neighboring counties be included in the planning process. This survey consists of 27 questions and will take approximately 15 minutes to complete.

The Erie County Hazard Mitigation Plan Planning Partnership thanks you for taking the time to participate in this information-gathering process. More information about this planning process can be found at the Erie County HMP website: https://www.eriecountynyhmp.com/

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

General Information

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan. Please note that individual answers will not be published in the plan.

1. Please indicate the county in which you represent

2. Name and Title of Respondent

3. What department do you represent?

4. Please provide your contact information.

Email Address

Phone Number

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Emergency Operations and Continuity of Operations Planning

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan.

5. Do you have any shared service agreements or mutual aid agreements in place with Erie County at the county level for the following?

- [ ] Equipment and staff for debris cleanup and snow removal
- [ ] Emergency staff for evacuations/disaster response
- [ ] Damage assessments
- [ ] Sheltering
- [ ] Other

If you checked any of the above, please explain.

6. Is Erie County involved in your county's comprehensive emergency operations planning, such as by participating on a planning team, or providing resources during an emergency?

- ( ) Yes
- ( ) No
- ( ) Don't Know
- ( ) N/A

If yes, please explain.

7. Is your county involved in Erie County's comprehensive emergency operations planning, such as by participating on a planning team, or providing resources during an emergency?

- ( ) Yes
- ( ) No
- ( ) Don't Know
- ( ) N/A

If yes, please explain.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

8. Is Erie County involved in your county's Continuity of Operations planning, such as by participating on a planning team, providing resources during an emergency, or carrying out some of your county's essential functions for a period of time?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

9. Is your county involved in Erie County's Continuity of Operations planning, such as by participating on a planning team, providing resources during an emergency, or carrying out some of Erie County's essential functions for a period of time?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

10. Thinking about emergency operations and disaster response, please explain how these actions are communicated between counties.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Risk and Vulnerability

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan.

11. Does your county share risk and vulnerability assessments (flood mapping, HAZUS, etc.) with Erie County?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Evacuation and Sheltering

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan.

12. Do you collaborate with Erie County on establishing evacuation routes and alternate evacuation routes?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

13. Do you and Erie County consult with one another before making evacuation decisions that would impact one another (recommending evacuation routes into neighboring counties)?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain

14. Are evacuation routes maintained to the same level of protection across county lines?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A
- ◯ Other (please specify)

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

15. Do you collaborate with Erie County on establishing shelters?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

16. Do you and Erie County consult with one another before making sheltering decisions that would impact one another (recommending shelters in neighboring counties)?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

17. Do you and Erie County share any spaces suitable for temporary housing? This includes locations suitable to place temporary housing units to house residents displaced by a disaster.

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Information Sharing

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan.

18. Does your county have access to contact information for Erie County's emergency operation centers at the county and local level?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

19. Please describe any situations or hazards that are of a concern to both your and Erie County. For example, would flooding along a particular waterway impact both counties, or are there any facilities or infrastructure that would affect both counties if it/they failed?

20. Please explain how information is shared between counties regarding mitigation projects.

21. Is information regarding mitigation shared during the planning and implementation phases of the projects?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Projects, Grants, Education, and Outreach

The answers provided in this section will be treated as CONFIDENTIAL and will be used solely for the purpose of preparing this plan.

22. Are you aware of any projects for the following that requires cross-collaboration between county boundaries?

- [ ] Stormwater projects
- [ ] Watershed projects or planning
- [ ] Floodplain projects or planning
- [ ] Connected roadway improvements
- [ ] Natural infrastructure restoration
- [ ] Outreach (education and outreach campaigns, programs for public information, etc.)
- [ ] Other (please specify)

23. If you selected anything above, please explain.

24. Have your county and Erie County collaborated on grant applications?

- ( ) Yes
- ( ) No
- ( ) Don't Know
- ( ) N/A

If yes, please explain.

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

25. Are you aware of any organizations that carry out education and outreach regarding hazards in both counties?

- ◯ Yes
- ◯ No
- ◯ Don't Know
- ◯ N/A

If yes, please explain.

26. What are opportunities or ideas to optimize cooperation with Erie County on emergency management operations and hazard mitigation projects?

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Erie County Hazard Mitigation Plan - Neighboring County Survey

Final Thoughts

27. Do you have any relevant questions or comments for Erie County?

Attachment: 32-Appendix-D-Public-and-Stakeholder-Outreach-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

APPENDIX E RISK ASSESSMENT SUPPLEMENTARY DATA

This appendix contains supporting information for the Risk Assessment (Section 5) as available. It contains excerpts of the previous events and losses as presented in the 2015 Hazard Mitigation Plan (HMP), organized by hazard of concern. This information has been compiled into one appendix for ease of reference; however, it has not been updated and is reproduced as documented in the 2015 plan.

In order to create a more streamlined plan, the 2021 HMP was reorganized and condensed into a practical and more readable document for the public with the goal of providing a plan easier to implement for the county and all municipalities to support future risk reduction. The information in this appendix supplements the information provided in Section 5.4 of this plan.

E.1 Critical Facilities and Lifelines

The identification of community lifelines across Erie County provides an enhancement to the 2021 HMP. The Federal Emergency Management Agency (FEMA) defines a lifeline as: *"providing indispensable service that enables the continuous operation of critical business and government functions, and is critical to human health and safety, or economic security."* Identifying community lifelines will help government officials and stakeholders to prioritize, sequence, and focus response efforts towards maintaining or restoring the most critical services and infrastructure within their respective jurisdiction(s). Identifying potential impacts to lifelines can help to inform the planning process and determining priorities in the event an emergency occurs. Figure E-1 is FEMA's fact sheet that describes lifelines further.

Figure E-1. FEMA Community Lifelines

Homeland Security

Fact Sheet

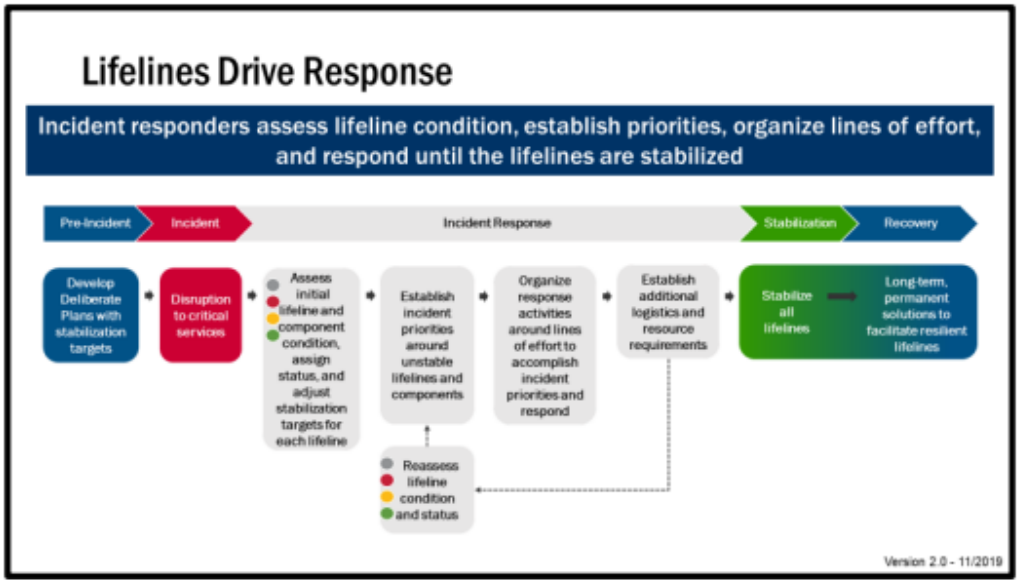
COMMUNITY LIFELINES

Why lifelines?

- FEMA developed the community lifelines construct to increase effectiveness in disaster operations and better position the Agency to respond to catastrophic incidents
- Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society
- When disrupted, decisive intervention (e.g., rapid service re-establishment or employment of contingency response solutions) is required
- During initial response, priority efforts focus on *stabilizing community lifelines*.
- Lifelines provide an outcome-based, survivor-centric frame of reference that assists responders with:
  - Root Cause Analysis
  - Interdependencies
  - Prioritization
  - Ease of Communication

How were lifelines developed?

- FEMA released initial guidance *(Lifelines Toolkit)* introducing the lifelines construct in February 2019, followed by significant stakeholder outreach and feedback including:
  - State and Local Emergency Managers
  - Interagency Partners
  - Private and Non-Profit Stakeholders
- Construct was validated during responses to Hurricanes Michael, Florence, and Dorian, Super Typhoon Yutu, Alaska Earthquake, and during Shaken Fury full-scale exercise.
- Lessons learned from exercises, operations, and stakeholder feedback resulted in refinement and improvement to the construct.
- *National Response Framework (NRF) 4th Edition* formalized lifelines in national response policy
- Enhanced Lifelines guidance *(Lifelines Toolkit 2.0)* released to support NRF Publication.



See the Lifelines Toolkit at:
https://www.fema.gov/media-library/assets/documents/177222

If you have any questions or feedback, please email them to: Lifelines@fema.dhs.gov

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

E.2 History of Hazard Events in the County – 2015 HMP

E.2.1 Coastal Erosion

December 12, 2000. The high winds caused water levels at the eastern end of Lake Erie to rise over five feet in a few hours. The high water levels coupled with waves of 10 to 14 feet caused shoreline erosion and localized flooding. Evacuations took place at Hoover Beach.

November 6, 2005. High water levels and waves of ten to fifteen feet resulted in some erosion of the lake shore and limited property damage.

January 30, 2008. The high water levels and waves to twelve to sixteen feet resulted in erosion of the lake shore and significant flooding at the extreme eastern end of the lake.

E.2.2 Extreme Temperature

Extreme Cold - February 1, 1993. This extreme cold event was reported to have caused $50,000 in property damage. No other information is available.

Extreme Heat - July 13, 2005. A 25-year-old construction worker collapsed and died from heat stroke as he was walking home from his construction job.

Unseasonable Warmth - October 8, 1993. Period of unseasonably warm temperatures. No further information is available.

E.2.3 Extreme Wind

NOAA's NCDC database [now NCEI] records 287 high wind and thunderstorm wind events affecting Erie County between July 1956 and March 2011 (data includes wind events greater than 50 knots/57.5 mph, with the exception of tornado events which are addressed separately). IThese incidents resulted in a reported total of three deaths and 34 injuries across the region which they affected, as well as more than $34 million in property damages and $200,000 in crop damages.

Date	Area Affected	Description	Recorded Damages
9/29/2005	Greater Buffalo Area	The thunderstorms accompanying the front produced damaging winds that downed trees and power lines. At the peak of the storms, over 30,000 customers were without power. Falling trees damaged homes and/or automobiles in Rochester, Silver Creek and Buffalo.	$30,000
11/3/2005	Hamburg	While most of wind gusts ranged from 45 to 50 mph, the winds did knock down several large trees in Hamburg during the late morning hours.	$4,000
8/2/2006	Tonawanda	Trees and limbs were downed in Constableville and Tonawanda.	$8,000
9/11/2007	Orchard Park, Buffalo, Tonawanda	The thunderstorm winds downed trees and power lines. In Orchard Park, a 15- to 20-foot section of the Buffalo Bills Field house was torn off by the thunderstorm winds.	$50,000
1/30/2008	Various	Sustained winds increased to 30 to 45 mph with gusts measured to 80 mph at the peak of the storm. Trees and power lines were downed by the strong winds. Utility companies reported close to 100,000 customers without power in locations scattered throughout region. Several homes and automobiles were damaged by falling trees and limbs. On Grand Island, the roof a manufacturing company sustained significant damage. The Buffalo Airport was closed between 8:30 a.m. and noon with over half of its scheduled flights canceled for the day. In downtown Buffalo, a building from the 1850s that had been damaged in an earlier January windstorm, sustained further damage and was deemed unsafe and to be demolished.	$250,000

Date	Area Affected	Description	Recorded Damages
12/28/2008	Various	A peak gust of 75 m.p.h. was recorded at 8:21 a.m. EST at the Buffalo Airport. Close to 100,000 customers lost power during the storm and nearly 90,000 were without phone service. Downed trees damaged several structures and automobiles. The strong winds tore off roofs and shingles on many buildings. At the Buffalo Airport, wind gusts blew several jetways into the terminal building and the airport lost power during much of the storm. At Orchard Park, the wind tore 2 feet by 50 feet section of the roof the Buffalo Bills field house. The wind picked up gravel and windows and windshields of numerous cars in the stadium parking lot were broken. Inside the stadium, the strong winds tilted both goal posts. Also, near the stadium, a concession trailer was blown over with only minor injuries to the occupants reported.	$250,000
2/12/2009	Various	Wind gusts were measured to 69 mph with widespread estimated gusts between 55 and 60 mph. The strong winds downed trees and power lines. Electric utilities reported nearly 100,000 customers without power at the peak of the storm.	$50,000
8/9/2009	Various	Trees and wires were downed by thunderstorm winds in East Aurora, Forest Glen, Eden, Springville, Williamsville, Ebenezer	$67,000
8/20/2009	Buffalo	The thunderstorms that developed produced damaging winds that downed trees and power lines.	$15,000
12/9/2009	Various	On the New York State Thruway, several tractor trailers were blown over as winds gusted to near 70 mph. As the system passed to the north, winds shifted to southwest and increased. Gusts were measured to 60 mph at the Buffalo International Airport. The winds downed trees and power lines and utilities reported tens of thousands without power.	$750,000
10/26/2010	Falconwood, Cheektowaga	Thunderstorms accompanying the front produced damaging wind gusts to 60 mph. In Cheektowaga, a traffic signal at Union Road and George Urban Boulevard was blown down.	$29,000

The SHELDUS database lists more than 335 storm events featuring high winds affecting Erie County since January 1960 (including 81 events recorded between 2005 and the present) to which approximately $36.5 million in property damages was attributed.

E.2.4 Flood

Date	Affected Municipalities	Description	Recorded Damages
2/7/94	Various	Three to four inches of rain fell in less than an hour over the towns of Boston and Eden. The flood waters swamped yards and basements and washed out roads, culverts and crops.	$500,000 property damage; $50,000 crop damage
Jan. 1996	Various	Warm temperatures and rapid snowmelt of 8 to 12 inches of snow combined with heavy rainfall produced significant flooding and ice jams. Nearly two hundred homes were damaged by flood waters. In West Seneca, over three feet of water and ice covered some sections of Clinton and Transit Roads. Evacuations occurred and several roads were closed due to the flood waters in West Seneca and Elma.	$1.7 million property damage; $500,000 crop damage
Sept. 1996	Tonawanda	Storm sewers and drains could not handle the runoff forcing the closure of over 30 streets and resulting in serious basement flooding in thousands of homes. Thousands of homes lost both their natural gas and their power.	$400,000 property damage
7/8/98	Various	The extensive flooding closed numerous roads throughout the multicounty area. Several were completely washed out. Specific road closures included: Rte.78 in Depew, Rte.98 in Arcade, Four Rod and Old Three Rod Roads in Alden, Rte.63 in Dansville, and Rte.20 in Darien.	$1.9 million property damage; $100,000 crop damage
Jan. 1999	Various	Ice jam flooding occurred on area Buffalo area creeks. Some evacuations were necessary and roads were closed in the vicinity of south Cheektowaga. Some of the hardest hit areas included Lancaster and	$740,000 property damage

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Date	Affected Municipalities	Description	Recorded Damages
		Williamsville in Erie County. Evacuations occurred in Angola, Chili and Lancaster.	
9/23/00	Blasdell	A State of Emergency was declared in Blasdell. Roads were washed out and basements flooded throughout the southtowns. The heavy rains caused three area creeks to overflow their banks.	$400,000 property damage
12/20/00	Lake Erie coastline (notably Buffalo)	SEICHE. High winds at the eastern end of Lake Erie caused the water to rise above five feet in a few hours. High water levels, along with ten to 14 foot waves, caused shoreline erosion and local flooding. Evacuations were ordered at Hoover Beach. The lake remained above flood stage for a few hours. There were no reports of injuries or fatalities.	$50,000
03/09/02	Lake Erie coastline (notably Angola)	SEICHE. Winds above 50 knots on Lake Erie caused the lake level to rise at the eastern end of the lake. The lake exceeded the eight foot flood stage and peaked at 9 feet 63 inches at 2340 hours. No injuries or fatalities occurred. Evacuations were not ordered.	$35,000
May-June 2004	Not specified	Federal Disaster Declaration for Severe Storms and flooding between May 13th and June 17th resulted in a PA-only declaration for 14 New York Counties. Erie County was included in this declaration. (Neither the NOAA NCDC database nor the SHELDUS database includes this event period in its event history for Erie County.)	FEMA reports $18.7 million in PA payouts across the 14 affected counties
11/06/05	Not specified	SEICHE. High water levels and waves of ten to fifteen feet resulted in some erosion of the lake shore and limited property damage. Several roads along the lake shore were water covered or closed because of spray.	$25,000
12/01/06	Not specified	SEICHE. Along the Lake Erie Shore, the water levels at the eastern end of the lake fell several feet ahead of the storm, then quickly surged as the winds shifted with the passage of the cold front. The lake level rose over ten-and-a-half feet in a matter of hours, peaking at 9.93 feet at the lake level gage at Buffalo.	$10,000
01/30/08	Buffalo	SEICHE. The high water levels and waves to twelve to sixteen feet resulted in erosion of the lake shore and significant flooding at the extreme eastern end of the lake. The FEMA FIS reports that this unnamed storm had sustained winds of 30 to 40 mph and gusts to 60 mph. Coastal flooding occurred in several areas in the City of Buffalo, with high water marks ranging from about 578 to 580 feet.	$50,000
Dec. 27-28, 2008	West Seneca, Marilla, Elma, Lancaster, Buffalo	SEICHE. The combination of the wind shift, rapid strengthening of the wind speed and the long fetch up the length of Lake Erie produced a seiche on the lake. Water levels rose over six and a half feet in about three hours' time. In addition, flooding was reported in West Seneca and near Cazenovia Park in South Buffalo. Cayuga Creek at Lancaster crested above its flood stage at 9.23 feet at 6 p.m. on the 27th. Flooding was reported in Marilla, Alden and Lancaster. Flooding occurred in Elma and Gardenville.	$275,000 property damage (with $25,000 attributed specifically to seiche)
08/09/09	Village of Gowanda	Devastating storms struck the southern area of Erie County, particularly in the Village of Gowanda, where caused extensive building and infrastructure damage occurred. This event received a Federal disaster declaration, and was the highest flow on record for the Cattaraugus Creek gage #04213500 at Gowanda. The Village estimates that nearly $5 million in damages were incurred to Village-owned facilities and infrastructure, including damages to the Village Hall ($534,677), DPW Building ($146,675), Village roads ($1,142,882), Village Water Department ($1,388,475), debris removal ($651,767), creek bank erosion repairs ($611,123), and wastewater treatment plant repairs ($121,232). The FEMA FIS also reports that the New York and Lake Erie Railroad was temporarily suspended due to a washout of track.	More than $15 million
12/09/09	Not specified	SEICHE. The combination of the wind shift, rapid strengthening of the wind speed and the long fetch up the length of Lake Erie produced a seiche on the lake. Water levels rose over six feet in just a few hours.	$15,000

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

E.2.5 Ice Jams

January 18-19, 1996. According to a NWS Flood Statement on 1/18/96, an ice jam formed on Buffalo Creek between Borden and Transit Streets in West Seneca, NY. Borden Street, Transit Street, and Clinton Road were closed due to flooding caused by the mile long ice jam. At about 7PM on 1/18/96 the jam broke and started moving rapidly downstream. Flood waters began to recede after the jam broke. Rapid snowmelt of eight to 12 inches of snow and heavy rainfall of about an inch combined with warm temperatures to produce a major ice jam on the Buffalo Creek in West Seneca. Over three feet of water and ice covered some sections of Clinton and Transit Roads. Evacuations occurred and several roads were closed due to the flood waters in West Seneca and Elma. Nearly two hundred homes were damaged by flood waters. $1.7 million in property damages and $500,000 in crop damages were reported for this event (NOAA NCDC). On 2/9/96 the jam was located between Union and Harlem Rds. It extended from the Black Railroad bridge near Brookview Apartments on Indian Church Rd to just west of Borden Rd. Backyard flooding resulted. A portion of the jam broke at the Black Railroad bridge on 2/10/96. The next day the jam was located just downstream of Union Rd. The water level continued to rise on the river at Union Rd through 2/21/96. Warm temperatures and rain were thought to possibly loosen the jam on 2/23. Jim Lever, CECRL-IE, was at the site of the jam on 2/22/96. He reported that the jam had heavily flooded a strawberry field near Clinton St and Transit Rd. On 2/23/96 it was believed that warm temps and rain might loosen the jam. By 2/28/96 the jam had loosened and cleared and water levels were back to normal. A total of $4500 in damages occurred in West Seneca due to the jams on Buffalo Creek and Cazenovia Creek.

January 23-24, 1999. Ice jam flooding was reported on Buffalo area creeks. Evacuations were necessary and roads were closed in south Cheektowaga. Some of the hardest hit areas included Lancaster and Williamsville. Evacuations also occurred in Angola, Chili and Lancaster. Property damages of $740,000 were reported for this event (NOAA NCDC).

February 4, 2003. An ice jam formed on Cayuga Creek at Four Rod Road in Alden. Ice blocked the bridge and water overflowed. A flood warning was issued for Erie County.

March 2-3, 2004. The NWS reported a major ice jam on the Cazenovia Creek in the Buffalo, NY area near I-90. At least 2 road closures had been reported. At 555 PM, the NWS reported the ice jam on the Cazenovia Creek in South Buffalo broke and progressed downstream into Cazenovia Park resulting in a rapid rise in the creek level downstream into South Buffalo. The Stevenson Street Bridge was closed. The NWS reported that the last jam affecting the Buffalo area eroded by Friday morning, March 5th. The National Weather Service reported an ice jam on the Buffalo Creek near Elma, NY on March 3. The Buffalo Creek overflowed in the town of Elma, flooding the home of an Erie County elected official. During the overnight and into the early morning, several fire companies were in the town of Elma to hold back waters from the overflowing Buffalo Creek. It affected one home. Throughout the overnight, volunteer firefighters and officials from Erie County and the town of Elma checked the banks of the Buffalo Creek and nearby homes for possible flooding. About 7 miles to the south, the siren wailed at Sunset Bay warning residents to get their cars out, as the icy waters of Cattaraugus Creek spilled over its banks.

December 30, 2004. The National Weather Service reported an ice jam on Cazenovia Creek in Buffalo New York between the Stevenson Street Bridge and the Cazenovia Bridge. At 945 AM Friday December 31, the jam was causing water to back up into Cazenovia Park. At that time, no private homes were affected. About a half inch of rain had fallen since midnight, causing runoff from snowmelt that resulted in ice breakup, movement, and jamming. At 1 PM EST on December 31, 2004, the NWS reported that the jam remained in place but water was receding from Cazenovia Park. At 431 PM, the NWS cancelled the flood warning after flood waters receded from Cazenovia Park. USGS real-time stage information for Gage no. 04215500 (Cazenovia Creek at Ebenezer) showed that a jam had been in place at the gage between December 27 and very early in the morning of December

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

31. Stage records show a sudden drop in stage at 3:15 AM on December 31 typical of ice jam failure. (NOAA NCDC records for this event indicate only $3,000 in property damages).

March 15, 2007. Ice on Cattaraugus Creek at Gowanda NY, broke up and has caused river levels to rise eight feet over a two day period, but appeared to have begun to recede midmorning 15 March. Warm temperatures during the past week, the resulting snowmelt, and a period of rain, led to the breakup of numerous rivers across New England, many causing flooding.

E.2.6 Landslide

Cause	Municipality	Location	Description	Damage Estimate
Man-induced	Springville	Route 39	Till or lake clay	Not identified
Not identified	Springville	Route 39	Sheeting 30 feet long, houses on steps, slide	Not identified
Natural	East Aurora	Not identified	Slide into Buffalo Creek. 15 acre lake created. Regional DOT reports creek erosion slides all along Buffalo Creek from [illegible] to county line.	Not identified
Natural	Springville	Near Springville, east of intersection of Route 39 with Route 240	Slumps occur on exposures of clayey till – [illegible]	Not identified
Natural	Springville	Just south of Springville	Slumps occur on exposures of clayey till – [illegible]	Not identified
Natural	Not identified	East of Morton Corners area, on both sides of creek that crosses Route 39	Slumps occur on exposures of clayey till – [illegible]	Not identified
Natural	Sardinia	Just south of Sardinia	Slumps occur on exposures of clayey till	Not identified
Natural	Sardinia	Southwest of Sardinia	Slumps occur on exposures of clayey till	Not identified
Natural	Not identified	Shero Road - west of Patchin	Stream erosion	Not identified
Man-induced (seepage - saturation of embankment)	Cheektowaga	Scajaquada Creek Flood Control Project	Failures have occurred along the cut slopes of a local flood control project. Four separate phases of slides were repaired. The total reach of sliding was about 1/4 mile (both banks). Oversaturated soils after water level drops.	~ $250,000
Natural	Lancaster	Cayuga Creek Flood Control Project	Erosion of outer bend of Cayuga Creek has resulted in sliding and threat to road above	Not identified

E.2.7 Tornado

Date	Location	Magnitude	Impacts	Recorded Property Damage
4/25/57	Erie County	F1	None Reported	$25,000
7/7/1961	Erie County	F2	None Reported	$250,000
6/9/1966	Erie County	F0	None Reported	$3,000
8/19/1970	Erie County	F3	None Reported	$250,000
8/23/1971	Erie County	F2	None Reported	$25,000
5/2/1972	Erie County	F2	None Reported	$250,000
6/30/1976	Erie County	F1	None Reported	-
9/18/1977	Erie County	-	None Reported	$250,000

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Date	Location	Magnitude	Impacts	Recorded Property Damage
7/30/1987	Erie County	F2	None Reported	$2,500,000
4/9/1991	Erie County	F1	None Reported	$25,000
5/1/1991	Erie County	F0	None Reported	$250,000
7/12/1992	Erie County	F1	None Reported	$0
8/31/1993	Clarence	F1	A thunderstorm spawned a small tornado during the early morning hours. Downburst winds with an embedded tornado downed numerous trees; some were 1 to 1.5 feet in diameter and at least 100 feet high. Some structural damage to homes resulted due to falling trees and limbs.	$500,000
9/23/1993	Grand Island	F0	The tornado first touched down on Grand Island where it ripped the antenna off a house and overturned outdoor lawn furniture. The tornado moved southeast downing some trees in Tonawanda.	$50,000
6/24/1994	Angola	F0	The tornado mainly uprooted trees: one fell on a house.	$50,000
8/28/1994	Amherst	F0	No description	$50,000
9/25/1997	Evans Center	F0	Power lines and five large maple trees were downed.	$15,000
4/28/2002	East Concord	F0	In the Town of East Concord, a weak tornado (winds between 70 and 75 mph) briefly touched down. A portion of the back and roof of an outbuilding were blown away, a pier was tossed across a pond, and trees were damaged.	$35,000
6/30/2006	Cheektowaga	F1	A thunderstorm spawned a tornado which moved across the Town of Cheektowaga from the northwest to the southeast, initially touching down at 2:55 pm on Walden Avenue near Harlem Road. On Walden Avenue, a construction trailer was moved several hundred feet. The worker in the trailer suffered minor injuries. It then moved across the New York State Thruway, lifting a tractor trailer and depositing it on its side across the Jersey barrier; the driver suffered a broken leg. It then continued on a southeast trek damaging a 20 by 30 foot section of a wall on a warehouse and then downed trees as it crossed through central Cheektowaga. The tornado touched down several times along its path. Its final touchdown was at the Parkside Village Mobile Home Park around 3:05 pm where three mobile homes sustained significant damage and eight others sustained minor damage. The tornado was ranked an F1 with a path length of three miles and a width of 75 yards.	$250,000

E.2.8 Winter Storm

These events are reported as being responsible for property damage totaling approximately $95.1 million, although this includes damage reported in counties besides Erie County that were affected by the same events. Details and descriptions for some of the events are as follows:

- **Blizzard of 1977**. This storm crippled Western New York with bitter cold temperatures and high winds bringing existing snow into the county off Lake Erie, yet deposited very little new snow.
- **January 3, 1993.** A combination of a cold surface and warm moist air aloft created freezing rain and freezing drizzle which resulted in over a thousand traffic accidents throughout the area.
- **December 9-10, 1995.** Known familiarly as the "Weekend Storm" (and meteorologically as "Gary"), this lake-effect snow storm was declared a snow emergency at the state level. A total of 37.9 inches of snow fell over a 24 hour period. Impacts were less severe because of the storm's occurrence over the weekend when many people were home.

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

- **November 11, 1996.** Lake effect snow squall persisted across the southern portion of the county for nearly three days dropping localized amounts of 10 to 22 inches.
- **December 19, 1996**. Parts of the New York State Thruway were closed for more than 12 hours. Thirty to forty cars were stranded near Angola. A state of emergency was declared in Dunkirk and various municipalities imposed driving bans. Many school districts cancelled classes.
- **January 10, 1997.** Some Buffalo suburbs received 24 to 30 inches of snow. During Saturday morning, over a foot of snow fell in just four hours over Amherst and Tonawanda.
- **March 14, 1997**. Several inches of the icy slush coated trees and power lines, the weight of which downed the trees and lines. Various school districts throughout the area cancelled classes because of the treacherous conditions. Countless automobile accidents were reported.
- **December 5, 1997.** Heavy snow closed the New York State Thruway from Ripley to the Pennsylvania state line.
- **March 2, 1998**. It was the largest snowfall of the entire winter season in the Buffalo metro area. The snow made roadways extremely slick and innumerable accidents resulted. The heavy ice and snow on power lines and trees resulted in scattered power outages throughout the area.
- **January 1999. January 1-15**. Known familiarly as the "Big Dump" (and meteorologically as "Europa"), this series of lake-effect and synoptic snowstorms resulted in 60.5 inches of snow falling over a 15 day period, with a 24-hour maximum of 12.0 inches. A Federal snow emergency was declared. The cumulative effects of these storms caused extensive structural damage throughout the region. January 15-25. In Orchard Park, a man was injured when a garage collapsed on top of him during this period of excessive snow. Roof collapses and entire structure failures were numerous across the area. Numerous barns across the region collapsed under the excessive weight of the snow, in several dairy cows were injured and killed. Several garages collapsed damaging the automobiles and machinery inside them.
- **November 20, 2000.** Known familiarly as "Gridlock Monday" for its occurrence during a Monday morning rush-hour, (and meteorologically as "Chestnut"), this lake-effect storm resulted in a Federal disaster declaration. The storm crippled much of the Buffalo metro area with 24.9 inches of snow falling in a 24-hour period. Tens of thousands of people were stranded in autos as city and suburban streets became clogged with traffic and came to a standstill. Three thousand school children were stranded in buses which were unable to complete their routes.
- **December 24, 2001-January 1, 2001**. This well-forecasted, lake-effect storm known as the "Christmas Storm" or "Bald Eagle" storm resulted in a Federal disaster and emergency declaration. Over a nine-day period, 81.6 inches (6.8 feet) of snow fell. The 24-hour maximum accumulation was 35.4 inches. This storm crippled Buffalo and surrounding areas; however, its occurrence over the holidays when schools and many businesses were already closed, thus minimizing the catastrophic nature of such a large snowfall.
- **April 3, 2005**. Locally heavier amounts of up to two feet were reported along the ridges southeast of Lake Erie. Numerous accidents were blamed on the spring snowstorm. Tens of thousands were without power as the heavy snow downed trees, limbs and power lines.
- **October 12-13, 2006.** This historic lake-effect snow storm was characterized by the NWS Buffalo Forecast Office as a "dramatic, crippling, out of season event". Roughly one million residents of the Niagara Frontier lost power, some for as long as a week. With most trees still in full leaf at the time, damages to vegetation were the worst in recent memory. The 22.6 inches recorded at the Buffalo airport not only blew away any October record (6" in 1909,only 4 falls of 2" or more in 100 years in October), but was the 7th greatest snowfall ever at any time in Buffalo. Depths varied quite a bit, from a minimum of 2 to 10 inches in parts of Grand Island, to 24 inches in Depew and Alden. Even within the City of

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Buffalo there was marked variation in total accumulations, ranging from 20 inches in the north, to 15 inches downtown, and 10 inches to the south.

- **March 4-7, 2008.** On March 4, general snow of four to six inches blanketed the entire region and was followed by several inches of sleet and up to a half inch of glaze from freezing rain. This system was followed on March 7 by a storm in which 21.6 inches of snow was measured at the Buffalo Airport - the greatest general (non-lake effect) snowfall in Buffalo in 24 years. Numerous automobile accidents were blamed on the slippery conditions and poor visibilities in falling and blowing snow.
- **December 1-2, 2010.** This lake-effect snow storm began on the afternoon of December 1 and continued through December 2, burying parts of Buffalo and surrounding towns. Suburban Depew recorded 42 inches while Buffalo neighborhoods south of downtown got 39 inches, according to the National Weather Service. Hundreds of motorists were stranded overnight when jackknifed tractor trailers on the NYS Thruway just east of Buffalo blocked traffic.
- **February 25, 2011.** A 30-mile stretch of the New York State Thruway between Hamburg and Dunkirk was closed due to multiple accidents. There were several reports of building collapses throughout the region from the weight of the snow which had built up throughout the snowy winter.
- **November 17-26, 2014**. Erie County was hardest hit by lake-effect snow during much of the week before Thanksgiving. The Buffalo southtowns were hardest hit with some areas receiving over 7 feet of snow. A 132 mile stretch of the New York State Thruway was shut down. Snowfall rates were recorded as high as six inches per hour. The extraordinary snow loads took their toll on homes and businesses.

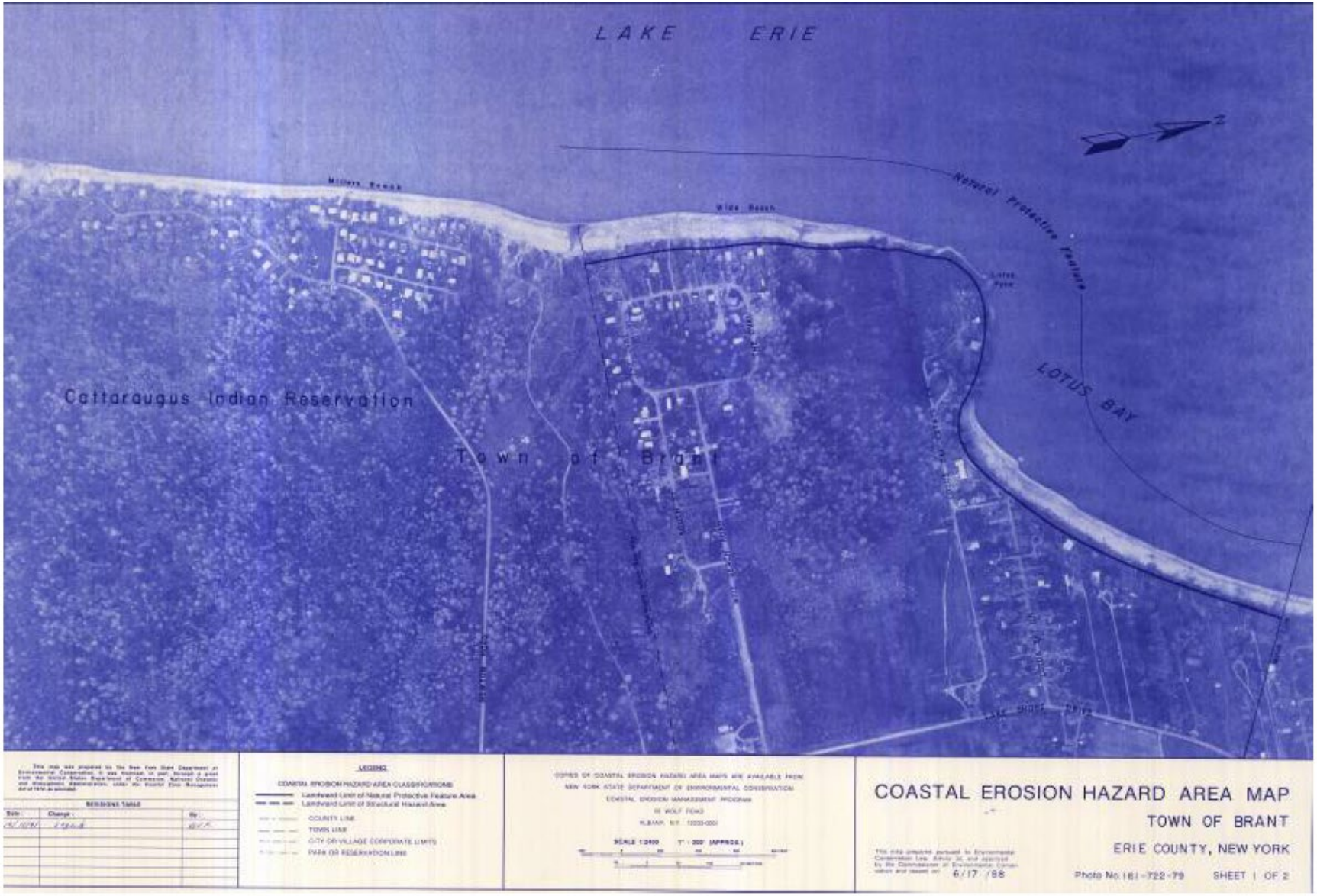
In addition to the events listed by NCDC, the SHELDUS database lists a further 177 winter storm events affecting Erie County since January 1960 (of which all but 35 were recorded before 1993) to which slightly $45.7 million in property damages was attributed.

Attachment: 33-Appendix-E-Risk-Assessment-Supp-Data-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

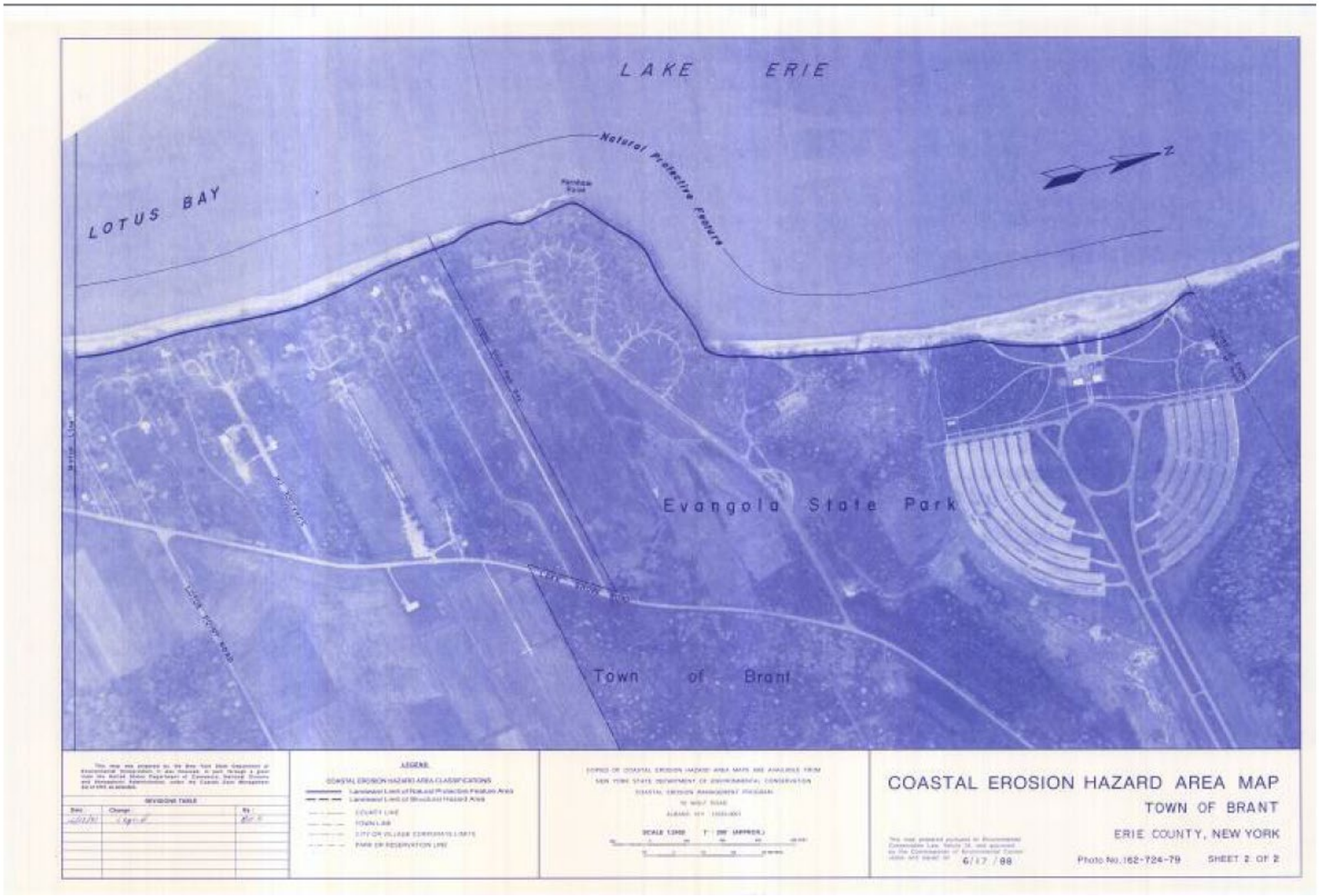
APPENDIX G COASTAL EROSION HAZARD AREA MAPS

This appendix contains Coastal Erosion Hazard Area maps which were referenced to consider risk exposure to coastal erosion events.

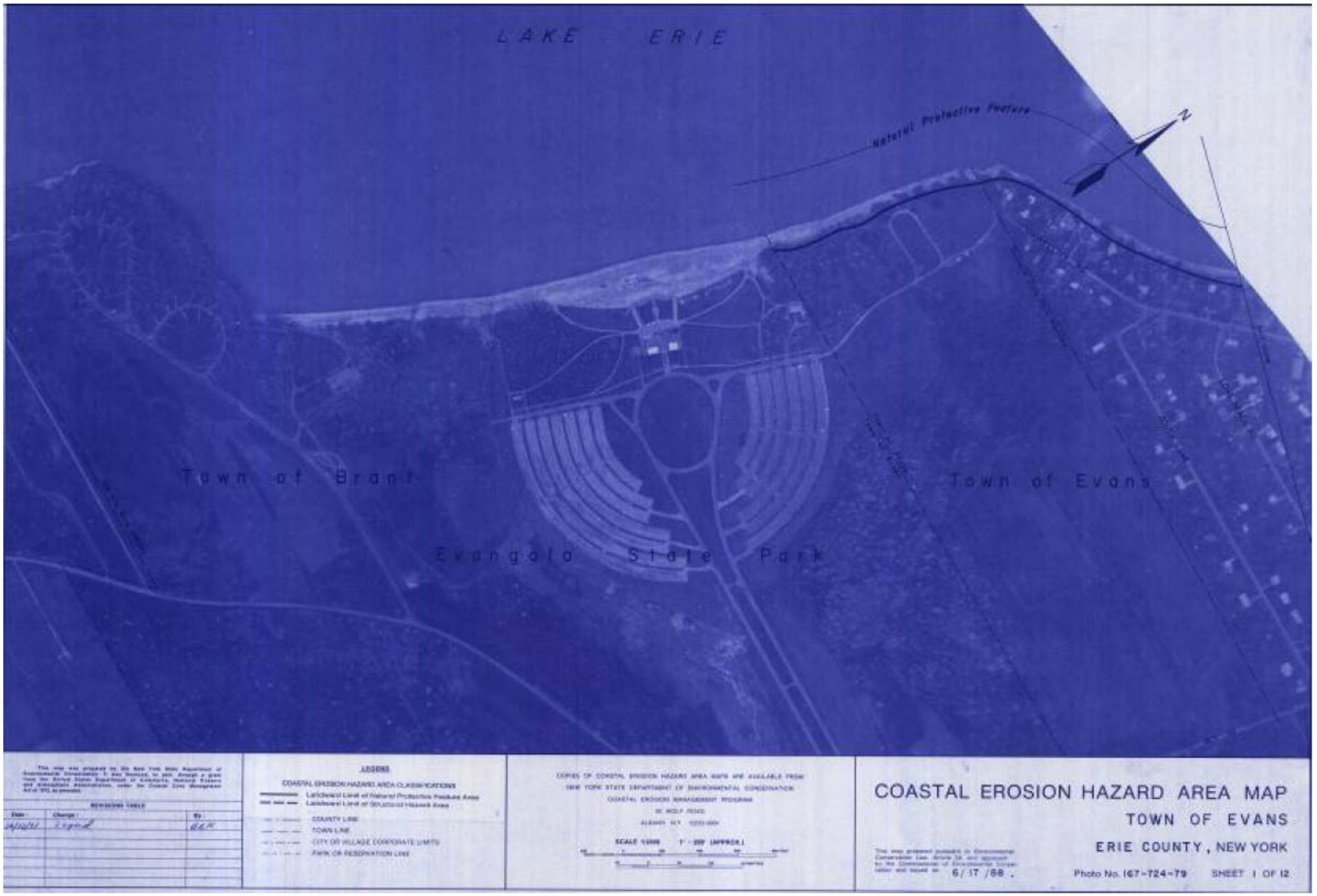
Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard



Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption



Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption



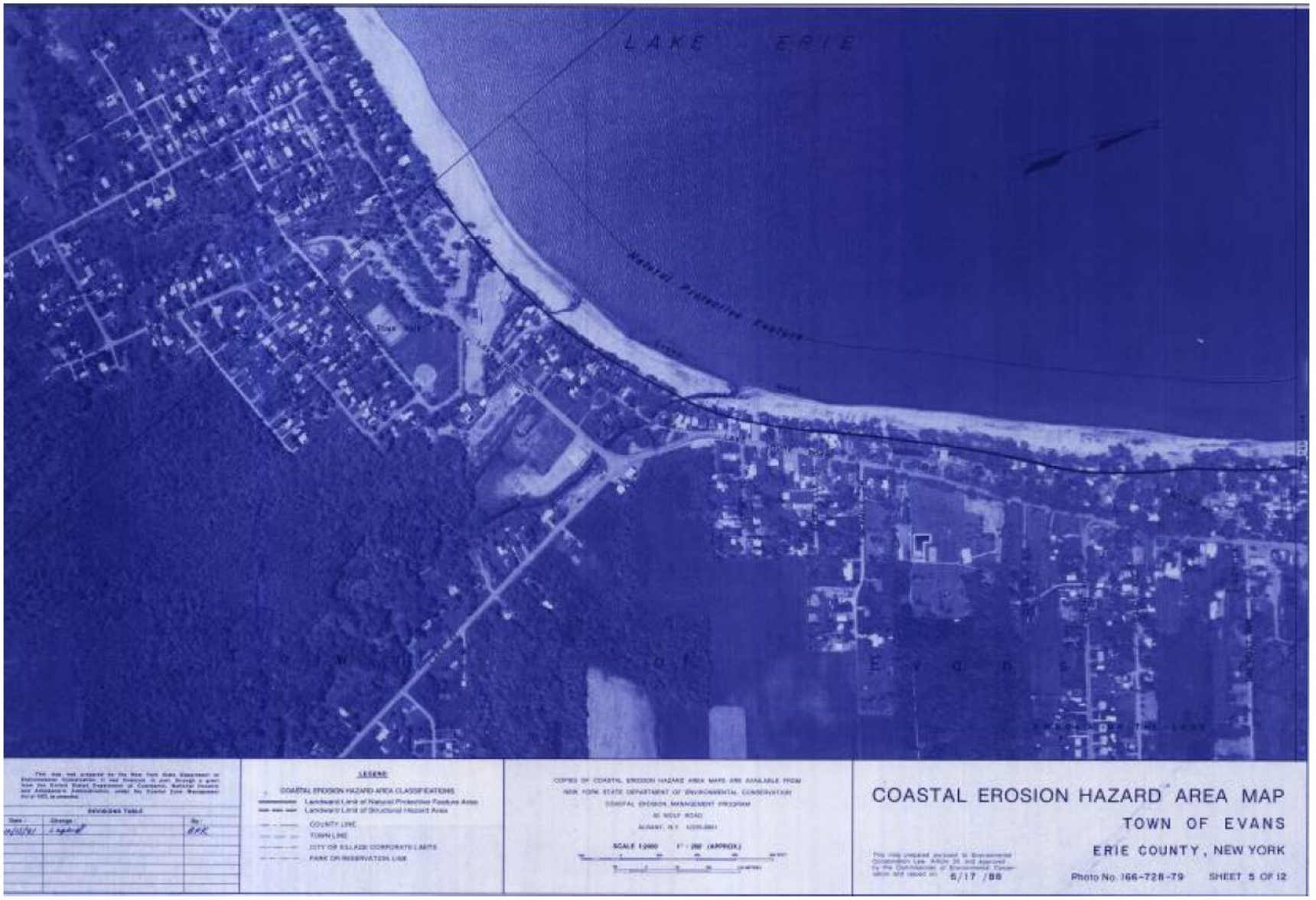
Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Packet Pg. 1208

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption



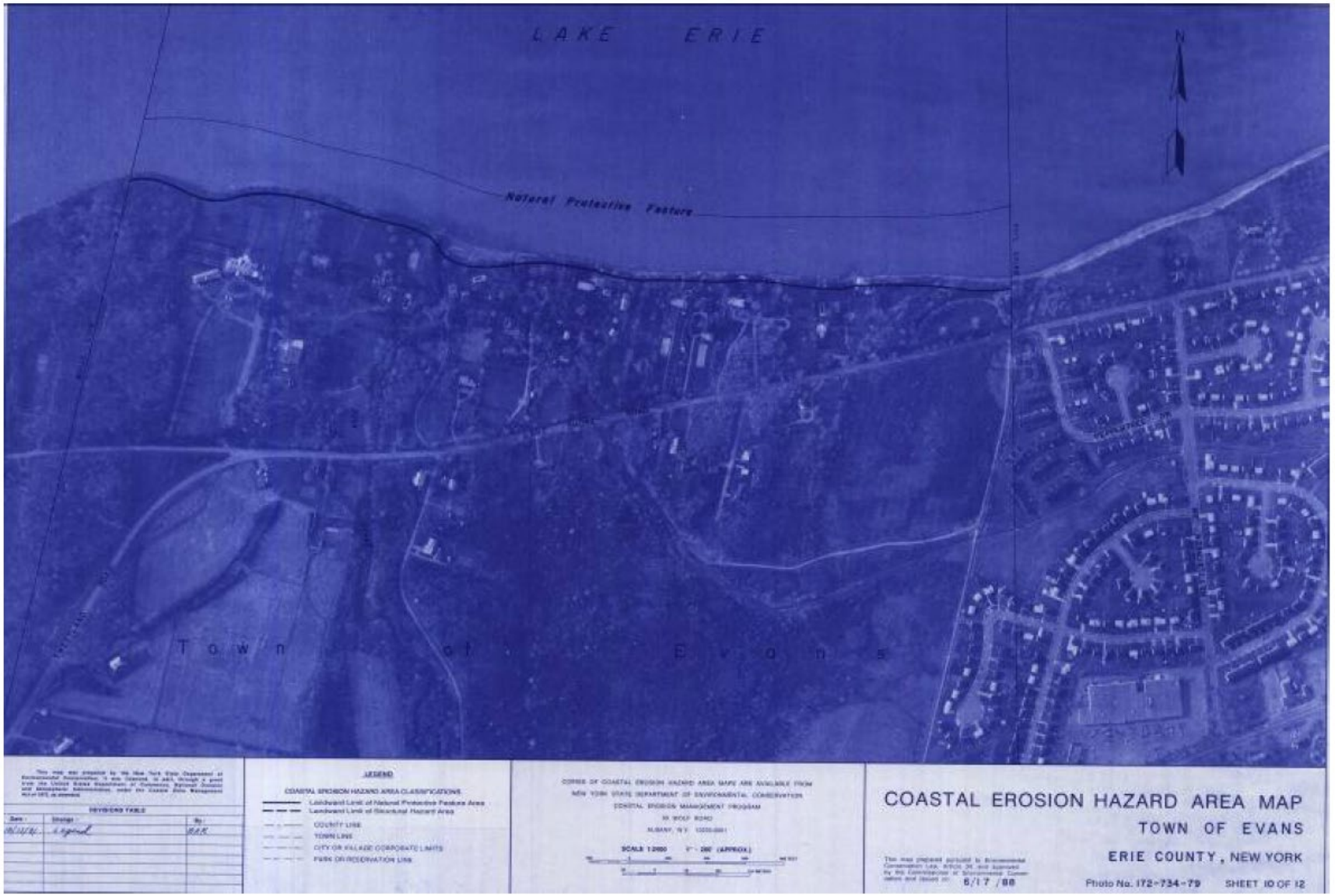
Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

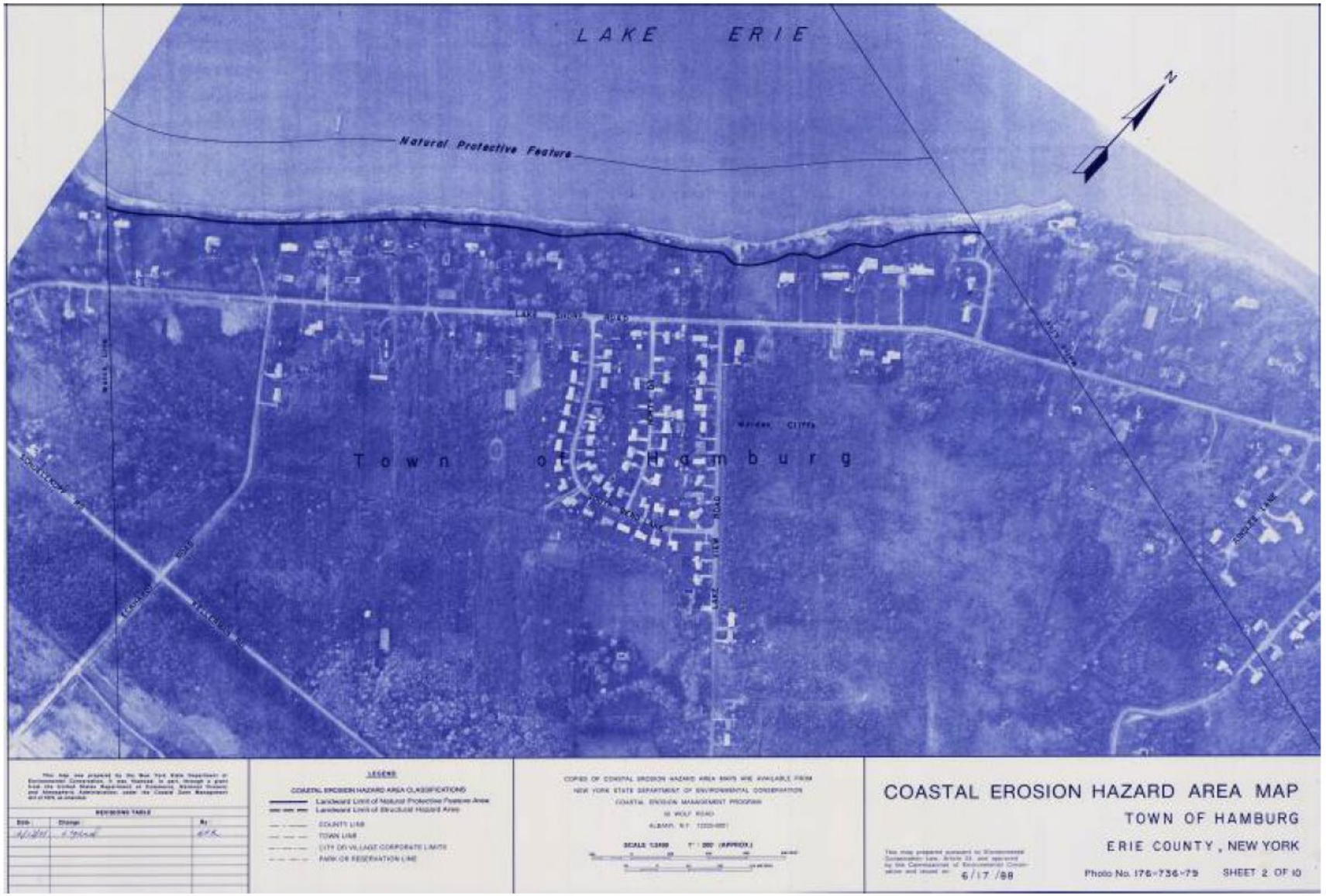


Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

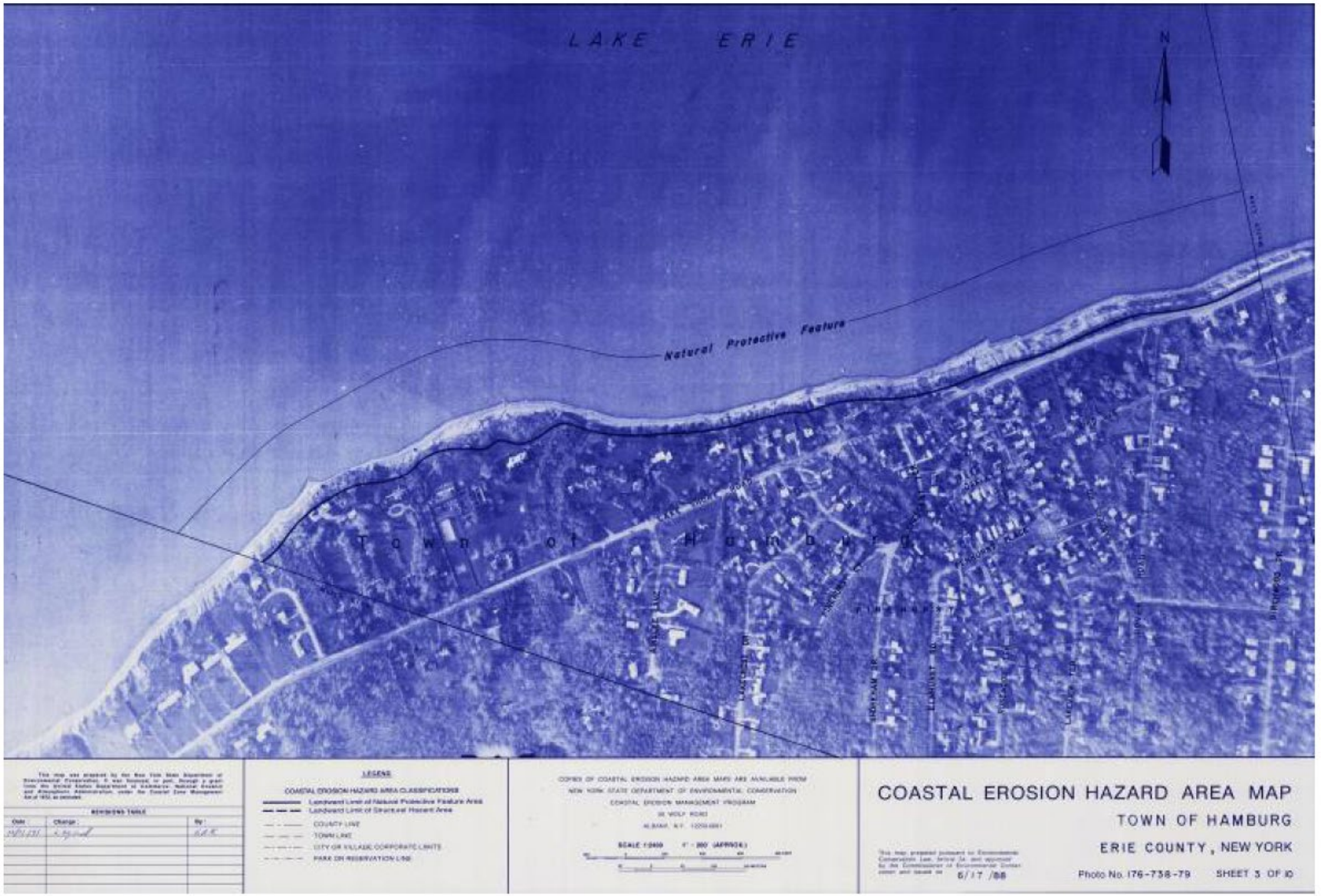
Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption



Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption



Attachment: 35-Appendix-G-Coastal-Erosion-Hazard-Maps-093021 (RES-2022-375 : Authorizing Adoption

APPENDIX H. PLAN REVIEW TOOLS

This appendix includes worksheets to facilitate plan maintenance and review by the Erie County Planning Partnership.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #1 Progress Report step 2

Progress Report Period: _____ (date) to _____ (date)

Project Title: _____ Project ID#: _____

Responsible Agency: _____

Address: _____

City/County: _____

Contact Person: _____ Title: _____

Phone #(s): _____ email address: _____

List Supporting Agencies and Contacts:

_____

_____

_____

Total Project Cost: _____

Anticipated Cost Overrun/Underrun: _____

Date of Project Approval: _____ Start date of the project: _____

Anticipated completion date: _____

Description of the Project (include a description of each phase, if applicable, and the time frame for completing each phase): _____

_____

_____

Milestones	Complete	Projected Date of Completion

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Plan Goal(s)/Objective(s) Addressed:

Goal: _____

Objective: _____

Indicator of Success (e.g., losses avoided as a result of the acquisition program):

In most cases, you will list losses avoided as the indicator. In cases where it is difficult to quantify the benefits in dollar amounts, you will use other indicators, such as the number of people who now know about mitigation or who are taking mitigation actions to reduce their vulnerability to hazards.

_____

_____

Status (Please check pertinent information and provide explanations for items with an asterisk. For completed or canceled projects, see Worksheet #2 — to complete a project evaluation):

Project Status

☐ Project on schedule

☐ Project completed

☐ Project delayed*

*explain: _____

_____

☐ Project canceled

Project Cost Status

☐ Cost unchanged

☐ Cost overrun*

*explain: _____

_____

☐ Cost underrun*

*explain: _____

_____

Summary of progress on project for this report:

A. What was accomplished during this reporting period?

_____

_____

_____

_____

B. What obstacles, problems, or delays did you encounter, if any?

_____

_____

_____

C. How was each problem resolved?

_____

_____

_____

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Next Steps: What is/are the next step(s) to be accomplished over the next reporting period?

Other comments:

Adapted from the North Carolina HMGP Progress Report Form at http://www.dem.dcc.state.nc.us/mitigation/document_index.htm.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #2 Evaluate Your Planning Team step 3

When gearing up for the plan evaluation, the planning team should reassess its composition and ask the following questions:	YES	NO
Have there been local staffing changes that would warrant inviting different members to the planning team?		
Comments/Proposed Action:		
Are there organizations that have been invaluable to the planning process or to project implementation that should be represented on the planning team?		
Comments/Proposed Action:		
Are there any representatives of essential organizations who have not fully participated in the planning and implementation of actions? If so, can someone else from this organization commit to the planning team?		
Comments/Proposed Action:		
Are there procedures (e.g., signing of MOAs, commenting on submitted progress reports, distributing meeting minutes, etc.) that can be done more efficiently?		
Comments/Proposed Action:		
Are there ways to gain more diverse and widespread cooperation?		
Comments/Proposed Action:		
Are there different or additional resources (financial, technical, and human) that are now available for mitigation planning?		
Comments/Proposed Action:		

If the planning team determines the answer to any of these questions is "yes," some changes may be necessary.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #3 Evaluate Your Project Results step 3

Project Name and Number: _____

_____

Project Budget: _____

_____

Project Description: _____

_____

_____

Associated Goal and Objective(s): _____

_____

_____

Indicator of Success (e.g., losses avoided): _____

_____

_____

Insert location map.

Include before and after photos if appropriate.

Was the action implemented? ☐ **YES** ☐ **NO**

IF NO

Why not?

	YES	NO
Was there political support for the action?	☐	☐
Were enough funds available?	☐	☐
Were workloads equitably or realistically distributed?	☐	☐
Was new information discovered about the risks or community that made implementation difficult or no longer sensible?	☐	☐
Was the estimated time of implementation reasonable?	☐	☐
Were sufficient resources (for example staff and technical assistance) available?	☐	☐

IF YES

What were the results of the implemented action? _____

_____

_____

_____

_____

_____

_____

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

	YES	NO
Were the outcomes as expected? If No, please explain:		
Did the results achieve the goal and objective(s)? Explain how:		
Was the action cost-effective? Explain how or how not:		
What were the losses avoided after having completed the project?		
If it was a structural project, how did it change the hazard profile?		
Additional comments or other outcomes:		

Date: _____

Prepared by: _____

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #4 Revisit Your Risk Assessment step 4

Risk Assessment Steps	Questions	YES	NO	COMMENTS
Identify hazards	Are there new hazards that can affect your community?			
Profile hazard events	Are new historical records available?			
	Are additional maps or new hazard studies available?			
	Have chances of future events (along with their magnitude, extent, etc.) changed?			
	Have recent and future development in the community been checked for their effect on hazard areas?			
Inventory assets	Have inventories of existing structures in hazard areas been updated?			
	Is future land development accounted for in the inventories?			
	Are there any new special high-risk populations?			
Estimate losses	Have loss estimates been updated to account for recent changes?			

If you answered "Yes" to any of the above questions, review your data and update your risk assessment information accordingly.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #1 Progress Report step 2

Progress Report Period: October 1, 2003 (date) to December 31, 2003 (date)

Project Title: Raging River Views Park Flood Acquisition Project Project ID#: HVMP-2003-01

Responsible Agency: Hazardville Department of Planning

Address: 1909 Burnham Way

City/County: Hazardville, Emergency

Contact Person: Eunice Euclid Title: Grants Administrator

Phone #(s): (555) 555-8473 email address: eeuclid@town.hazardville.ny

List Supporting Agencies and Contacts:

Hazardville Department of Housing: Noah Hudson (555) 555-8465

Hazardville Habitat for Humanity: Carter Goodman (555) 555-9432

Total Project Cost: $360,000

Anticipated Cost Overrun/Underrun: $N/A

Date of Project Approval: July 21, 2003 Start date of the project: November 15, 2003

Anticipated completion date: Summer 2005

Description of the Project (include a description of each phase, if applicable, and the time frame for completing each phase):

Acquire and demolish 14 structures located at the Raging River Views Park. Work with Habitat for Humanity and the Department of Housing to construct new housing or rehabilitate existing housing for displaced low-income residents. The Department of Housing will also provide funds for temporary housing to displaced residents.

Milestones	Complete	Projected Date of Completion
Conduct surveys of ground and first-floor elevations	✓	
Obtain Notices of Intent by owners	✓	
Conduct structure appraisals	✓	
Send letters of offer to homeowners		1/31/04
Perform title work		3/30/04
Acquire structures		6/30/04
Begin construction of new housing or reconstruction of existing housing for relocated residents		6/30/04
Send payment for relocation to renters		9/30/04
Finalize contract for demolition		1/12/05
Demolish structures		4/26/05
Landscape open parcels		6/30/05

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Plan Goal(s)/Objective(s) Addressed:

Goal: Minimize losses to existing and future structures within hazard areas.

Objective: Reduce potential damages to the manufactured home park in the floodplain.

Indicator of Success (e.g., losses avoided as a result of the acquisition program):

In most cases, you will list losses avoided as the indicator. In cases where it is difficult to quantify the benefits in dollar amounts, you will use other indicators, such as the number of people who now know about mitigation or who are taking mitigation actions to reduce their vulnerability to hazards.

Losses Avoided. After a major flood (100-year), the Department of Economic Development will assist the Planning Department in calculating the losses avoided.

Status (Please check pertinent information and provide explanations for items with an asterisk. For completed or canceled projects, see Worksheet #2 — to complete a project evaluation):

Project Status

- ☑ Project on schedule
- ☐ Project completed
- ☐ Project delayed*

*explain: _____

- ☐ Project canceled

Project Cost Status

- ☑ Cost unchanged
- ☐ Cost overrun*

*explain: _____

- ☐ Cost underrun*

*explain: _____

Summary of progress on project for this report:

A. What was accomplished during this reporting period?

The Department of Planning contacted the owners of the properties vulnerable to floods to determine their willingness to sell their properties. Of the 14 property owners contacted, 10 agreed to have their homes acquired. An appraiser contracted by the Department of Planning estimated the value of the 10 properties.

B. What obstacles, problems, or delays did you encounter, if any?

The owners of four properties refused to sell. There has been some limited neighborhood opposition to various suggestions for the community open space created by the acquisitions.

C. How was each problem resolved?

The Department of Planning has proposed to the residents a design charrette to develop alternatives for the open space that would be created, with the understanding that no permanent structures can be constructed on the open parcels after acquisition and demolition has been completed. Recreational activities will be limited to passive uses such as trails and bike paths.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Next Steps: What is/are the next step(s) to be accomplished over the next reporting period?

1. Send offer letters to homeowners.
2. Do title work.
3. Work with the Department of Housing and Habitat for Humanity to identify existing housing for rehabilitation and viable vacant parcels to construct new housing for the displaced residents.

Other comments:

None

Adapted from the North Carolina HMGP Progress Report Form at http://www.dem.dcc.state.nc.us/mitigation/document_index.htm.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #2 Evaluate Your Planning Team step 3

When gearing up for the plan evaluation, the planning team should reassess its composition and ask the following questions:	YES	NO
Have there been local staffing changes that would warrant inviting different members to the planning team?		✓
Comments/Proposed Action: NA		
Are there organizations that have been invaluable to the planning process or to project implementation that should be represented on the planning team?	✓	
Comments/Proposed Action: Hazardville Habitat for Humanity has been invaluable in assisting the relocation of former Raging River Views Park residents. The organization should be invited to participate in THORR.		
Are there any representatives of essential organizations who have not fully participated in the planning and implementation of actions? If so, can someone else from this organization commit to the planning team?	✓	
Comments/Proposed Action: It is essential that the Department of Public Works be represented at each meeting because so many mitigation actions involve them. However, representatives from the department have been unable to attend meetings consistently since the development of the plan. THORR will work with the departments director to find consistent, active representation.		
Are there procedures (e.g., signing of MOAs, commenting on submitted progress reports, distributing meeting minutes, etc.) that can be done more efficiently?	✓	
Comments/Proposed Action: Again, the Department of Public Works has been unable to provide timely progress reports of its mitigation actions. Administrative duties and paperwork have fallen through the cracks since the department has been assigned numerous new duties in Hazardville's mitigation efforts. Perhaps the department, in partnership with THORR, should approach the Town Council for funding for more department staff.		
Are there ways to gain more diverse and widespread cooperation?	✓	
Comments/Proposed Action: THORR members believe that better publicity about mitigation actions will garner more interest from the public, affected/interested organizations, and state agencies.		
Are there different or additional resources (financial, technical, and human) that are now available for mitigation planning?	✓	
Comments/Proposed Action: THORR has learned about new PDM funding. The state has asked that local jurisdictions submit applications for brick and mortar projects and risk assessments studies.		

If the planning team determines the answer to any of these questions is "yes," some changes may be necessary.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #3 Evaluate Your Project Results step 3

Project Name and Number:

Raging River Views Park Flood Acquisition Project (HVMP-2003-01)

Project Budget:

$360,000

Project Description:

Acquisition and demolition of 14 flood-prone structures

Associated Goal and Objective(s):

Goal: Minimize losses to existing and future structures within hazard areas

Objective: Reduce potential damages to the manufactured home park in the floodplain

Indicator of Success (e.g., losses avoided):

Losses avoided by acquisition and demolition of flood-prone structures

Town of Hazardville Composite Loss Map developed previously during risk assessment (see FEMA 386-2).

Was the action implemented? ☑ YES ☐ NO

IF NO

Why not?	YES	NO
Was there political support for the action?	☐	☐
Were enough funds available?	☐	☐
Were workloads equitably or realistically distributed?	☐	☐
Was new information discovered about the risks or community that made implementation difficult or no longer sensible?	☐	☐
Was the estimated time of implementation reasonable?	☐	☐
Were sufficient resources (for example staff and technical assistance) available?	☐	☐

IF YES

What were the results of the implemented action?

Of the 14 proposed properties, 10 were acquired. The benefit-cost ratio is 2.19, based on project benefits of $789,000 and costs of $360,274. Benefits are based on the net present value of the avoided damages over the project life. Furthermore, about 40 people are no longer in the path of a potential flood, making emergency rescue operations in that area less likely and evacuation easier.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

	YES	NO
Were the outcomes as expected? If No, please explain:		✓
The project originally set out to acquire 14 properties. Four of the 14 owners did not want to participate in the buyout program.		
Did the results achieve the goal and objective(s)? Explain how:	✓	
Despite four properties still in harm's way, the objective has been largely met. See additional comments.		
Was the action cost-effective? Explain how or how not:	✓	
The FEMA Limited Data module was used to perform the benefit-cost analysis. Data for the analysis was collected from historical flood data and used as benchmarks in the before mitigation section of the analysis. The damages after mitigation section was left blank, due to the properties being permanently acquired, and the economic risk removed completely. The analysis resulted in a benefit-cost ratio of 2.19, with benefits totaling $789,000 for 10 properties.		
What were the losses avoided after having completed the project?		
Total avoided losses are $789,000 over the lifetime of the project (estimated at 100 years).		
If it was a structural project, how did it change the hazard profile?		
N/A		
Additional comments or other outcomes:		
The Planning Department has agreed to work with the remaining four homeowners in evaluating other flood-proofing options.		

Date: October 12, 2005

Prepared by: Hazardville Department of Economic Development
Hazardville Department of Planning

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Worksheet #4 Revisit Your Risk Assessment step 4

Risk Assessment Steps	Questions	YES	NO	COMMENTS
Identify hazards	Are there new hazards that can affect your community?		✓	
Profile hazard events	Are new historical records available?		✓	
	Are additional maps or new hazard studies available?	✓		Recently completed maps and studies showing vulnerability of the new coastal development to erosion and tidal surge are available.
	Have chances of future events (along with their magnitude, extent, etc.) changed?		✓	
	Have recent and future development in the community been checked for their effect on hazard areas?	✓		
Inventory assets	Have inventories of existing structures in hazard areas been updated?	✓		
	Is future land development accounted for in the inventories?	✓		The Planning Department is preparing a coastal development plan to ensure that any future development is set back far enough to be outside the erosion zones and the coastal high hazard areas. Current and future road configurations will also be studied to ensure adequate evacuation times before hurricane events.
	Are there any new special high-risk populations?	✓		Coastal residents and business owners.
Estimate losses	Have loss estimates been updated to account for recent changes?	✓		

If you answered "Yes" to any of the above questions, review your data and update your risk assessment information accordingly.

Attachment: 36-Appendix-H-Plan-Review-Tools-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Erie County	Charter Amendment	LL 1-2017	2017	Erie County Legislature
Erie County	Energize NY Benefit Financing Program Law	LL 1-2019	2019	
Erie County	Erie and Niagara County Framework for Regional Growth	N/A	10/2006	Erie County Department of Environment and Planning
Erie County	Green Buildings Act	LL 6-2007	2007	Erie County Legislature
Erie County Water Authority	Erie County Water Authority Comprehensive Strategic Plan	N/A	9/2019	Erie County Water Authority
Akron Village	Building and Energy Code	LL 6-2006	2006	Village of Akron
Akron Village	Flood Damage Prevention Ordinance	LL 1-2019	2019	Code Enforcement Officer
Akron Village	Revised Buildings, Unsafe	LL 3-2010	2010	Village of Akron
Akron Village	Subdivision	LL 1-2007	2007	Village of Akron
Akron Village	Town of Newstead and Village of Akron Combined Comprehensive Plan	N/A	2001	Akron Village Board
Akron Village	Town of Newstead and Village of Akron Joint Comprehensive Plan Update	N/A	2018	Akron Village Board
Akron Village	Zoning Code	LL 1-1971	1971	Village of Akron
Alden Town	Building Code Administration	LL 3-2006	2006	Town of Alden
Alden Town	Flood Damage Prevention Ordinance	LL 2-2019	2019	Code Enforcement Officer
Alden Town	Land Subdivision Regulations	LL 1-2007	2007	Town of Alden
Alden Town	Storm Sewers	LL 7-2007	2007	Town of Alden
Alden Town	Stormwater Management and Erosion and Sediment Control	LL 8-2007	2007	Town of Alden
Alden Town	Town of Alden Comprehensive Plan	N/A	10/2009	Alden Town Board
Alden Town	Zoning Code	LL 1-1992	1992	Town of Alden
Alden Village	Building Construction and Fire Prevention	LL 6-2003	2003	Village of Alden
Alden Village	Buildings, Unsafe	LL 7-2003	2003	Village of Alden
Alden Village	Environmental Conservation Commission	LL 1-2012	2012	Village of Alden
Alden Village	Flood Damage Prevention Ordinance	LL 1-1987	6/7/2019	Building Inspector
Alden Village	Sewers	LL 11-2003	2003	Village of Alden
Alden Village	Stormwater Management and Erosion and Sediment Control	LL 2-2007	2007	Village of Alden
Alden Village	Stormwater Mgt Illicit Discharge	LL 3-2007	2007	Village of Alden
Alden Village	Subdivision of Land	LL 13-2003	2003	Village of Alden
Alden Village	Village of Alden 2015 Comprehensive Plan	N/A	2000	Village of Alden Planning Board
Alden Village	Zoning	LL 21-2003	2003	Village of Alden
Amherst Town	Building Construction Administration	LL 1-2009	2009	Town of Amherst
Amherst Town	Environmental Quality Review	LL 3-1982	1982	Town of Amherst
Amherst Town	Resilient New York Flood Mitigation Strategy for Gott Creek	N/A	2020	NYSDEC
Amherst Town	Stormwater and Erosion Control	LL 11-2007	2007	Town of Amherst
Amherst Town	Subdivision of Land	LL 2-2009	2009	Town of Amherst

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Amherst Town	Town of Amherst Bicentennial Comprehensive Plan	N/A	2/28/2011	Town of Amherst Planning Board
Angola Village	Buildings, Unsafe_General Legislation	1974 Code	1974	Village of Angola
Angola Village	Flood Damage Prevention Ordinance	LL 3-2019	6/7/2019	Code Enforcement Officer
Angola Village	Storm Sewers	LL 5-2007	2007	Village of Angola
Angola Village	Stormwater Management	LL 4-2007	2007	Village of Angola
Angola Village	Subdivision of Land	1974 Code	1974	Village of Angola
Angola Village	Town of Evans/ Village of Angola Comprehensive Plan Update	N/A	1/14/2019	Town of Evans
Angola Village	Zoning	1974 Code	1974	Village of Angola
Aurora Town	Fire Prevention and Building Construction	N/A	1954	Town of Aurora
Aurora Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	Building Inspector, Code Enforcement Officer, or employee of an engineering department
Aurora Town	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora	N/A	2012	Village of East Aurora
Aurora Town	Sewers	LL 1-1989	1989	Town of Aurora
Aurora Town	Site Plan Review	LL 6-2007	1/11/1999	Town of Aurora
Aurora Town	Stormwater Management	LL-2007	2007	Town of Aurora
Aurora Town	Subdivision of Land and Open Development	LL 5-2007	2017	Town of Aurora
Aurora Town	Zoning Code	LL 4-2017	2017	Town of Aurora
Boston Town	Fire Prevention and Building Code Administration	LL 3-1987	1987	Town of Boston
Boston Town	Flood Damage Prevention Ordinance	LL 1-1987	9/30/1981	Code Enforcement Officer
Boston Town	Sewers	LL 2-1997	1997	Town of Boston
Boston Town	Site Plan Review	LL 8-1990	1990	Town of Boston
Boston Town	Subdivision of Land	LL 7-1990	1990	Town of Boston
Boston Town	Town of Boston Comprehensive Plan: A Vision for the Year 2020	N/A	2002	Town of Boston
Boston Town	Zoning	LL 6-1990	1990	Town of Boston
Brant Town	Building Construction and Fire Prevention	LL 2-2010	2010	Town of Brant
Brant Town	Buildings, Unsafe_General Provisions	N/A	1980	Town of Brant
Brant Town	Environmental Quality Review	LL 1-1979	1979	Town of Brant
Brant Town	Flood Damage Prevention Ordinance	LL 2-1983	1984	Code Enforcement Officer
Brant Town	Subdivision of Land	LL 1-1976	1976	Town of Brant
Brant Town	Town of Brant, Village of Farnham Master Plan	N/A	8/2003	Brant Town Board
Brant Town	Zoning	LL 2-2019	2019	Town of Brant
Buffalo City	Building Construction and Demolition; Fire Prevention	N/A	1974	City of Buffalo
Buffalo City	Buildings, Unsafe	N/A	1974	City of Buffalo
Buffalo City	City of Buffalo Comprehensive Plan	N/A	2/7/2006	Buffalo Office of Strategic Planning
Buffalo City	Flood Damage Prevention Ordinance	City Charter	9/3/2008	Commissioner of Public Works, Parks and Streets

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Cheektowaga Town	Building Construction Codes Administration	LL 5-2004	2004	Town of Cheektowaga
Cheektowaga Town	Buildings, Unsafe	LL 4-2006	2006	Town of Cheektowaga
Cheektowaga Town	Disaster Preparedness	1985 Code	1985	Town of Cheektowaga
Cheektowaga Town	Flood Damage Prevention Ordinance	LL 2-2019	6/7/2019	Town Engineer
Cheektowaga Town	Storm Sewers	LL 7-2007	2007	Town of Cheektowaga
Cheektowaga Town	Stormwater Management and Erosion Sediment Control	LL 8-2007	2007	Town of Cheektowaga
Cheektowaga Town	The Town of Cheektowaga Comprehensive Master Plan	N/A	1992	Town of Cheektowaga
Cheektowaga Town	Zoning	LL 1-1992	1992	Town of Cheektowaga
Clarence Town	Building Code Administration	LL 2-2007	2007	Town of Clarence
Clarence Town	Environmental Quality Review	LL 2-2010	2010	Town of Clarence
Clarence Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	Town Engineer and/or his designee
Clarence Town	North Clarence Flood Reduction Study	N/A	2015	Town of Clarence
Clarence Town	Storm Sewers	LL 7-2007	2007	Town of Clarence
Clarence Town	Stormwater Management and Erosion and Sediment Control	LL 6-2007	2007	Town of Clarence
Clarence Town	Subdivision of Land	LL 5-2005	2005	Town of Clarence
Clarence Town	Town of Clarence Master Plan 2015	N/A	2/2007	Town of Clarence
Clarence Town	Zoning	LL 3-2005	2005	Town of Clarence
Colden Town	Building Construction	LL 3-1986	1986	Town of Colden
Colden Town	Environmental Quality Review	LL 1-1980	1980	Town of Colden
Colden Town	Flood Damage Prevention Ordinance	LL 1-1995	6/7/2019	Code Enforcement Officer of Town
Colden Town	Subdivision of Land	LL 2-1978	1978	Town of Colden
Colden Town	Town of Colden Master Plan 2002	N/A	9/1993	Town of Colden Planning Board
Colden Town	Water	LL 1-2006	2006	Town of Colden
Colden Town	Zoning	LL 1-1997	1997	Town of Colden
Collins Town	Buildings, Unsafe	LL 1-1987	1987	Town of Collins
Collins Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	The Code Enforcement Officer
Collins Town	Subdivision of Land	Chapter 1 : General provisions	1987	Town of Collins
Collins Town	Town of Collins/Village of Gowanda 1999 Master Plan	N/A	8/1999	Town of Collins
Collins Town	Zoning	LL 1-1987	1987	Town of Collins
Concord Town	Buildings, Unsafe	LL 3-1995	1995	Town of Concord
Concord Town	Fire Prevention and Building Construction	LL 3-1986	1986	Town of Concord
Concord Town	Flood Damage Prevention Ordinance	LL 1-1987	6/7/2019	The Code Enforcement Officer
Concord Town	Sewers	LL 2-1993	1993	Town of Concord
Concord Town	Subdivision of Land	LL 1-1997	1997	Town of Concord
Concord Town	Town of Concord and Village of Springville Joint Comprehensive Plan	N/A	8/1999	Town of Concord
Concord Town	Zoning	General Provisions	2005	Town of Concord
Depew Village	Building Construction and Fire Prevention	LL 9-2011	2011	Village of Depew
Depew Village	Environmental Quality Review	LL 2-1979	1979	Village of Depew

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Depew Village	Flood Damage Prevention Ordinance	LL 1-2008	2008	Not specified
Depew Village	Sewer Use	LL 2-1971	1971	Village of Depew
Depew Village	Storm Sewers	LL 2-2008	2008	Village of Depew
Depew Village	Stormwater Management	LL 1-2008	2008	Village of Depew
Depew Village	Town of Lancaster, Village of Lancaster, Village of Depew: A Comprehensive Plan…A Common Future February 2000	N/A	2/2000	Town of Lancaster
Depew Village	Zoning	LL 5-2012	2012	Village of Depew
East Aurora	Flood Damage Prevention Ordinance	LL 4-2019	6/7/2019	The Village Floodplain Coordinator
East Aurora Village	Building Construction and Fire Prevention	LL 1-2006	2006	Village of East Aurora
East Aurora Village	Environmental Stewardship	LL 7-2019	2019	Village of East Aurora
East Aurora Village	Historic preservation	LL 9-1987	1987	Village of East Aurora
East Aurora Village	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora	N/A	2012	Village of East Aurora
East Aurora Village	Sewers	N/A	1953	Village of East Aurora
East Aurora Village	Subdivision of Land	N/A	1972	Village of East Aurora
East Aurora Village	Zoning	LL 3-2019	2019	Village of East Aurora
Eden Town	Buildings, Unsafe	LL 4-1997	1997	Town of Eden
Eden Town	Buildings, Unsafe	LL 4-1997	1997	Town Planning Board
Eden Town	Cultivate Eden Town of Eden Comprehensive Plan Update	N/A	2018	Town of Eden
Eden Town	Disaster Plan	N/A	2012	Town Planning Board
Eden Town	Farmland Protection Plan	N/A	2009	Town Planning Board
Eden Town	Fire Prevention and Building Construction	LL 1-1998	1998	Town of Eden
Eden Town	Fire Prevention and Building Construction	LL 1-1998	1998	Town Planning Board
Eden Town	Flood Damage Prevention Ordinance	LL 2-2019	6/7/2019	The Code Enforcement Officer
Eden Town	Stormwater Management	LL 9-2001	2001	Town of Eden
Eden Town	Subdivision of Land	N/A	1990	Town of Eden
Eden Town	Subdivision of Land	General Legislation	1990	Town Planning Board
Eden Town	Town of Eden, New York 2015 Comprehensive Plan	N/A	10/11/2000	Town Planning Board
Eden Town	Zoning	LL 1-1997	1997	Town Planning Board
Elma Town	Building Construction	N/A	1954	Town of Elma
Elma Town	Environmental Commission	LL 1-1971	1971	Town of Elma
Elma Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	The Code Enforcement Officer
Elma Town	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora	N/A	2012	Village of East Aurora
Elma Town	Sewers	N/A	2005	Town of Elma
Elma Town	Site Plan Review	LL 6-1986	1986	Town of Elma
Elma Town	Stormwater Management	LL 2-2015	2015	Town of Elma
Elma Town	Stormwater Management	LL 2-2015	2015	Town of Elma

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Elma Town	Subdivision of Land	LL 1-1989	1989	Town of Elma
Elma Town	Zoning	N/A	1950	Town of Elma
Evans Town	Building Code Administration	LL 1-2007	2007	Town of Evans
Evans Town	Buildings, Unsafe	LL 3-1973	1973	Town of Evans
Evans Town	Flood Damage Prevention Ordinance	LL 2-2019	6/7/2019	The Code Enforcement Officer or his/her designee
Evans Town	Lake Erie Beach Neighborhood Revitalization Strategy	N/A	2010	Town of Evans
Evans Town	LWRP	N/A	2012	Town of Evans
Evans Town	Stormwater Management Plan	N/A	2007	Town of Evans
Evans Town	Stormwater Management Program Plan	N/A	2015	Town of Evans
Evans Town	Stormwater Management Program Plan		2015	Town of Evans
Evans Town	Storm Sewers	LL 7-2007	2007	Town of Evans
Evans Town	Subdivision of Land	LL 1-1992	1992	Town of Evans
Evans Town	Town of Evans/ Village of Angola Comprehensive Plan Update	N/A	1/14/2019	Town of Evans
Evans Town	Waterfront Ordinance	LL 8-2011	2011	Town of Evans
Evans Town	Winter Storm Recovery and Preparing for the Next Storm	N/A	2014	Town of Evans
Evans Town	Zoning	LL 8-1987	1987	Town of Evans
Farnham Village	Town of Brant, Village of Farnham Master Plan	N/A	8/2003	Master Plan Steering Committee
Gowanda Village	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	The Code Enforcement Officer
Gowanda Village	Site Plan Review Procedures	LL 1-2007	2007	Village of Kenmore
Gowanda Village	Town of Collins/Village of Gowanda 1999 Master Plan	N/A	8/1999	Town of Collins
Grand Island Town	Construction Codes, Uniform	LL 1-2012	2012	Town of Grand Island
Grand Island Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	The Town Engineer
Grand Island Town	Sewers	N/A	1973	Town of Grand Island
Grand Island Town	Subdivision of Land	Chapter 24A	1971	Town of Grand Island
Grand Island Town	Town of Grand Island 2018 Comprehensive Plan	N/A	9/17/2018	Town of Grand island
Grand Island Town	Town of Grand Island Local Waterfront Revitalization Program	N/A	2006	Town of Grand Island
Grand Island Town	Zoning	LL 3-2004	2004	Town of Grand Island
Greater Buffalo Niagara Regional Transportation Council	One Region Forward	N/A	2015	Greater Buffalo Niagara Regional Transportation Council
Hamburg Town	Building Construction and Fire Prevention	LL 1-2005	2005	Town of Hamburg
Hamburg Town	Buildings, Unsafe	LL 5-1972	1972	Town of Hamburg
Hamburg Town	Disaster Preparedness	LL 3-1995	1995	Town of Hamburg
Hamburg Town	Flood Damage Prevention Ordinance	LL 3-2019	6/7/2019	Town of Hamburg Supervising Code Enforcement Officer
Hamburg Town	Stormwater Management and Erosion and Sediment Control	LL 4-2007	2007	Town of Hamburg
Hamburg Town	Storm Sewers	LL 5-2007	2007	Town of Hamburg

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Hamburg Town	Subdivision of Land	LL 14-1991	1991	Town of Hamburg
Hamburg Town	Town of Hamburg 2007 Comprehensive Plan Update	N/A	9/8/2008	Town of Hamburg
Hamburg Town	Zoning	LL 10-1986	1986	Town of Hamburg
Hamburg Village	Building Construction and Fire Prevention	LL 3-1998	1998	Village of Hamburg
Hamburg Village	Environmental Quality Review	LL 6-1973	1973	Village of Hamburg
Hamburg Village	Flood Damage Prevention Ordinance	LL 2-2019	6/7/2019	Town of Hamburg Supervising Code Enforcement Officer
Hamburg Village	Sewers	LL 5-1981	1981	Village of Hamburg
Hamburg Village	Stormwater Management	LL 4-2007	2007	Village of Hamburg
Hamburg Village	Subdivision of Land	N/A	1967	Village of Hamburg
Hamburg Village	Tree Management Plan	N/A	2014	Village of Hamburg
Hamburg Village	Village of Hamburg 2012 Comprehensive Plan Update	N/A	2012	Village of Hamburg
Hamburg Village	Zoning	LL 4-1974	1974	Village of Hamburg
Holland Town	Building Construction	LL 2-1988	1988	Town of Holland
Holland Town	Buildings, Unsafe	LL 2-2202	2002	Town of Holland
Holland Town	Comprehensive Plan	N/A	2018	Town of Holland
Holland Town	Flood Damage Prevention Ordinance	LL 1-2019	9/26/2008	Supervisor of the Town of Holland
Holland Town	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora	N/A	2/1994	Village of East Aurora
Holland Town	Subdivision of Land	LL 2-1988	1988	Town of Holland
Holland Town	Zoning	N/A	1973	Town of Holland
Kenmore Village	Buildings and Building Regulations	N/A	1962	Village of Kenmore
Kenmore Village	Comprehensive Plan for the Village of Kenmore Business District	N/A	11/18/2003	Village of Kenmore
Kenmore Village	Flood Damage Prevention Ordinance	LL 2-2019	6/7/2019	Building Inspector
Kenmore Village	Sewers and Sewage Disposal	LL 2-1970	1970	Village of Kenmore
Kenmore Village	Site Plan Review	LL 4-2002	2002	Village of Kenmore
Kenmore Village	Stormwater Management	LL 1-2008	2008	Village of Kenmore
Kenmore Village	Subdivision of Land	LL 7-2018	2018	Village of Kenmore
Kenmore Village	Zoning	LL 1-2015	2015	Village of Kenmore
Lackawanna City	Building Code Administration	LL 1-2007	2007	City of Lackawanna
Lackawanna City	Buildings, Unsafe	N/A	2014	City of Lackawanna
Lackawanna City	City of Lackawanna Comprehensive Plan 2020	N/A	2001	City of Lackawanna
Lackawanna City	City of Lackawanna Local Waterfront Revitalization Program	N/A	1989	City of Lackawanna
Lackawanna City	Environmental Quality Review	N/A	1987	City of Lackawanna
Lackawanna City	LWRP Preliminary Draft	N/A	2018	City of Lackawanna
Lackawanna City	Sewers	N/A	1987	City of Lackawanna
Lackawanna City	Subdivision of Land	N/A	2016	City of Lackawanna
Lackawanna City	Zoning	N/A	2002	City of Lackawanna

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Lancaster Town	Building Code Administration	LL 1-2007	2007	Town of Lancaster
Lancaster Town	Fire Prevention and Building Code	LL 1-1984	1984	Town of Lancaster
Lancaster Town	Flood Damage Prevention Ordinance	LL 4-2019	6/7/2019	Town of Lancaster Building Inspector
Lancaster Town	Stormwater Management and Erosion and Sediment Control	LL 2-2007	2007	Town of Lancaster
Lancaster Town	Town of Lancaster Stormwater Management Plan	N/A	2010	Town of Lancaster
Lancaster Town	Town of Lancaster, Village of Lancaster, Village of Depew: A Comprehensive Plan. A Common Future February 2000	N/A	2/2000	Town of Lancaster
Lancaster Town	Zoning	N/A	1989	Town of Lancaster
Lancaster Village	Building Construction	N/A	1956	Village of Lancaster
Lancaster Village	Environmental Quality Review	LL 6-1979	1979	Village of Lancaster
Lancaster Village	Flood Damage Prevention Ordinance	LL 7-2019	6/7/2019	Superintendent of Public Works
Lancaster Village	Sewers	LL 3-2018	2018	Village of Lancaster
Lancaster Village	Stormwater Management	LL 14-2007	2007	Village of Lancaster
Lancaster Village	Subdivision of Land	N/A	1965	Village of Lancaster
Lancaster Village	Town of Lancaster, Village of Lancaster, Village of Depew: A Comprehensive Plan…A Common Future February 2000	N/A	2/2000	Town of Lancaster
Lancaster Village	Zoning	LL 18-1976	1976	Village of Lancaster
Marilla Town	Buildings, Unsafe	LL 5-2002	2002	Town of Marilla
Marilla Town	Comprehensive Plan Town of Marilla Erie County, New York	N/A	8/13/1998	Town of Marilla
Marilla Town	Flood Damage Prevention Ordinance	LL 4-2019	6/7/2019	The Code Enforcement Officer
Marilla Town	Subdivision of Land	LL 1-1997	1997	Town of Marilla
Marilla Town	Zoning	LL 1-1999	1999	Town of Marilla
Newstead Town	Buildings, Unsafe	LL 4-2002	2002	Town of Newstead
Newstead Town	Construction Codes, Uniform	LL 3-2006	2006	Town of Newstead
Newstead Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	The Code Enforcement Officer
Newstead Town	Stormwater Management and Erosion Control	LL 2-1996	1996	Town of Newstead
Newstead Town	Subdivision of Land	LL 2-2008	2008	Town of Newstead
Newstead Town	Town of Newstead and Village of Akron Combined Comprehensive Plan	N/A	2001	Village Board
Newstead Town	Town of Newstead and Village of Akron Joint Comprehensive Plan Update	N/A	2018	Akron Village Board
Newstead Town	Zoning	LL 2-1988	1988	Town of Newstead
North Collins Town	Buildings, Unsafe	LL 1-2002	2002	Town of North Collins
North Collins Town	Site Plan Review	LL 2-1991	1991	Town of North Collins
North Collins Town	Subdivision of Land	LL 1-1977	1977	Town of North Collins
North Collins Town	Town of North Collins 2010 Comprehensive Plan	N/A	12/11/1996	Town of North Collins
North Collins Town	Zoning	N/A	1970	Town of North Collins

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
North Collins Village	Building Construction	LL 2-1988	1988	Village of North Collins
North Collins Village	Housing Standards	LL 2-1988	1988	Village of North Collins
North Collins Village	Subdivision of Land	LL 2-1988	1988	Village of North Collins
North Collins Village	Village of North Collins Comprehensive Plan Update	N/A	12/2017	Village of North Collins
North Collins Village	Zoning	LL 2-1988	1988	Village of North Collins
Orchard Park Town	Building Construction	LL 7-2007	2007	Town of Orchard Park
Orchard Park Town	Flood Damage Prevention Ordinance	LL 3-2019	6/7/2019	Orchard Park Town Building Inspector
Orchard Park Town	Orchard Park Economic Development Committee Strategic Plan	N/A	5/2008	Orchard Park Economic Development Committee
Orchard Park Town	Stormwater Management and Erosion and Sediment Control	LL 3-2007	2007	Town of Orchard Park
Orchard Park Town	Storm Sewers	LL 4-2007	2007	Town of Orchard Park
Orchard Park Town	Subdivision of Land	N/A	1970	Town of Orchard Park
Orchard Park Town	Town of Orchard Park Comprehensive Plan	N/A	9/19/2007	Town of Orchard Park
Orchard Park Town	Zoning	N/A	1985	Town of Orchard Park
Orchard Park Village	Building Code Administration and Enforcement	LL 2-2010	2010	Village of Orchard Park
Orchard Park Village	Environmental Quality Review	LL 1-1979	1979	Village of Orchard Park
Orchard Park Village	Flood Damage Prevention Ordinance	LL 5-2019	6/7/2019	The Village Code Enforcement Officer
Orchard Park Village	Stormwater Management and Erosion and Sediment Control	LL 1-2008	2008	Village of Orchard Park
Orchard Park Village	Stormwater Management and Erosion and Sediment Control	LL 1-2008	2008	Village of Orchard Park
Orchard Park Village	Storm Sewers	LL 2-2008	2008	Village of Orchard Park
Orchard Park Village	Zoning	LL 12-1979	1979	Village of Orchard Park
Sardinia Town	Construction Codes, Uniform	LL 2-2006	2006	Town of Sardinia
Sardinia Town	Flood Damage Prevention Ordinance	LL 1-2019	6/7/2019	Code Enforcement
Sardinia Town	Town of Sardinia Erie County, New York Comprehensive Plan	N/A	12/2003	Town of Sardinia
Sardinia Town	Zoning	LL 1-2005	2005	Town of Sardinia
Sloan Village	Construction Codes, uniform	LL 4-2007	2007	Village of Sloan
Sloan Village	Sewers	LL 3-2007	2007	Village of Sloan
Sloan Village	Stormwater Management	LL 2-2007	2007	Village of Sloan
Sloan Village	Zoning	N/A	1958	Village of Sloan
Springville Village	Village of Springville Comprehensive Plan	N/A	2014	Village of Springville
Springville Village	Building Construction and Fire Prevention	LL 6-2006	2006	Village of Springville
Springville Village	Flood Damage Prevention Ordinance	LL 3-2019	6/7/2019	The Code Enforcement Officer
Springville Village	Springville Commercial Revitalization Report	N/A	2018	Village of Springville
Springville Village	Subdivision of Land	LL 6-2007	2007	Village of Springville
Springville Village	Wellhead Protection Overlay District	LL 1-2002	2002	Village of Springville
Springville Village	Zoning	N/A	1979	Village of Springville
Tonawanda C	Flood Damage Prevention Ordinance	L.L. No. 3-2008	6/7/2019	Building Inspector

Attachment: 37-Appendix-I-Plan-Review-Matrix-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Jurisdictional Applicability	Existing plan, program, or technical documents	Citation	Date of Adoption	Responsible Party
Tonawanda City	Buildings and Building Regulations	LL 1-2008	2008	City of Tonawanda
Tonawanda City	City of Tonawanda Comprehensive Plan	N/A	7/2002	City of Tonawanda
Tonawanda City	Stormwater Management	N/A	2008	City of Tonawanda
Tonawanda City	Subdivision of Land	N/A	1989	City of Tonawanda
Tonawanda City	Zoning	N/A	1997	City of Tonawanda
Tonawanda T	Flood Damage Prevention Ordinance	LL No. 1-2019	6/7/2019	Town Engineer
Tonawanda Town	Building Code Administration	LL 2-2007	2007	Town of Tonawanda
Tonawanda Town	Environmental Quality Review	LL 3-1989	1989	Town of Tonawanda
Tonawanda Town	Old Town Neighborhood Plan	N/A	11/2009	Town of Tonawanda
Tonawanda Town	Sewers	LL 2-2000	2000	Town of Tonawanda
Tonawanda Town	Stormwater Management	LL 9-2007	2007	Town of Tonawanda
Tonawanda Town	Subdivision of Land	LL 7-1996	1996	Town of Tonawanda
Tonawanda Town	Town of Tonawanda Comprehensive Plan	N/A	12/2005	Town of Tonawanda
Tonawanda Town	Town of Tonawanda Local Waterfront Revitalization Program Amendment	N/A	2008	Town of Tonawanda
Tonawanda Town	Zoning	LL 4-1982	1982	Town of Tonawanda
Wales T	Flood Damage Prevention Ordinance	L.L. No. 2-2019	6/7/2019	Code Enforcement Officer
Wales Town	Building Construction	LL 1-1993	1993	Town of Wales
Wales Town	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora	N/A	2012	Village of East Aurora
Wales Town	Subdivision of Land	N/A	1971	Town of Wales
Wales Town	Zoning	LL 1-1993	1993	Town of Wales
West Seneca T	Flood Damage Prevention Ordinance	L.L. No. 2-2019	6/7/2019	Town Engineer
West Seneca Town	Building code Administration and Enforcement	L.L. No. 3-2007	2007	Town of West Seneca
West Seneca Town	Site Plan Review	L.L. No. 4-2007	2007	Town of West Seneca
West Seneca Town	Stormwater Management and Erosion and Sediment Control	L.L. No. 8-2007	2007	Town of West Seneca
West Seneca Town	Town of West Seneca Comprehensive Plan	N/A	10/2006	West Seneca Town Board
West Seneca Town	Town of West Seneca Disaster Plan	N/A	2017	Town of West Seneca
West Seneca Town	Zoning	N/A	1963	Town of West Seneca
Williamsville V	Flood Damage Prevention Ordinance	L.L. No. 2-2019	6/7/2019	Code Enforcement Enforcer
Williamsville Village	Fire Prevention and Building Code Administration	L.L. No. 5-2006	2006	Village of Williamsville
Williamsville Village	Sewer Use	L.L. No. 3-2003	2003	Village of Williamsville
Williamsville Village	Village of Williamsville Community Plan & Draft Generic Environmental Impact Statement	N/A	5/26/2015	Williamsville Board of Trustees
Williamsville Village	Zoning	L.L. No. 3-2011	2011	Village of Williamsville

Attachment: 38-Volume-II-Cover-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Mitigation Plan

Erie County, New York

September 2021

Volume II

Prepared by:
Tetra Tech, Inc.
2000 Linglestown Road, Suite 203 | Harrisburg, PA 17110

SECTION 8. PLANNING PARTNERSHIP

This section describes the Erie County's Hazard Mitigation Plan (HMP) Planning Partnership, its responsibilities throughout the planning process, and the jurisdictional annexes developed as a result of the plan update efforts.

8.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

> *"Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan" [Section 201.6a(4)]*

For the Erie County HMP, a Planning Partnership was formed to leverage resources and to meet requirements for the federal Disaster Mitigation Action of 2000 (DMA) for as many eligible governments as possible. Members of the Planning Partnership consisted of representatives from each jurisdiction. The DMA defines a local government as follows:

Members of the planning partnership have the expertise to develop the plan and have their jurisdiction's authority to implement the mitigation strategy developed during the planning process. The planning partnership is responsible for developing and reviewing draft sections of the plan, creating the mitigation strategy for their jurisdiction, and adopting the final plan.

> *Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.*

Each participating planning partner has prepared a jurisdictional annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

8.2 INITIAL SOLICITATION AND LETTERS OF INTENT

Erie County solicited the participation of all municipalities in the county at the commencement of this project. All municipalities interested signed a Letter of Intent and/or a resolution committing their participation and resources to the development of the Erie County HMP (Appendix B). Table 8-1 lists the jurisdictions that elected to participate in the update process and have met the minimum requirements of participation as established by the county and the Steering Committee. Erie County and the municipalities indicated in Table 8-1 participated in the HMP update.

Table 8-1. Participating Jurisdictions in Erie County

Jurisdictions		
Erie County	Concord, Town of	Marilla, Town of
Erie County Water Authority	Depew, Village of	Newstead, Town of
Akron, Village of	East Aurora, Village of	North Collins, Town of
Alden, Town of	Eden, Town of	North Collins, Village of
Alden, Village of	Elma, Town of	Orchard Park, Town
Amherst, Town of	Evans, Town of	Orchard Park, Village of

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Jurisdictions		
Angola, Village of	Farnham, Village of	Sardinia, Town of
Aurora, Town of	Gowanda, Village of	Sloan, Village of
Blasdell, Village of	Grand Island, Town of	Springville, Village of
Boston, Town of	Hamburg, Town of	Tonawanda, City of
Brant, Town of	Hamburg, Village of	Tonawanda, Town of
Buffalo, City of	Holland, Town of	Wales, Town of
Cheektowaga, Town of	Kenmore, Village of	West Seneca, Town of
Clarence, Town of	Lackawanna, City of	Williamsville, Town of
Colden, Town of	Lancaster, Town of	
Collins, Town of	Lancaster, Village of	

8.2.1 Planning Partner Expectations

The Steering Committee developed the following list of planning partner expectations, which were confirmed at the kick-off meeting held on November 2, 2020 (see Appendix C [Meeting Documentation] for details):

- Complete administrative tasks:
  - Complete a letter of intent to participate and return to the Erie County Department of Homeland Security and Emergency Services.
  - Designate points of contact.
- Provide representation at Planning Partnership meetings.
- Provide information about jurisdictional assets (critical facilities, plans/ordinances, hazard events/damages, new development, etc.) as requested.
- Support public outreach efforts within the jurisdictions, including posting of notices and plan links on websites and local media sources, advertising and supporting public meetings, and supporting outreach to National Flood Insurance Program (NFIP) repetitive loss and severe repetitive loss property owners, where applicable.
- Solicit and encourage the participation of regional agencies, a range of stakeholders, and citizens in the HMP development process.
- Assist with the identification of stakeholders within the jurisdiction that should be informed and potentially involved with the planning process.
- Prepare and submit a jurisdictional annex:
  - Attend mitigation workshop.
  - Perform a capability assessment.
  - Review the risk assessment.
  - Involve local NFIP Floodplain Administrator in the planning process and have them complete the NFIP portion of the annex.
  - Review the 201 mitigation strategies and provide a status of each.
  - Identify jurisdiction-specific mitigation strategies to address each of the natural hazards posing a risk to the jurisdiction.
- Review draft plan sections when requested and provide comments and input as appropriate.
- Ensure the HMP update meets the requirements of the DMA 2000 and FEMA and New York State Division of Homeland Security and Emergency Services (NYS DHSES) guidance.
- Adopt the plan by resolution of local governing body after FEMA conditional approval.
- Provide information regarding progress on identified initiatives as requested by the County Hazard Mitigation Planning Coordinator.
- Participate, as able, in additional opportunities:
  - Attend municipal support meetings.

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Participate in and advertise the public review and comment period prior to adoption.

By adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume I. As described in Volume I, Section 7 (Plan Maintenance), it is intended that the Planning Partnership remain active beyond the regulatory update to support plan maintenance. Regarding the composition of the Steering Committee and Planning Partnership, it is recognized that individual commitments change over time, and it shall be the responsibility of each jurisdiction and its representatives to inform the HMP Coordinator of any changes in representation.

8.2.2 Jurisdictional Annex Preparation Process

As stated in the 2017 New York State Hazard Mitigation Planning Standards, jurisdictional annexes provide a unique, stand-alone guide to mitigation planning for each jurisdiction. The Erie County HMP Update is organized so that there is an annex for Erie County and for every jurisdiction within the county's borders. Section 9 (Jurisdictional Annexes) includes an annex for each jurisdiction in Erie County, including those that did not fully participate.

During the Erie County HMP planning process, the nation, the State of New York, and Erie County were facing the COVID-19 pandemic. The COVID-19 pandemic was declared a major disaster on March 20, 2020 (DR-4480). The Governor issued a stay-at-home Executive Order beginning March 22, 2020, which remained in effect the duration of the planning process. With the stay-at-home orders in place, all meetings during the planning process were held virtually.

Annex Development

In order to facilitate update of the County and Jurisdictional Annexes, data from the 2015 Erie County HMP annexes was transferred to the new annex format, which was developed to meet federal and state criteria. Clear instructions were provided to the county and municipality. These instructions provided a basis to address the following:

- Document changes in capabilities and vulnerabilities.
- Provide a current status of the 2015 HMP mitigation strategy.
- Develop a new mitigation strategy to address identified issues and to increase community resiliency.

The county invited all municipalities to participate in a municipal kick-off meeting held on November 18 and 19, 2020, to provide an overview of the planning process. Subsequently, each partner was asked to participate in one of six municipal informational meetings held in January and February 2021, during which key elements of the worksheets were discussed and subsequently completed by the appropriate jurisdictional personnel for each worksheet. The worksheets were collected, and the information was incorporated into each jurisdictional annex. In the event additional information was needed, the jurisdictional point of contact was contacted to provide more input into their annex.

A mitigation workshop was held on June 9, 2021, to provide an overview of developing a strong mitigation strategy. In preparation for this workshop, the consultant provided a consolidated list of problem areas/vulnerabilities identified during the planning process and feedback from the citizen survey to support the development of relevant projects to form the mitigation strategy.

Municipal Support Meetings

In addition to the municipal kick-off meeting, municipal support meetings were held on January 21, 22, 25, 26, and February 2, 2021. At these support meetings, the consultant worked with the Planning Partnership members to discuss the needs for their jurisdictional annexes. This included but was not limited to the following:

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Major incidents and their impacts
- Problem areas
- Flooding concerns
- Projects completed since the last HMP
- Questions on worksheets
    - Evaluation of Identified Hazards of Concern
    - Capability Assessment and Integration
    - NFIP Floodplain Administrator Questionnaire
    - Mitigation Action Progress
    - New Development and Building Permits
    - Shelters, Evacuation Routes, Temporary Housing, and Long-Term Housing
- Outreach conducted by jurisdictions

Hazard Ranking Exercise

The presentation of the risk assessment and risk ranking for each jurisdiction was done on May 19, 2021. At this meeting, the consultant presented the overall risk assessment for the hazards of concern. In addition, each planning partner was asked to review the ranked risk specific for its jurisdiction. Refer to Section 5.3 (Hazard Ranking) for the methodology of the hazard ranking process. The calculated ranking was presented to each jurisdiction, and they were asked to review the ranking and revise based on history of events, probability of occurrence, and the potential impact on people, property, and the economy. The objectives of this exercise were to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as "high" for each jurisdiction as a result of this exercise were considered to be priorities for identifying appropriate mitigation actions, although jurisdictions also identified actions to mitigate "medium" or "low" ranked hazards as appropriate.

Mitigation Strategy Workshop

Two mitigation strategy workshops were conducted the week of June 9, 2021, for all participating jurisdictions to support the development of focused problem statements based on the impacts of natural hazards in the county and their communities. These problem statements are intended to provide a detailed description of the problem area, including its impacts to the municipality/jurisdiction, past damages, loss of service, etc. An effort was made to include the street address of the property/project location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing conditions (topography, terrain, hydrology) of the site. These problem statements form a bridge between the hazard risk assessment, which quantifies impacts to each community with the development of actionable mitigation strategies. In total, two workshops were held for Erie County's municipalities. The nearly 100% participation of the planning partners reflects the excellent outreach and dedication of the planning team. The county and the mitigation consultant team worked with each jurisdiction to identify clear, implementable mitigation actions as well as to further support the completion of the jurisdictional annexes. The NYS DHSES Action Worksheet template and instructions are provided in Appendix J (NYS DHSES Planning Standards).

Jurisdictional Annexes

While the jurisdictional annex format is designed to document and ensure local compliance with the DMA 2000 regulations, its greater purpose and function includes:

- Providing a locally relevant synthesis of the overall mitigation plan that can be readily presented, distributed, and maintained;

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- Facilitating local understanding of the community's risk to natural hazards;
- Facilitating local understanding of the community's capabilities to manage natural hazard risk, including opportunities to improve those capabilities;
- Facilitating local understanding of the efforts the community has taken, and plans to take, to reduce their natural hazard risk;
- Facilitating the implementation of mitigation strategies, including the development of grant applications;
- Providing a framework by which the community can continue to capture relevant data and information for future plan updates.

Each jurisdiction's annex is intended to be a *living document* and will continue to be improved as resources permit. As such, its design is intended to promote and accommodate continued efforts to maintain the annex to be current and to improve the effectiveness of the annex as the key tool, reference, and guiding document by which the jurisdiction will implement hazard mitigation locally. The following provides a description of the various elements of the jurisdictional annex.

Section 9.X.1: Hazard Mitigation Planning Team: Identifies the hazard mitigation planning primary and alternate(s) contacts and Floodplain Administrators as identified by the jurisdiction. Provides details on which departments were involved throughout the development of the jurisdictional annex. Plans developed with the participation of the widest range of departments, stakeholders, and persons familiar with the jurisdiction should be involved in the development of the jurisdictional annexes. Further detail is provided in Section 3 (Planning Process), Section 9 (Jurisdictional Annexes), and Appendix B (Participation Matrix).

Section 9.X.2: Municipal Profile: Provides an overview and profile of the jurisdiction, including identification of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.3: Jurisdictional Capability Assessment and Integration: Provides an inventory and evaluation of the jurisdiction's tools, mechanisms, and resources available to support hazard mitigation and natural hazard risk reduction. Within the municipal annexes, tables provide an inventory of the municipality's planning, regulatory, administrative, technical, and fiscal capabilities. Further, another table identifies the municipality's level of participation in state and federal programs designed to promote and incentivize local risk reduction efforts.

Section 9.X.4: National Flood Insurance Program (NFIP) Compliance: Summarizes jurisdiction-specific information related to managing and regulating the regulatory floodplain, including current and future compliance with the NFIP.

Section 9.X.5: Evacuation, Sheltering, Temporary Housing, and Permanent Housing: To meet the NYS DHSES requirement, jurisdictions provided evacuation routes, sheltering measures, and potential locations for temporary and permanent housing.

Section 9.X.6: Growth/Development Trends: Summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Section 9.X.7: Jurisdictional Risk Assessment: Provides information regarding each plan participant's vulnerability to the identified hazards. Full data and information on the hazards of concern, the methodology used to develop the vulnerability assessments, and the results of those assessments that serve as the basis of these local risk rankings may be found in Section 5.

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

- ***Hazard Area Extent and Location Map:*** Each annex includes a map (or series of maps) illustrating identified hazard zones and critical facilities. Further, these maps show areas of known or anticipated future development, as available and provided by the jurisdiction.
- ***Hazard Event History:*** Identifies hazard events that have caused significant impacts within the jurisdiction, including a summary characterization of those impacts identified by the jurisdiction.
- ***Hazard Ranking and Vulnerabilities:*** The Erie County HMP identifies and characterizes the broad range of hazards that pose risk to the entire planning area; however, each jurisdiction has differing degrees of risk exposure and vulnerability aside from the whole. The local risk ranking serves to identify each jurisdiction's degree of risk to each hazard as it pertains to them, supporting the appropriate selection and prioritization of initiatives that will reduce the highest levels of risk for each community.
- ***Critical Facilities:*** Identifies potential flood losses to critical facilities in the jurisdiction based on the flood vulnerability assessment process presented in Section 5.
- ***Identified Issues:*** Presents other specific hazard vulnerabilities as identified by the jurisdiction.

Section 9.X.8: Mitigation Strategy and Prioritization: Discusses and provides the status of past mitigation actions and status and describes proposed hazard mitigation initiatives and prioritization.

- ***Past Mitigation Initiative Status:*** Where applicable, a review of progress on the jurisdiction's prior mitigation strategy is presented, identifying the disposition of each prior action, project, or initiative in the jurisdiction's updated mitigation strategy. Other completed or ongoing mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- ***Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy:*** Other completed or ongoing mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- ***Proposed Hazard Mitigation Initiatives for the Plan Update:*** Table 9.X-11 presents the jurisdiction's updated mitigation strategy. As indicated, applicable mitigation actions, projects, and initiatives are further documented on an Action Worksheet, which provides details on the project identification, evaluation, prioritization, and implementation process. Table 9.X-12 provides a summary of the local mitigation strategy prioritization process discussed in Section 6.

Section 9.X.9: Action Worksheets: Provides each municipality with a more developed starting point for project implementation should funding become available. Following NYS DHSES HMP Standards Guide, each municipality developed a minimum of two action worksheets. Workshops and additional meetings (in person, by email, or by teleconference) to complete the jurisdictional annexes were held with the Steering and Planning Committees throughout the planning process. In summary, all participating communities and the county completed the planning partner expectations and annex preparation process. Details regarding these meetings are described further in Sections 3 (Planning Process) and 6 (Mitigation Strategy). Completed jurisdictional annexes are provided in Section 9 (Jurisdictional Annexes).

8.2.3 Coverage Under the Plan

Of the 44 planning partners, all fully met the participation requirements specified by the Steering Committee. All planning partners are included in this volume. Those that did not meet the requirements will not be able to seek FEMA or NYS DHSES approval at the time of plan submittal nor will they be eligible to obtain FEMA grant funding.

Table 8-2 lists the status of each jurisdiction as well as their status in this plan update. It is noted that participation in scheduled Planning Partnership meetings provides only a partial indication of the level of participation of each jurisdiction. Throughout the bulk of the process, all municipalities' resources were strained due to the Covid-19 pandemic. Due to this, the consultant provided support in the manner of numerous calls as well as virtual

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

meetings to ensure each planning partner seeking approval for the HMP met the threshold for participation. Appendix B (Participation Matrix) and Appendix C (Meeting Documentation) provide details on participation and meeting attendance.

Table 8-2. Jurisdictional Status

Municipality	Letter of Intent to Participate	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
Erie County	N/A	X	X	X	X
Erie County Water Authority	X	X	X	X	X
Akron, Village of	X	X	X	X	X
Alden, Town of	X	X	X	X	X
Alden, Village of	X	X	X	X	X
Amherst, Town of	X	X	X	X	X
Angola, Village of	X	X	X	X	X
Aurora, Town of	X	X	X	X	X
Blasdell, Village of	X	X	X	X	X
Boston, Town of	X	X	X	X	X
Brant, Town of	X	X	X	X	X
Buffalo, City of	X	X	X	X	X
Cheektowaga, Town of	X	X	X	X	X
Clarence, Town of	X	X	X	X	X
Colden, Town of	X	X	X	X	X
Collins, Town of	X	X	X	X	X
Concord, Town of	X	X	X	X	X
Depew, Village of	X	X	X	X	X
East Aurora, Village of	X	X	X	X	X
Eden, Town of	X	X	X	X	X
Elma, Town of	X	X	X	X	X
Evans, Town of	X	X	X	X	X
Farnham, Village of	X	X	X	X	X
Grand Island Town, of	X	X	X	X	X
Gowanda, Village of	X	X	X	X	X
Hamburg, Town of	X	X	X	X	X
Hamburg, Village of	X	X	X	X	X
Holland, Town of	X	X	X	X	X
Kenmore, Village of	X		X	X	X
Lackawanna, City of	X	X	X	X	X
Lancaster, Town of	X	X	X	X	X
Lancaster, Village of	X	X	X	X	X
Marilla, Town of	X		X	X	X
Newstead, Town of	X	X	X	X	X

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

Municipality	Letter of Intent to Participate	Attended Workshops and/or Meetings and Project Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
North Collins, Town of	X	X	X	X	X
North Collins, Village of	X	X	X	X	X
Orchard Park, Town	X	X	X	X	X
Orchard Park, Village of	X	X	X	X	X
Sardinia, Town of	X	X	X	X	X
Sloan, Village of	X	X	X	X	X
Springville, Village of	X	X	X	X	X
Tonawanda, City of	X	X	X	X	X
Tonawanda, Town of	X	X	X	X	X
Wales, Town of	X	X		X	X
West Seneca, Town of	X	X	X	X	X
Williamsville,Village of	X	X	X	X	X

Attachment: 39-Section-8-Planning-Partnership-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation

9.1 Erie County

This section presents the jurisdictional annex for Erie County. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the county participated in the planning process; an assessment of the county's risk and vulnerability; the different capabilities utilized in the county; and an action plan that will be implemented to achieve a more resilient community.

9.1.1 Hazard Mitigation Planning Team

Erie County followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many county departments, including Public Works, Homeland Security and Emergency Management and Environment and Planning. The Department of Homeland Security and Emergency Services represented the county on the Erie County Hazard Mitigation Plan Planning Partnership and Steering Committee and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gregory Butcher, Deputy Commissioner Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Gregory.butcher@erie.gov	Name/Title: Melissa Calhoun, Special Assistant Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Melissa.calhoun@erie.gov
Additional Contributors	
Name/Title: Daniel Castle, Deputy Commissioner, Erie County Department of Environment & Planning **Method of Participation:** Participated in several meetings and provided written input	
Name/Title: Joe Fiegl, Deputy Commissioner, Erie County Division of Sewerage Management **Method of Participation:** Participated in a meeting and provided input in writing and on the phone	
Name/Title: Jon DePlanche, Senior Engineer, County Highway Department **Method of Participation:** Participated in a meeting and provided input in writing and on the phone	
Name/Title: Joanna Panasiewicz **Method of Participation:** Participated in meetings and completed capabilities information and information about identified hazards and risks	

9.1.2 Jurisdiction Profile

Please refer to Section 4, Volume I of this HMP for details on Erie County's population, location, climate, history, growth, and development.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.1.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. The jurisdictional annexes for each municipality summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. The Erie County Department of Environment & Planning leads the county's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county. The department also provides technical assistance to municipal boards, such as planning and zoning boards, as well as to municipalities updating their master plans or zoning.

9.1.4 Capability Assessment and Integration

Erie County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

Areas where mitigation is currently integrated are summarized in this Capability Assessment. Erie County identified specific integration activities that will be incorporated into procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Erie County. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.1-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	No	Yes	Regulated at Local and State Levels	State and Local	Local Code or Building Departments
Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels.					
Zoning Code	Yes	No	Regulated at local level	Local	Zoning Board of Appeals or Adjustment
Comment: Adopted and enforced at the local level					
Subdivision Ordinance	No	No	Regulated at local level	Local	Planning or Zoning Boards

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Adopted and enforced at the local level					
Stormwater Management Ordinance	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations	Local	Erie County Department of Environment and Planning /DSM (manages City of Lackawanna's stormwater management system)
Comment Statewide regulation related to stormwater management standards.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	Regulated at local level	Local	Local Planning Boards
Comment: Regulated at the local level and is pursuant to their local codes.					
Site Plan Review	Yes	No	NYS General Municipal Law 239 L & M	State	Erie County Department of Environment and Planning and Erie County Department of Public Works
Comment: New York State General Municipal Law Section 239 requires municipalities to refer certain projects and/or actions to Erie County for review. The County's Department of Environment and Planning reviews and makes a recommendation or provides comments on the project to the local board within 30 days.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: Regulated by NYS regulations per New York State Environmental Conservation Law; Department of Environmental Conservation.					
Flood Damage Prevention Ordinance	No	Yes	Regulated at local level	Local	Municipal floodplain administrator
Comment: Regulated and enforced at the local level					
Municipal Separate Storm Sewer System (MS4)	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations	County/State	Erie County Department of Public Works
Comment: The County Department of Public Works and other county departments implement the MS4 regulations to manage storm flows safely and collaboratively.					
Emergency Management Ordinance	Yes	Yes	Erie County Charter – Article 14, Emergency Management Ordinance	County	Erie County Department of Homeland Security and Emergency Services
Comment: This article establishes the county's Department of Homeland Security and Emergency Services					
Climate Change Ordinance	No	Yes	-	-	-
Comment: New York State Climate Leadership and Community Protection Act; NYS Department of Environmental Conservation					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	LL6-2007, Green Buildings Act	Local	County Department of Public Works Erie County Department of Environment and Planning. And all local municipalities.
Comment: The Plan states that all major facility projects of Erie County shall be designed, constructed, and certified to at least the LEED silver standard. 2) Public buildings can be built and renovated using high-performance methods that save energy costs, preserve the environment, and make workers and students safer and more productive.					
Planning Documents					
Comprehensive Plan	Yes	No	Framework for Regional Growth	Erie & Niagara Counties	Erie County Department of Environment and Planning
Comment: Erie & Niagara Counties have partnered to develop the Framework for Regional Growth. As envisioned by County leaders, the Framework establishes basic policies and principles to guide the future growth and development of the Region. Specifically, the Framework provides: ▪ a vision for how we wish the region to grow and redevelop over the next 15 years. ▪ direction regarding growth and redevelopment matters to county decision-makers and other regional organizations linked to the two counties via funding, membership, or other relationships. ▪ information on the ways local governments, private sector, and non-profit actions and initiatives can reinforce the overall regional vision; and ▪ mechanisms to ensure that the goals, concepts, and recommendations of the Framework for Regional Growth are implemented in an efficient and accountable manner.					
Capital Improvement Plan	No	No	-	-	-
Comment: While the County does not have a capital improvement plan, the Department of Environment Planning plays a lead role in coordination and review of proposed capital projects. Department personnel review capital projects for consistency with the county's comprehensive plan and manage the environmental review process for capital projects. The Division of Sewerage Management has a separate asset management/capital improvement planning process for Erie County Sewer District facilities.					
Disaster Debris Management Plan	Yes	No	County Emergency Management Plan, 2018, Debris Management	-	-
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC). The CEMP is contained in three distinct, but interconnected volumes The CEMP contains information about debris management planning.					
Floodplain or Watershed Plan	Yes	No	Regional Niagara River/ Lake Erie Watershed Management Plan Phase 2 – June 2019 www.erie.gov/wmp	Erie County and regional counties	Developed by Erie County and the Lake Erie Watershed Protection Alliance and Buffalo Niagara Waterkeeper
Comment: The goal of the Watershed Management Plan is to outline a strategy to improve water quality within the Niagara River/Lake Erie watershed. Active participation and stakeholder involvement is key to developing a comprehensive and successful watershed-wide management plan. Stakeholders such as citizens, community groups, environmental organizations, businesses, agencies, and public officials will have opportunities as detailed in this plan, to shape the resulting findings and recommendations. The Plan is based upon water quality monitoring, modeling and assessments currently underway.					
Stormwater Plan	Yes	No	NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations. And County Stormwater Management Plan; November 2010	Local	Erie County Department of Environment and Planning and County Department of Public Works
Comment: The aim of the NYS State Pollution Discharge Elimination System is to protect water quality by reducing pollution.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Habitat Conservation Plan	Yes	No	Niagara River Habitat Conservation Strategy – August 2021	County	Developed by Buffalo Niagara Waterkeeper
Comment: The purpose of the Strategy is to serve as blueprints for habitat restoration and conservation in both the Niagara River watershed and Niagara River Greenway. Both efforts followed the Conservation Action Planning (CAP) process like that utilized for the Lake Ontario Watershed, the Lake Erie Watershed, and the Niagara River Watershed in Canada.					
Economic Development Plan	Yes	Yes	Erie and Niagara County Framework for Regional Growth, 2017	Regional	Counties, all municipalities
Comment: The Erie County Comprehensive Economic Development Strategy (CEDS) is an extraction and combining of the primary findings and strategic directives of several recent planning studies and reports undertaken by County and City government, economic development organizations and area institutions.					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: A Draft Plan was developed in 2003 but not adopted.					
Transportation Plan	Yes	No	New York State Transportation Improvement Plan Title 23 USC and 49 USC Chapter 53	State	County Department of Environment and Planning and Niagara Frontier Transportation Authority
Comment: The State Transportation Improvement Plan is a five-year capital plan for NYS Transportation facilities and includes certain projects in Erie County. The EC Department of Public Works collaborates with the Greater Buffalo Niagara Regional Transportation Council to develop county projects within the Transportation Improvement Program annually.					
Climate Change /Resilience/ Sustainability Plan	Yes	No	Erie County Climate Action and Sustainability Plan for internal operations, 2019	County	County Department of Environment and Planning
Comment: In addition to this plan the county is also developing a climate vulnerability assessment.					
Agriculture Plan	Yes	No	County Agricultural and Farmland Protection Plan, 2012	County	Erie County Department of Environment and Planning; Erie County Agricultural and Farmland Protection Board
Comment: The Plan sets as its key goal is to keep land in agricultural production by protecting farmland, helping a new generation to farm, and improving the viability of all farms in the County. Included in the Plan are: • an analysis of agriculture and development pressure in the County, • summaries of the various public meetings and individual interviews that were conducted as part of the process, Erie County Agricultural and Farmland Protection Plan pg 2 • summaries of other planning documents specific to agriculture that are currently being used in the County, • information about the "tools in the toolbox" that Erie County does, and can, use to support farms and protect farmland, and • a set of strategies with goals and recommended actions for implementation.					
Other	-	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Emergency Management Plan, 2017	State/ county	Erie County Department of Homeland Security and Emergency Services
Comment: Each county in New York State is required to prepare a CEMP. The purpose of this plan is to minimize the effect of disasters by (i) identifying appropriate local measures to prevent disasters, (ii) developing mechanisms to coordinate the use of local resources and manpower for service during and after disasters and the delivery of services to aid citizens and reduce human suffering resulting from a disaster, and (iii) providing for recovery and redevelopment after disasters.					

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: See "Other" for information about the county's CEPA.					
Post-Disaster Recovery Plan	Yes	No	Comprehensive Emergency Management Plan Annex 16.0	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: Post Disaster Recovery is a section of the CEMP					
Continuity of Operations Plan	Yes	No	County Continuity of Operations Plan, 2012	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: The COOP states that all emergency response activities within the county will utilize the National Incident Management System (NIMS). This plan employs a MAC structure that includes a MACC coordinator, a Planning section (situation unit / resource unit / strategic foresight unit), a Logistics section, Joint Information Center (JIC) and agency/organization representatives.					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	Yes	County Emergency Preparedness Assessment (CEPA)	State and county	Erie County Department of Homeland Security and Emergency Services
Comment: Every three years, NYS DHSES assesses the county's programs in a manner similar to how the state develops its THIRA.					

Development and Permitting Capability

The table below summarizes the capabilities of Erie County to oversee and track development.

Table 9.1-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	Buildout varies by municipality.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Erie County and their current responsibilities which contribute to hazard mitigation.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.1-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustments	No	-
Planning Department	Yes	Erie County Department of Environment and Planning leads the county's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Division of Environmental Compliance Services develops and implements programs in partnership with a variety of stakeholders to address the pressing environmental needs and concerns of the region. The Division leads and supports a variety of programs in the county, including by not limited to climate action and sustainability, invasive species, public outreach, water quality, and watershed management.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Erie County Office of Economic Development is part of the Department of Environment and Planning. They focus on business development, attraction, retention, and expansion.
Public Works/Highway Department and Weight and Measures	Yes	The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The department is divided into four divisions: Buildings and Grounds, Highways, Weights and Measures, and Fleet. The Department regularly addresses stormwater, sewer and tree trimming needs to address hazard impacts.
Construction/Building/Code Enforcement Department	No	No
Emergency Management/Public Safety Department	Yes	The Department of Homeland Security and Emergency Services is responsible for the overall planning and response coordination for emergencies in the county and ensures the county is prepared to respond to, and recover from, all natural and man-made emergencies for our citizens, employers, and visitors.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	ECDHSES manages the warning system, to include NY-Alert, Ready Erie app, IPAWS, NAWAS
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The Highway Division is responsible for the engineering and inspection of over a thousand miles of roadways. The Division is currently working on several projects including culvert repairs and replacements, roadway extensions, roadway stabilizations and bridge replacements.
Mutual aid agreements	Yes	The Department of Homeland Security and Emergency Services maintains a mutual aid plan and an Emergency Managers Mutual Aid structure.
Other	No	-
Technical/Staffing Capability		

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	Yes	The County Department of Environment and Planning leads the County's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Division of Buildings and Grounds – designs, constructs, maintains, and manages county-owned facilities. The Division of Sewerage Management designs, constructs, maintains, and manages Erie County Sewer District facilities. Division of Highways designs, constructs and maintains county owned transportation assets.
Planners or engineers with an understanding of natural hazards	Yes	County Department of Public Works and County Department of Environment and Planning
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	County Department of Environment and Planning
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	The county's Emergency Manager is the Deputy Commissioner of Preparedness and Homeland Security
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	The County Department of Environment and Planning staffs a Compliance Specialist, a Hazardous Waste Coordinator, a Sustainability Coordinator, and a Watershed Protection Coordinator

Fiscal Capability

The table below summarizes financial resources available to Erie County.

Table 9.1-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes (sewer)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	EPA Great Lakes Restoration Grants, NYS CFA grants for infrastructure, nonpoint source pollution and conservation.

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Erie County.

Table 9.1-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	The Office of GIS (EDDEP) and the Department of Information and Support Services
Hazard mitigation information available on your website	Yes	The Department of Homeland Security and Emergency Services has information about hazard mitigation and the HMP update with links to the HMP project website. The main county website has news and announcements on the main page.
Social media for hazard mitigation education and outreach	No	The county employs the following social media platforms to distribute hazard mitigation related information; Facebook, Linked In, Instagram, Twitter and YouTube
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Erie County Environmental Management Council, Lake Erie Watershed Protection Alliance, County Agricultural and Farmland Protection Board, WNY Stormwater Coalition, Solid Waste Management Boards
Other programs already in place that could be used to communicate hazard-related information	Yes	Community Climate Change Task Force, Erie County Hazardous Waste Program, Food Policy Council of Buffalo and Erie County.
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to Erie County.

Table 9.1-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	Bronze	9/26/2019
Storm Ready Certification	Yes	-	7-13-2016
Fire wise Communities classification	No	-	-
Other	No	-	-

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.1-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.1.5 National Flood Insurance Program (NFIP) Compliance

Management and regulation of the regulatory floodplains are done at the local level. Refer to the individual jurisdictional annexes for details on the NFIP for each municipality.

9.1.6 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Erie County has an Evacuation Annex 2019 that directs evacuation procedures countywide and provides guidance on operations and responsibilities for evacuations when necessary.

Sheltering

Erie County has identified the following designated emergency shelters within the county.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.1-9. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The County will collaborate with municipalities to identify potential emergency shelters, per Proposed Action # 009							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. Erie County has identified the following sites suitable for placing temporary housing units.

Table 9.1-10. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 010					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. Erie County has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.1-11. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 009					

9.1.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for Erie County's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which Erie County has significant exposure. The maps also show the location of potential new development, where available. These maps are included in the respective Hazard Profiles.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The County's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. For details of hazard events that impacted the County, refer to Volume I, Section 5 of this plan.

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes Erie County's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Erie County. Erie County has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the county indicated agreement with the results as shown below.

Table 9.1-12. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.1-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Springville Dam	County owned dam	Yes	Yes	2022-Erie County-002

Source: XXXX

Identified Issues

After review of Erie County's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, Erie County has identified the following vulnerabilities within their community:

- Municipalities are not generally participating in the Community Rating System.
- The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county regularly reports to NYSDEC that the dam is serviceable.
- The Erie County Court building is vulnerable to wind damage.
- The Erie County Correctional Facility parking lots are subject to flooding.
- Coastal erosion is causing damage to lakeside structures
- Ellicott Creek is eroding streambank/road embankment and endangering road which is a main access route to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Dept.
- Parking lots at the Erie County Correctional Facility are in the floodplain and sometimes are covered with water.
- Several streams throughout the county are eroding.
- Residents living along coastal areas need more information about the hazards.
- The county is not able to identify shelters and temporary/permanent housing locations.
- There are approximately 20 pump stations that lack a backup redundant power source and backup power for cooling centers should be considered.

9.1.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.1-14. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Road repair/ culvert reconstruction – various locations County-wide	Flooding	Not Identified	DPW	Ongoing Capability	Cost		1. Discontinue 2. 3. This is a continuing item across the county and should be removed from this list. Per EC DPW
						Level of Protection		
						Damages Avoided; Evidence of Success		
2	Debris Removal from Creeks & Streams – various locations County-wide	Flooding	Not Identified	DPW	Ongoing Capability	Cost		1. Discontinue 2. 3. This is a continuing item across the county and should be removed from this list. Per EC DPW
						Level of Protection		
						Damages Avoided; Evidence of Success		
3	NOAA Storm Watcher and Storm Ready Programs	Nnatural events	Not Identified	Emergency Services	Ongoing Capability	Cost		1. Discontinue 2. 3. This is a Continuing Item with 3-year renewal Skywarn Spotter Trainings are conducted yearly
						Level of Protection		
						Damages Avoided; Evidence of Success		
4	Tree removal & trimming along various County roads to prevent power outages and road closures.	Severe storms, tornadoes, winter storms, high winds, ice storms	Not Identified	DPW	Ongoing Capability	Cost		1. Discontinue 2. 3. This is a continuing item across the county and should be removed from this list. Per EC DPW
						Level of Protection		
						Damages Avoided; Evidence of Success		
5	Replace & upgrade storm drainage system along various County roads to reduce flood risks.	Flooding	Property Damage	DPW	Ongoing Capability	Cost		1. Discontinue 2. 3. This is a continuing item across the county and should be removed from this list. Per EC DPW
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

Erie County did not identify specific mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

Erie County participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.1-15. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	-	-	X	-	-	-	-	-	X
Cyber Attack	-	-	-	X	-	-	-	-	-	X
Earthquake	-	-	-	X	-	-	-	-	-	X
Expansive Soils	-	-	-	X	-	-	-	-	-	X
Extreme Temperature	-	-	-	X	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	X	-	X
Hazardous Materials	-	-	-	X	-	-	-	-	-	X
Landslide	-	-	-	X	-	-	-	-	-	X
Pandemic	-	-	-	X	-	-	-	-	-	X
Severe Storm	-	X	-	X	-	X	X	-	-	X
Severe Winter Storm	-	X	-	X	-	X	X	-	-	X
Utility Failure	-	-	-	X	-	-	-	-	-	X
Wildfire	-	-	-	X	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.1-16 summarizes the comprehensive range of specific mitigation initiatives Erie County would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.1-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.1-16. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-001	Community Rating System	1	Flood	**Problem**: Communities are not generally participating in CRS. **Solution**: Encourage all municipalities to participate in the CRS, which will decrease flood insurance rates and protect more properties. The county will provide technical assistance to help interested jurisdictions move forward.	No	No	Within 5 years	County Emergency Management, County Department of Environment and Planning	Staff Time	Protect facilities from flooding damage	Municipal budget	High	LPR	PR
2022-Erie County-002	Protect Springville Dam to the 0.2% flood event	1	Flood	**Problem**: The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable. **Solution**: The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam.	Yes	No	1 year	County Emergency Management, Department of Public Works	TBD by feasibility assessment	Preserve dam functionality and properties downstream from damage	BRIC and High Hazard Potential Dam Program	High	LPR, SIP	PP, PR

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-003	Manage Streambank erosion and flooding	1	Flood, Severe Storm	**Problem**: Ellicott Creek eroding streambank/road embankment endangering access to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Department. **Solution**: County Public Works Department will assess the danger posed to the facilities. The DPW will then implement erosion control measures.	Yes	No	Within 1 year	County DPW	$1,200,000	Ensure continued access to these important facilities	Municipal budget	High	EAP	PR
2022-Erie County-004	Erie County Correctional Facility	1	Flood	**Problem**: Several buildings and parking lots of the prison are in the 0.2% annual chance flood area and susceptible to flood damages. **Solution**: The County Sheriff and Public Works Department will complete a study to determine mitigation options to alleviate flooding in this area. Once projects are identified, they will be implemented.	No	No	Within 3 years	County Sheriff and Public Works Department	TBD during design process	Ensure continued access to the Correctional facility	Municipal budget for study; HMGP and FMA for mitigation measures	High	LPR, SIP	PP
2022-Erie County-005	Protect Erie County Court building from wind damage	1	Severe Storm, Severe Winter Storm	**Problem**: The building's exterior cladding is vulnerable to high wind which could generate large pieces of flying debris. **Solution**: The Sheriff Department will determine and implement the optimal	No	No	Within 3 years	County Sheriff Department	TBD by engineering feasibility	Ensure continued access to the County Court	BRIC, HMGP, Municipal budget	High	SIP	PP

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				wind damage protection measures.										
2022-Erie County-006	Provide/improve backup power to pumping stations and other sewer district facilities	1	Flood	**Problem:** There are approximately 20 county operated pump stations that lack backup redundant power source, with other pumping stations and facilities with older units requiring upgrades. In the event of a power outage, the locations are at risk of not being able to provide the proper services to the county. **Solution:** Develop and prioritize a list of pump stations to receive backup power or for improvements to existing backup systems. This will include identifying the type, size, and fuel source for each generator. Once identified, the county will begin purchasing and installing the generators.	Yes	No	Within 5 years	County Division of Sewerage Management	TBD by feasibility analysis	Ensure continued service from these critical facilities	HMGP, county budget	High	SIP	PP

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Erie County-007	Coastal Resilience Outreach	2	Flood, Severe Storm, Severe Winter Storm	**Problem:** Severe weather including precipitation and wind, coupled with high lake levels have caused severe coastal erosion and flooding of structures along the Lake Erie coastline, exposing these critical facilities to failure. **Solution:** Working with NY Sea Grant, convene with municipal representatives to complete a needs assessment to assess the current understanding of coastal processes, regulations, and programs/resources and develop a Story Map resource with information on natural processes, NFIP, permitting case studies/ examples, and flood mitigation project examples.	No	No	Within 2 years	Sea Grant, County Department of Homeland Security and Emergency Services	$50,000	Improve capacity of local stakeholders to implement hazard mitigation measures along the Lake Erie coastline	Sea Grant, county budget	High	EAP	PI
2022-Erie County-008	Identify Emergency Shelters and temporary/permanent housing locations	1	All Hazards	**Problem:** Erie County does not maintain a list of identified shelters, temporary housing locations, or permanent housing locations. In the event of an emergency or disaster, the county does not have identified facilities for residents to go to. Nor do they have a buildable land inventory to relocate displaced residents or structures in the event of repetitive losses or proximity to hazard areas (i.e., WUI).	Yes	No	Within 3 years	County Department of Homeland Security and Emergency Services	Staff Time	Provide emergency shelters and temporary/permanent locations	BRIC, HMGP, municipal budget	High	LPR, SIP	ES

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The Department of Homeland Security and Emergency Services will work with the necessary departments and agencies to develop and implement a program to identify sites suitable for shelters, temporary housing, and permanent housing. This will also include identifying ways to make the sites suitable to provide these services to the county.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.1-17. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Erie County-001	Community Rating System	1	1	0	1	1	1	1	1	0	1	0	1	1	1	11	High
2022-Erie County-002	Protect Springville Dam to the 0.2% flood event	1	1	1	0	1	1	1	1	1	1	0	1	1	1	12	High
2022-Erie County-003	Manage Streambank erosion and flooding	1	1	1	1	1	1	1	1	1	0	0	1	1	1	12	High
2022-Erie County-004	Erie County Correctional Facility	1	1	1	0	1	1	0	1	1	1	1	1	0	1	11	High
2022-Erie County-005	Protect Erie County Court building from wind damage	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-Erie County-006	Provide/improve backup power to pumping stations and other sewer district facilities	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Erie County-007	Coastal Resilience Outreach	1	1	1	0	1	1	1	0	0	1	1	1	1	1	11	High
2022-Erie County-008	Identify Emergency Shelters and temporary/permanent housing locations	1	1	1	0	1	1	1	0	0	1	0	1	1	1	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.1.9 Action Worksheets

The following action worksheets have been developed by Erie County to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Erie County Action Worksheet			
Project Name:	Protect Springville Dam to the 0.2% flood event		
Project Number:	2022-Erie County- 002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Springville dam is county owned and is designated a High Hazard Potential Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable.		
Action or Project Intended for Implementation			
Description of the Solution:	The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operation of this Potential High Hazard dam
Useful Life:	50 years	**Goals Met:**	1
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	Within 1 year	**Potential Funding Sources:**	BRIC, High Hazard Potential dam
Responsible Organization:	County Emergency Management, Department of Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Remove dam	Very High	Loss of flood control services provide by the dam, including controlling intrusion from sea lamprey; infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Erie County Action Worksheet		
Project Name:	Protect Springville Dam to the 0.2% flood event	
Project Number:	2022-Erie County- 002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the High Hazard dam
Property Protection	1	Project will protect the important flood control services provided by the dam
Cost-Effectiveness	1	
Technical	0	
Political	1	
Legal	1	The county has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Erie County Action Worksheet			
Project Name:	Protect the Erie County Court House from wind damage		
Project Number:	2022-Erie County-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm		
Description of the Problem:	Original construction of the building has degrading materials has allowed water to get behind the building. The Building's cladding is vulnerable to high wind which could generate large pieces of flying debris.		
Action or Project Intended for Implementation			
Description of the Solution:	The Department of Public Works will determine and implement wind damage protection measures. The Department will then work with the Sheriff Department to ensure that protective measures are implemented.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect up to 100 mph winds	**Estimated Benefits (losses avoided):**	Ensures continuity of operations at the important county courthouse
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	BRIC, HMGP, municipal budget
Responsible Organization:	County Sheriff	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Tear down the courthouse building	Very High	Loss of important services provided at the courthouse.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Erie County Action Worksheet		
Project Name:	Protect the Erie County Court House from wind damage	
Project Number:	2022-Erie County-005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the courthouse
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The county has legal authority to complete the project.
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm
Timeline	1	3 year
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 40-Section-9.1-Erie-County-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

9.2 Erie County Water Authority

This section presents the jurisdictional annex for the Erie County Water Authority. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Water Authority participated in the planning process; an assessment of the Erie County Water Authority's risk and vulnerability; the different capabilities utilized in the Water Authority; and an action plan that will be implemented to achieve more resilient operations.

9.2.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Erie County Water Authority's hazard mitigation plan primary and alternate points of contact. The Erie County Water Authority followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months from the Chief Security Officer and the Chief Operating Officer. The Chief Security Officer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.2-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Matt Barrett, Chief Security Officer Address: 295 Main Street Buffalo, NY 14203 Phone Number: 716-685-8562 Email: mbarrett@ecwa.org	Name/Title: Russell Stoll, Chief Operating Officer Address: 295 Main Street Buffalo, NY 14203 Phone Number: 716-685-8276 Email: rstoll@ecwa.org

9.2.2 Water Authority Jurisdictional Profile

The Erie County Water Authority (ECWA) is a public benefit authority formed in 1949 to provide a potable water supply to the citizens of Erie County. The ECWA finances, contracts, constructs, and operates a water supply and distribution system for residents of Erie County. The Authority began operating in 1953. The Erie County Water Authority is responsible for the treatment and distribution of 25 billion gallons of safe, clean, potable water annually to more than 540,000 residential, commercial, and industrial customers in 36 municipalities located within Erie County and parts of Chautauqua, Cattaraugus, western Wyoming and western Genesee counties, as well as the territories of the Seneca Nation of Indians (Erie County Water Authority 2021). The Authority employs 40 staff in its headquarters and 190 staff throughout the districts and provides 24/7 operations.

ECWA operates two treatment plants and many pump stations and tank sites throughout Erie County. The water is distributed through 3,600 miles of pipe. ECWA both owns and leases sites throughout Erie County. The Authority owns and operates two treatment plants and many pump stations and tank sites, none of which are in a floodplain. Mitigation projects have included substantial security upgrades at many different locations. Seven

county sewer districts outside of the City of Buffalo serve most, but not all, the suburban area of Erie County. The Authority's Sewer Division is responsible for administering, operating, improving, and maintaining infrastructure within the sewer districts. The Sewer Division operates 6 treatment plants, 100 pumping stations and 1,100 miles of sewer. The sewer division coordinates with Emergency Services when they have events like prolonged outages.

ECWA prioritizes continuous service and has mitigated against power outages by installing backup power at the larger pumping stations. All such stations are equipped with remote telemetry that will alert ECWA to hook up a portable generator. All the Authority's sewer pumping stations are listed as priority facilities with utility providers National Grid and NYSEG. Other local towns/villages, including Buffalo, provide their own water and sewer systems (Erie County Water Authority 2021).

9.2.3 Jurisdictional Capability Assessment and Integration

The Erie County Water Authority performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.2.3). The Erie County Water Authority's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Erie County Water Authority. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.2-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Local municipalities are responsible for adopting and enforcing codes and regulations that guide development, construction, etc. within their municipal boundaries					
Planning Documents					
Comprehensive Plan	Yes	No	Erie County Water Authority Comprehensive Strategic Plan, 2019	County	Erie County Water Authority

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The ECWA Comprehensive Strategic Plan establishes a strategy to support ECWA's infrastructure to reliably meet the service needs of our present and future customers in a cost-effective manner. Maintain and constantly re-examine our vulnerability assessments and emergency response plans.6) Develop a plan and practice measures needed to operate key components of the water treatment and distribution systems in the event of the loss of automated monitoring and control capabilities.7) Review cyber security awareness and plan for operation in the event of corruption/attack of key IT systems.					
Capital Improvement Plan	No	No	-	-	-
Comment: N/A					
Disaster Debris Management Plan	No	No	-	-	-
Comment: N/A					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: N/A					
Stormwater Plan	No	No	-	-	-
Comment: N/A					
Open Space Plan	No	No	-	-	-
Comment: N/A					
Urban Water Management Plan	No	No	-	-	-
Comment: N/A					
Habitat Conservation Plan	No	No	-	-	-
Comment: N/A					
Economic Development Plan	No	No	-	-	-
Comment: N/A					
Shoreline Management Plan	No	No	-	-	-
Comment: N/A					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: N/A					
Forest Management Plan	No	No	-	-	-
Comment: N/A					
Transportation Plan	No	No	-	-	-
Comment: N/A					

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: N/A					
Agriculture Plan	No	No	-	-	-
Comment: N/A					
Other (this could include a tourism plan, business development plan, etc.)	-	-	-	-	-
Comment: N/A					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: N/A					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: N/A					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: N/A					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: N/A					
Continuity of Operations Plan	No	No	-	-	-
Comment: N/A					
Public Health Plan	No	No	-	-	-
Comment: N/A					
Other	No	-	-	-	-
Comment: N/A					

Development and Permitting Capability

The table below summarizes the capabilities of the Erie County Water Authority to oversee and track development.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	ECWA does not issue building permits. Building permits are issued by local municipalities.	
Are permits tracked by hazard area? (For example, floodplain development permits.)		
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Erie County Water Authority and their current responsibilities which contribute to hazard mitigation.

Table 9.2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustments	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	No	-
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	ECWA communicates with the public about warnings via the agency website, Facebook and Twitter
Maintenance programs to reduce hazard (stormwater maintenance, tree trimming, etc.)	Yes	ECWA performs regular trimming of trees that could impact important Authority facilities.
Mutual aid agreements	No	The ECWA is not party to any mutual aid agreements.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	There are several staff with knowledge of land development, several of whom are engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	There are many Authority staff with experience with building or infrastructure practices.
Planners or engineers with an understanding of natural hazards	Yes	There are several Authority staff with an understanding of natural hazards.
Staff with expertise or training in benefit/cost analysis	No	-

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	ECWA works closely with insurance agents to derive damage assessments.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	ECWA staff includes GIS expertise and the Authority's assets are maintained in GIS data format.
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Erie County Water Authority.

Table 9.2-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes, ECWA levies a commodity charge and an infrastructure charge that varies based on size of connection. There are also fees to maintain hydrants.
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Water Infrastructure Finance & Innovation Act

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Erie County Water Authority.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Matthew Barrett; ECWA Security Officer. The Authority contracts with E3 Communications to provide public information services.
Personnel skilled or trained in website development	Yes	Matthew Barrett; ECWA Security Officer. The Authority contracts with E3 Communications to provide public information services.
Hazard mitigation information available on your website	Yes	Matthew Barrett; ECWA Security Officer. The Authority contracts with E3 Communications to provide public information services, particularly regarding water quality and boil water advisories.
Social media for hazard mitigation education and outreach	Yes	Matthew Barrett; ECWA Security Officer. The Authority contracts with E3 Communications to provide public information services and makes use of Facebook and Twitter.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	ECWA is determining whether to provide reverse 9-1-1 service.
Warning systems for hazard events	Yes	Matthew Barrett; ECWA Security Officer, distributes service warnings via the Authority website, Facebook and Twitter.
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Erie County Water Authority.

Table 9.2-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	Not applicable, individual municipalities are responsible for their classifications in various programs		
Building Code Effectiveness Grading Schedule (BCEGS)			
Public Protection (ISO Fire Protection Classes 1 to 10)			
NYSDEC Climate Smart Community			
Storm Ready Certification			
Firewise Communities classification			
Other			

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.2.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Not applicable, municipalities are responsible for floodplain administration

National Flood Insurance Program (NFIP) Summary

Not applicable, municipalities are responsible for floodplain administration

Table 9.2-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Not applicable, municipalities are responsible for floodplain administration						

Source:
Notes:
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

Not applicable, municipalities are responsible for floodplain administration

NFIP Compliance

Not applicable, municipalities are responsible for floodplain administration

9.2.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Evacuation Routes and Procedures

Not applicable, municipalities are responsible for determining evacuation routes and procedures

Sheltering

Not applicable, the Water Authority is not responsible for identifying or operating emergency shelters.

Table 9.2-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Not applicable, municipalities are responsible for identifying emergency shelters							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Erie County Water Authority is not responsible for identifying or operating emergency shelters.

Table 9.2-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Not applicable, municipalities are responsible for determining temporary housing locations.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Erie County Water Authority is not responsible for locating new permanent housing for displaced residents.

Table 9.2-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Not applicable, municipalities are responsible for determining permanent housing locations.					

9.2.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.2-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Multi-Family	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other (commercial, mixed-use, etc.)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Permits Issued	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
N/A					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
N/A					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.2.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Erie County Water Authority's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the county and the ECWA's coverage area. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Erie County Water Authority has significant exposure. Hazard maps are shown in the respective hazard profiles in Section 5 (Risk Assessment). For security reasons, the Erie County Water Authority assets and infrastructure are not shown in greater detail in this annex.

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Erie County Water Authority's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.2-14 provides details regarding municipal-specific loss and damages the Water Authority experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the Water Authority did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the Water Authority did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the Water Authority did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the Water Authority did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the Water Authority did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the Water Authority did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the Water Authority did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the Water Authority did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the Water Authority did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the Water Authority did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the Water Authority did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the Water Authority did not report damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	No	Although the county was impacted, the Water Authority did not report damages.
October 31-November 1, 2019	High Wind DR-4472 NY	No	Although the county was impacted, the Water Authority did not report damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the Water Authority did not report damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the Water Authority did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the Water Authority did not report damages.
March 2020-Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Erie County Water Authority's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Erie County Water Authority. The Erie County Water Authority has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Water Authority indicated agreement with the results of the risk ranking shown in Table 9.2-15.

Table 9.2-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Table 9.2-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
N/A – Information regarding the vulnerability of ECWA assets and infrastructure is not for public release.						

Identified Issues

After review of the Erie County Water Authority's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Erie County Water Authority has identified the following vulnerabilities within their community:

- Several ECWA facilities lack surveillance and security measures
- Wave action, compounded by lack of winter ice cover, has severely eroded the Lake Erie shoreline at the ECWA Sturgeon Point Water Treatment Plant.
- Cyber security shortfalls will be assessed to determine necessary upgrades in software and processes to prevent cyber attack on the ECWA water distribution system.
- The Water Authority lacks Reverse 9-1-1 capability
- ECWA has numerous facilities with backup generators in remote locations. Some of the access roads are substandard. Others become impassable due to debris and downed power lines during storms.

9.2.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.2-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 1. If discontinue, explain why.
No Projects were listed in the 2015 HMP for the ECWA							

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Erie County Water Authority did not identify any projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Proposed Hazard Mitigation Initiatives for the HMP Update

The Erie County Water Authority participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.2-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	-	-	-	X	X	-	-	-	-
Cyber Security	X	X	-	-	X	X	-	-	-	X
Earthquake	-	-	-	-	X	X	-	-	-	-
Expansive Soils	-	-	-	-	X	X	-	-	-	-
Extreme Temperature				-	X	X	-	-	-	-
Flood	X	X	X	-	X	X	-	X	X	X
Hazardous Materials	-	-	-	-	X	X	-	-	-	-
Landslide	-	-	-	-	X	X	-	-	-	-
Pandemic	-	-	-	-	X	X	-	-	-	-
Severe Storm	-	X	-	-	X	X	-	-	X	-
Severe Winter Storm	-	X	-	-	X	X	-	-	X	-
Utility Failure	-	-	-	-	X	X	-	-	-	-
Wildfire	-	-	-	-	X	X	-	-	-	-

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.2-19 summarizes the comprehensive range of specific mitigation initiatives the Erie County Water Authority would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.2-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

Table 9.2-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-ECWA-001	Erie County Water Authority surveillance and security enhancement	1	Cyber Security	**Problem:** Several ECWA facilities lack adequate security measures, exposing them to cyber or other terrorist attack. **Solution:** ECWA staff will add to and update alarm monitoring and surveillance systems already in place at specified locations. Staff will install automated gates controlled by card readers to grant access at designated locations.	Yes	No	Within 3 years	ECWA	$475,000	Continuity of water services	HMGP, BRIC, ECWA budget	High	SIP	PR
2022-ECWA-002	Erie County Water Authority – Sturgeon Point Water Treatment Plant Shoreline Stabilization	1	Severe Storm, Flood, Severe Winter Storm	**Problem:** Wave action, compounded by lack of winter ice cover, has severely eroded the Lake Erie shoreline at the ECWA Sturgeon Point Water Treatment Plant. The erosion threatens the integrity of the plant's critical outfall structure and the foundation supporting a United States Customs and Border	Yes	May require permitting	Within 3 years	ECWA; NYSDEC and USACE (regulatory)	$500,000	Continuity of water services	HMGP, BRIC, ECWA budget, Water Infrastructure Finance and Innovation Act	High	SIP	PP, SP

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

Table 9.2-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Protection communication tower. **Solution:** A stabilization program will be implemented to protect the shoreline from further erosion and to maintain the integrity of the outfall and communication tower structures. It is anticipated the improvements required will include injection grouting below/behind the existing outfall structure and armor stone revetment of the currently unprotected shoreline including the area immediate to the communication tower.										
2022-ECWA-003	Critical roadway access to ECWA facilities with fuel powered generators	1	Flood	**Problem:** ECWA has numerous facilities with backup generators in remote locations. Some of the access roads are substandard. Others become impassable due to debris and	Yes	No	Within 6 months	ECWA	TBD per engineering assessment	Continuity of water service during extended power outages	ECWA budget	High	LPR, NSP	ES, NR

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

Table 9.2-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				downed power lines during storms. These obstructions can cause fuel delivery delays to backup generators during power outages. **Solution:** ECWA will conduct an assessment to determine which facilities require mitigation measures to ensure access for fuel delivery to backup generators. ECWA will institute these measures and also establish an ongoing program for tree clearing and trimming with the jurisdictions responsible for these roadways										
2022-ECWA-004	Cyber security assessment	1,2	Cyber Security	**Problem**: Cyber security shortfalls will be assessed to determine necessary upgrades in software and processes to prevent cyber attack on the ECWA water distribution system.	Yes	No	Within 1 year	ECWA	$100,000	Mitigating cyber security vulnerabilities and making necessary security improveme	ECWA	High	LPR	ES

Table 9.2-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: ECWA will support a full cyber security assessment of the ECWA water distribution system. Authority staff will implement priority measures identified in the assessment.						nts to ensure delivery of water to the public				
2022-ECWA-005	Reverse 9-1-1 service	1	All Hazards	**Problem: T**he Water Authority lacks Reverse 9-1-1 capability **Solution:** The Authority will develop the capacity to deliver Reverse 9-1-1 service	No	No	2 years	ECWA	TBD	Improved public preparedness to hazards	EMPG, municipal Budget	High	PR	PP

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

Table 9.2-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-ECWA-001	Erie County Water Authority surveillance and security enhancement	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-ECWA-002	Erie County Water Authority – Sturgeon Point Water Treatment Plant Shoreline Stabilization	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-ECWA-003	Critical roadway access to ECWA facilities with fuel powered generators	1	1	1	1	1	1	1	1	1	0	0	1	1	0	11	High
2022-ECWA-004	Cyber security assessment	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-ECWA-005	Reverse 9-1-1 service	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of

9.2.9 Action Worksheets

The following action worksheets have been developed by the Erie County Water Authority to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Action Worksheet			
Project Name:	Erie County Water Authority surveillance and security enhancement		
Project Number:	2022-ECWA-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Cyber Security		
Description of the Problem:	Several ECWA facilities lack adequate security measures, exposing them to cyber or other terrorist attack.		
Action or Project Intended for Implementation			
Description of the Solution:	ECWA staff will add to and update alarm monitoring and surveillance systems already in place at specified locations. Staff will install automated gates controlled by card readers to grant access at designated locations.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Ensure that facilities are protected by effective surveillance	**Estimated Benefits (losses avoided):**	Ensure that water flows uninterrupted to the public
Useful Life:	10 years	**Goals Met:**	1
Estimated Cost:	$475,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	3 years
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	HMGP, BRIC, ECWA
Responsible Organization:	Erie County Water Authority	**Local Planning Mechanisms to be Used in Implementation if any:**	Finance, Planning
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Station Police at every ECWA facility	Very High	Not feasible for cost and operational reasons
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Evaluation and Prioritization		
Project Name:	Erie County Water Authority surveillance and security enhancement	
Project Number:	2022-ECWA-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Will secure facilities from cyber attack and ensure that water service continues as required to maintain life safety
Property Protection	1	Will protect ECWA assets from attack.
Cost-Effectiveness	1	For the benefits provided the project is cost effective
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Cyber Security
Timeline	0	Within 3 years
Agency Champion	1	Erie County Water Authority
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Action Worksheet			
Project Name:	Erie County Water Authority – Sturgeon Point Water Treatment Plant Shoreline Stabilization		
Project Number:	2022-ECWA-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Flood, Severe Winter Storm		
Description of the Problem:	Wave action, compounded by lack of winter ice cover, has severely eroded the Lake Erie shoreline at the ECWA Sturgeon Point Water Treatment Plant. The erosion threatens the integrity of the plant's critical outfall structure and the foundation supporting a United States Customs and Border Protection communication tower.		
Action or Project Intended for Implementation			
Description of the Solution:	A stabilization program will be implemented to protect the shoreline from further erosion and to maintain the integrity of the outfall and communication tower structures. It is anticipated the improvements required will include injection grouting below/behind the existing outfall structure and armor stone revetment of the currently unprotected shoreline including the area immediate to the communication tower.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	To fully stabilize shoreline and prevent further erosion	**Estimated Benefits (losses avoided):**	Continuity of water services
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	$500,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	Within 1 year	**Potential Funding Sources:**	BRIC, HMGP, WIFIA
Responsible Organization:	Erie County Water Authority (owner); NYSDEC and USACE (regulatory)	**Local Planning Mechanisms to be Used in Implementation if any:**	Planning, Finance
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Move the WTP to another location	Very expensive	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Evaluation and Prioritization		
Project Name:	Erie County Water Authority – Sturgeon Pt WTP Shoreline Stabilization	
Project Number:	2022-ECWA-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Will secure facilities from attack and ensure that water service continues
Property Protection	1	Will protect ECWA assets from attack.
Cost-Effectiveness	1	For the benefits provided the project is cost effective
Technical	1	
Political	1	
Legal	1	May require permitting
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flood, Severe Winter Storm
Timeline	1	
Agency Champion	1	Erie County Water Authority (owner); NYSDEC and USACE (regulatory)
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 41-Section-9.2-Erie-County-Water-Authority-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.3 Village of Akron

This section presents the jurisdictional annex for the Village of Akron. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Akron's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.3.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Akron's hazard mitigation plan primary and alternate points of contact. The Village of Akron followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from village departments, including the Mayor's and the Code Enforcement Office. The Code Enforcement Officer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.3-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Carl Patterson, Mayor Address: 21 Main Street Akron, NY 14001 Phone Number: 716-542-9636 Email: AkronMayor@akronvillage.us	Name/Title: Daniel Kowalik, Emergency Manager Address: 21 Main Street Akron, NY 14001 Phone Number: 716-913-9978 Email: dkowalik@townofnewstead.com
NFIP Floodplain Administrator	
Name/Title: Michael Borth, Code Enforcement Officer Address: 21 Main Street Akron, NY 14001 Phone Number: 716-225-3929 Email: CodeEnforcement@adkronvillage.us	
Additional Contributors	
Name/Title: Jon Cummings, Public Works Manager Method of Participation: Provided information on completed past mitigation measures	

9.3.2 Municipal Profile

The Village of Akron is located approximately 25 miles east of downtown Buffalo. Native Americans had a long residence in the Akron area; the Great Iroquois Indian Trail passed through the area. White settlers arrived around 1829 to Akron Falls, which were harnessed for waterpower. Akron became an incorporated village in 1849 and is entirely contained within the Town of Newstead (Town of Akron 2020). The village gradually absorbed the community of Fallkirk as it grew. In 1880, the population of Akron was approximately 1,050 persons.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Early industries in the village included lumbering, barrel making, blacksmithing, flour and cement milling, gypsum processing, and cigar making. The West Shore Railroad was extended to the village in 1884 and later Akron was chosen as the site for the Buffalo Arms plant. Akron Airport is a reliever airport to the Buffalo Airport. Perry's Ice Cream is a major ice cream manufacturer and distributor that is based in the village. Main Street is the commercial and civic center of the community. Blizzards in 1966 and 1977 were notoriously fierce (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Village of Akron was 2,868. The estimated 2019 population, 2,871 was a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.3 percent of the population is 5 years of age or younger and 19 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.3.3 Jurisdictional Capability Assessment and Integration

The Village of Akron performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.3.3). The Village of Akron's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Akron. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.3-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 71, Building Construction and Fire Prevention	Local	Building Department
Comment: Building Department enforcement of the Building Code increases hazard preparedness.					
Zoning Code	Yes	No	LL1-1971, Village of Akron – Chapter 165, 1971	Local	Building/Zoning, Mayor

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: § 165-35. L-C Land Conservation District. [Added 3-31-1975 by L.L. No. 3-1975] The Land Conservation District is hereby established primarily to allow Murder Creek to carry or store its maximum amount of water without restrictions, to prevent encroachments on its floodplains which would increase floodwater levels and to prevent the threat to health, safety, and property in the immediate area, as well as downstream.					
Subdivision Ordinance	Yes	No	LL1-2007, Chapter 142, Village of Akron subdivision, 2007	Local	Building/Zoning, Mayor
Comment: The purpose of street construction specifications is to detail the requirements as set forth briefly in § 142-5, Improvements, § 142-6C(4), Construction detail sheet, and other sections of Article I of this chapter prior to dedicating to the village streets, rights-of-way, etc., as directed in Article I of this chapter. Site plans must include Existing topography of the site and immediately adjacent property as revealed by contours or key elevations as may be required by the Planning Board and any proposed re-grading of the site, including water courses, wetlands, and flood plains with data sources; and Location of fire and other emergency zones.					
Stormwater Management Ordinance	Yes	Yes	Village Code Chapter 142-5, Stormwater	State and Local	Building Department
Comment: Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet. Uncontaminated industrial cooling water or unpolluted industrial process waters may be discharged on approval of the Superintendent and DEC to a storm sewer or natural outlet.Proactive management of stormwater will decrease flooding risk.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Village of Akron Chapter 142, Street Construction	Local	Planning Board/Building Department
Comment: Growth Management can help steer new development away from hazards.					
Site Plan Review	Yes	No	Village of Akron Chapter 142-2,3,4,6	Local	Planning and Building Departments
Comment: Site plan review can help steer new development away from hazard exposure. The historical development of the Village has placed commercial and industrial zones in proximity and development requires detailed review. The following site plan provisions are intended to secure compliance with the requirements of the Village Code regarding site development and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location, and dimension of buildings in proposed single parcel development.					
Environmental Protection Ordinance	Yes	Yes	Village of Akron Chapter 142-3	Local	Building Department
Comment: Environmental review encompasses site plan review and includes assessment of hazard exposure					
Flood Damage Prevention Ordinance	Yes	Yes	LL1-2019, Chapter 82 Flood Damage Prevention2019 2019	Local	FPA
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet for all construction in the SFHA (residential and non-residential).					

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-.
Comment: None					
Emergency Management Ordinance	Yes	Yes	Village of Akron Chapter 21-7 Hazardous Materials Response Plan, Emergency response agency responsibilities and Chapter 11 Disaster Preparedness Plan	Local	Emergency Manager
Comment: Proactive emergency management will help provide safety for residents and property during hazard events. This disaster preparedness Ordinance is intended to set forth all necessary information pertaining to operating procedures, material and human resource availability and political organization and responsibility for the Village of Akron for use by the village officials during a declared emergency.					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Newstead and Village of Akron Combined Comprehensive Plan	Local	Mayor, Village Board
Comment: The Plan seeks to establish a program to identify, prioritize and protect or preserve the locally and regionally important scenic and natural resources of the community. The Communities resources are to be promoted as part of a regional framework, such as the different watersheds that transect the communities. The Plan endorsed continued enforcement of erosion and sediment control measures.					
Capital Improvement Plan	Yes	No	Village of Akron Chapter 1-4, Chapter 165	Local	Planning/Zoning/Building
Comment: Mitigation projects can be regularly scheduled into the village CIP.					
Disaster Debris Management Plan	No	No		-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Village of Akron Chapter 165-35	Federal, State, County, Local	Floodplain Management Building Department
Comment: Management of water flows over a watershed scale helps to mitigate damage from flooding.					
Stormwater Plan	Yes	Yes	Village of Akron, Chapter 165-10, 11, 12, 13, 27	Local	Planning/Zoning/Building
Comment: The Stormwater Plan will facilitate proactive management of stormwater and help to mitigate flood risk.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Senior Transportation/CDBG	Local	Village Board
Comment: The Plan will help mitigate danger to seniors during disasters as contingencies for transportation during hazards has been addressed in the plan.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Comprehensive Emergency Management Plan	Local/ County	Emergency Services Coordinator
Comment: The CEMP facilitates effective emergency response during hazard events.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	No	Village of Akron Chapter 21-7, Hazardous Materials Response Plan	Local	Village Emergency Manager
Comment: The Hazardous Materials Response Plan directs effective response to hazardous materials spills					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Akron to oversee and track development.

Table 9.3-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning Board/Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Code Enforcement Officer
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	There are approximately 250 lots available for new home construction.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Akron and their current responsibilities which contribute to hazard mitigation.

Table 9.3-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	Yes	Planning and Zoning Board members are knowledgeable about natural hazards

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Public Works Department staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Village Police Department staff coordinate emergency response
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Fire Siren, Social Media, Akron Central School Notification System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Public Works Department staff trim tree branches and keep floodways clear.
Mutual aid agreements	Yes	Local, County, State
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Public Works Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Consultant engineer
Professionals trained in conducting damage assessments	Yes	Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Consultant engineer
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Village Emergency Manager coordinates response during hazard events
Grant writer(s)	Yes	Consultant
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Village approved Engineers William. Schutt & Association /Clark Patterson Lee

Fiscal Capability

The table below summarizes financial resources available to the Village of Akron.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.3-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes, Green Space fees
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Akron.

Table 9.3-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk
Personnel skilled or trained in website development	Yes	Village Clerk
Hazard mitigation information available on your website	Yes	Village Clerk
Social media for hazard mitigation education and outreach	Yes	Planning Board, Hazardous Mitigation Committee
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning Board, Hazardous Mitigation Committee
Other programs already in place that could be used to communicate hazard-related information	Yes	E-Plan, County Local Emergency Planning Committee
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Akron.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.3-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Pending	TBD	TBD
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	05-5Y	Sept 2016
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Fire wise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.3-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.3.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Borth, Code Enforcement Officer

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Akron.

Table 9.3-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Akron	1	4	$8,104	0	1

Source: FEMA 2020a and FEMA 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village did not identify any areas that are prone to flooding. There are not any Risk MAP projects currently underway in the village. The village did not identify how many (if any) properties have been mitigated. The village flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Village of Akron does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in October 2010. The Building Department and the Code Enforcement Officer are responsible for floodplain administration. There are no Certified Floodplain Managers on staff. The village does not have access to resources to determine possible future flooding conditions from climate change. The village stated that floodplain management staff need assistance or training now. The village applies the regulations of the Building Code when making Substantial Damage determinations. The village floodplain management program meets minimum requirements and offers NFIP administration services such as permit review and inspections, and public education about floodplain management practices and ordinances.

9.3.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Akron has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 93 - Starts at Route 5 going north thru the town and village up to the Niagara County line. This is a north-south route and is owned and plowed by NYSDOT.
- Hunts Corner Road starting at Route 93 west to the Town of Clarence line close to Salt Road. This is an east to west county route owned by Erie County & plowed by the Town of Newstead DPW.
- Route 5 From Genesee County line going east to the Town of Clarence line at Davison Road. This is an east to west route.
- North Millgrove Rd from Route 5 going south to Route 33 in the Town of Alden. This is a north to south route and is owned by the County Highway Department.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Notification will be given to residents through local media, radio, & TV stations or a message through the public-school Emergency Broadcast system on which routes will be open to use. The village will coordinate with the County Emergency Managers as appropriate.

Sheltering

The Village of Akron has identified the following designated emergency shelters within the village.

Table 9.3-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Akron Fire Hall	1 Main Street Akron N.Y. 14001	275	Yes	No	Yes	Basic First Aid	Food, Heat, Air Conditioning, . Sleeping Area

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Akron has identified the following sites suitable for placing temporary housing units.

Table 9.3-11. Temporary Housing Locations

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Property	Eckerson Avenue & Clinton Street	Water, Electric.	15 Trailers on a site 20' x 50'	Open Mowed Field Off Edge of Street	Permits & Inspections
Village Property	43 East Avenue, Old DPW Site	Water, Electric.	25 Trailers on a site 20' x 50'	Open Stone Parking Lot	Permits & Inspections

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Akron has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.3-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will work with the county to identify potential permanent housing locations per Action # 2022-VAkron-008					

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.3.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.3-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.3-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	2	0	1	0	3	0	1	0	3	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	147	0	130	0	138	0	145	0	94	0	147	0
Total Permits Issued	**149**	**0**	**131**	**0**	**141**	**0**	**146**	**0**	**97**	**0**	**149**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

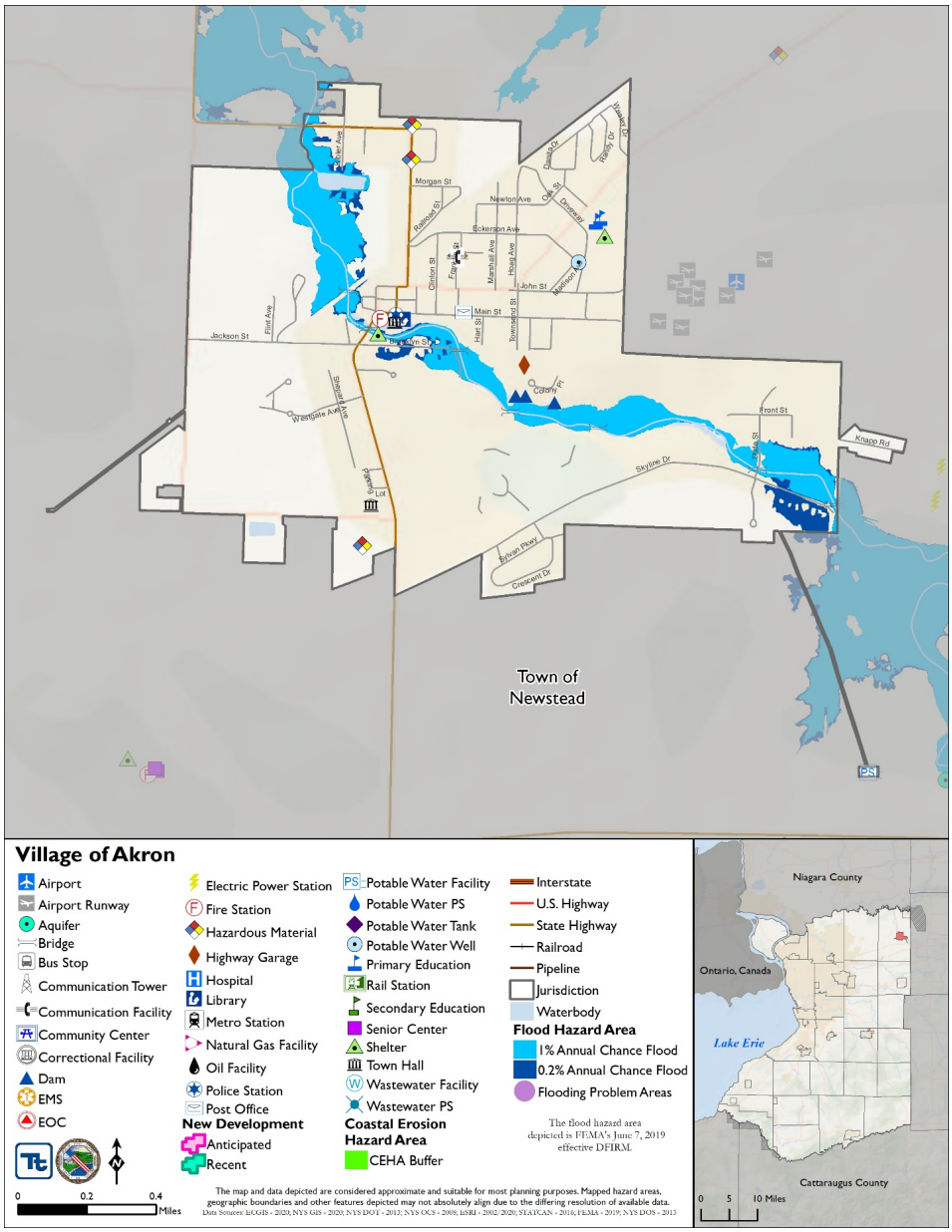
9.3.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Akron's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Akron has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

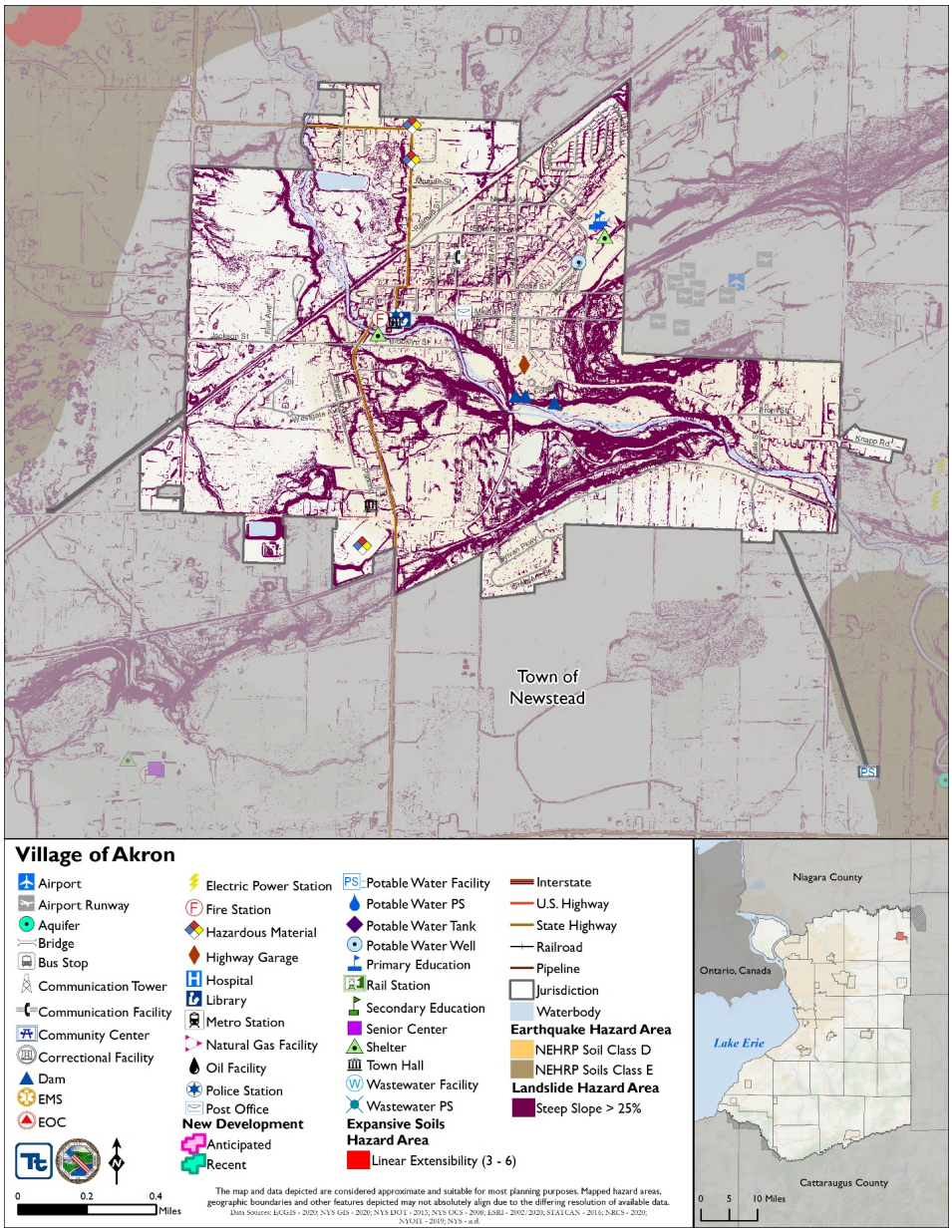
Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.3-1. Village of Akron Hazard Area Extent and Location Map 1



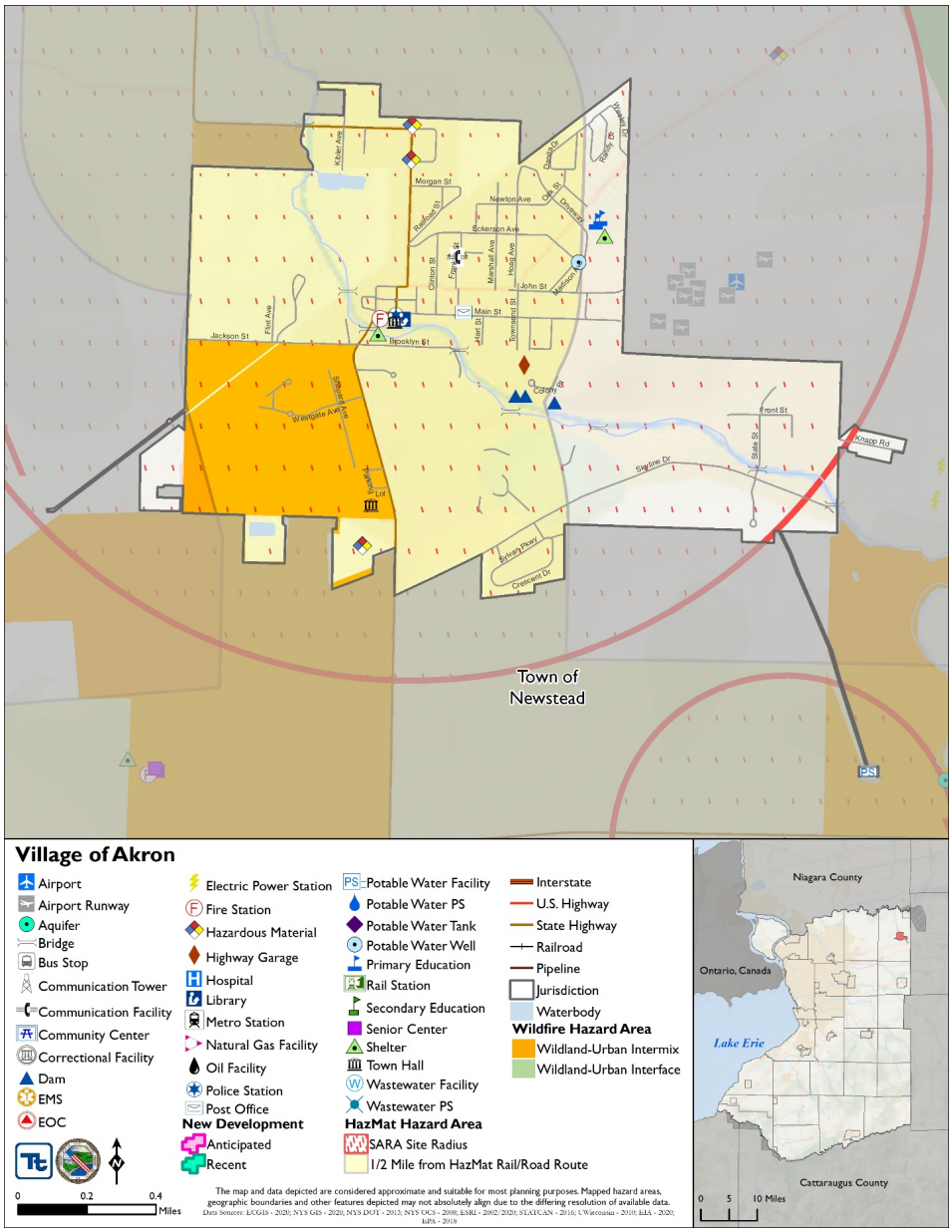
Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.3-2. Village of Akron Hazard Area Extent and Location Map 2



Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.3-3. Village of Akron Hazard Area Extent and Location Map 3



Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Akron's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.3-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.3-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated ?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 28-29, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 12, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
November 18, 2015	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 11, 2017	High Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
March 8, 2017	High Wind	No	Yes, minor power outages, Trees, and power lines down, No major cost to the Village DPW
March 13, 2017	Winter Storm	No	Although the county experienced damage from this hazard event, the village did not report any damage
July 20, 2017	Tornado	No	Although the county experienced damage from this hazard event, the village did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county experienced damage from this hazard event, the village did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 2, 2018	Blizzard	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 6, 2018	Lightning	No	Although the county experienced damage from this hazard event, the village did not report any damage
February 24, 2019	High Wind	No	Yes, minor power outages, trees, and power lines down, no major cost to the Village DPW Gas Station roof blew off the canopy.
February 24, 2019	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county experienced damage from this hazard event, the village did not report any damage
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county experienced damage from this hazard event, the village did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated ?	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county experienced damage from this hazard event, the village did not report any damage
March 2020-present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Erie County residents

Notes:
EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Akron's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Akron. The Village of Akron has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk5of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated agreement with the derived hazard ranking as shown in the table below.

Table 9.3-15. Hazard Event History

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.3-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Akron Fire Hall	Shelter	Yes	No	2022-V Akron-003

Source: FEMA 2021

Identified Issues

After review of the Village of Akron's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Akron has identified the following vulnerabilities within their community:

- The village municipal facility lacks backup power. This facility houses emergency management functions and the Police Department conducts arrests and bookings in the building.
- Flooding can impact certain properties multiple times.
- The village should have stockpiles of sandbags and other flood response materials.
- Drainage infrastructure has become clogged.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The village water facilities and water treatment plant are vulnerable to earthquake damage and flooding.
- Numerous storm water channels are blocked and create local flooding.
- The Village waterline is vulnerable to disruption that could affect the entire village.
- The Akron Fire Hall is in the SFHA, exposed to the flood hazard.
- A potable water facility on Crittendon Road is located within the earthquake hazard zone
- The village was not able to identify locations for permanent housing.
- Several homes on Brooklyn Street are threatened by erosion from Murder Creek.
- Village electrical facilities are vulnerable to cyber-attack or other malicious attack.
- The Wastewater Treatment Plant is vulnerable to flooding.

9.3.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.3-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Installation of backup generators at 2 key lift stations in Akron Village Wastewater System	Storm	Power Outage	Akron DPW	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Backup generator has been installed at the Leisure wood Lift Station. The Jackson Street lift station has an overflow system set up that alleviates the need for a backup generator.
	Installation of backup generator at Village of Akron/Town of Newstead Joint DPW Facility	Storm	Power Outage	Akron Village Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Back-up generator was hard wire installed when the building was built.
	Installation of protective dyke/berm system to protect Akron Village Wastewater Treatment Plant	Flooding	Not Identified	Akron DPW	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
	Capacity improvements/ rerouting of key storm drainage corridor in central part of village (Newton Ave/West Shore Drainage Corridor)	Flooding	Not Identified	Akron Village Board	Complete	Cost $10010.40 Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Village replaced drainage pipe in the central part of the village as a part of an addition project for Akron Rule in 2017 which help with the drainage flow coming from Bloomingdale Ave.
	Open storm water channels and culverts and remove debris from key drainage waterways within village to better accommodate storm water/flooding capacities	Flooding	Not Identified	Akron DPW	In Progress	Cost $9236.00 Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. Addressed by Proposed Mitigation Action #2022-V Akron-011 3.
	State St Bridge Improvements – Abutment	Flooding	Not Identified	Akron Village Board	In Progress	Cost Level of Protection		1. Include in 2020 HMP 2.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Strengthening, Improve Drainage Capacity					Damages Avoided; Evidence of Success		3. Still waiting on a grant for funding of the reconstruction of the bridge. It is only used at this point for pedestrian crossing.
	Hardening of primary Akron Village electric substation access (bollards, access, etc.)	Malicious Acts, Terrorism	Not Identified	Akron DPW	In Progress	Cost		1. Include in 2020 HMP 2. Addressed by Proposed Mitigation Action #2022-V Akron-012 3. Pending and Electric Substation upgrade within the next three years.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to comply with latest FEMA Regulations	Flooding	Not Identified	Akron Village Board	Complete	Cost		1. Discontinue 2. 3. Code Enforcement Mike Borth attended the 2019 NYS Floodplain and Stormwater Manager Association Annual Conference in April 2019. Board Resolution approved on April 1, 2019 the Intermunicipal Floodplain Management Agreement with Erie County.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Building Dept. and Code Enforcement	Complete	Cost		1. Discontinue 2. 3. Code Enforcement Mike Borth attended the 2019 NYS Floodplain and Stormwater Manager Association Annual Conference in April 2019. Board Resolution approved on April 1, 2019 the Intermunicipal Floodplain Management Agreement with Erie County.
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Akron has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Department of Public Works continues to maintain tree growth, removal and trimming limbs surrounding all electrical lines and utility poles in the Village of Akron.
- In 2019, Public Works completed a large project to update an aging part of the Electrical Distribution System.

1. Applied for CDBG Grant funds in 2020 to complete a waterline upgrade. This project would give redundancy in the water system in the Skyline Drive and Main Street areas. The DPW led a major Wastewater Treatment Plant upgrade combine the infrastructure work with the road reconstruction with Erie County DPW.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Akron participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (FEMA 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.3-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	X	X	X	-	-	-	X
Cyber Attack	-	X	-	X	X	X	-	-	-	X
Earthquake	-	X	-	X	X	X	-	-	-	X
Expansive Soils	-	X	-	X	X	X	-	-	-	X
Extreme Temperature	-	X	-	X	X	X	-	-	-	X
Flood	X	X	-	X	X	X	-	-	-	X
Hazardous Materials	-	X	-	X	X	X	-	-	-	X
Landslide	-	X	-	X	X	X	-	-	-	X
Pandemic	-	X	-	X	X	X	-	-	-	X
Severe Storm	-	X	-	X	X	X	-	-	-	X
Severe Winter Storm	-	X	-	X	X	X	-	-	-	X
Utility Failure	-	X	-	X	X	X	-	-	-	X
Wildfire	-	X	-	X	X	X	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.3-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Akron would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.3-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Akron-001	Protect the village municipal building by installing a backup generator.	1,2	All Hazards	**Problem**: Village Hall lacks backup generator power. The Police Department is housed in the Hall and does bookings and arrests in the Hall. The facility houses emergency management functions. **Solution**: The village will conduct an engineering analysis to determine the correct generator. The DPW will purchase and install the backup generator.	Yes	No	Within 2 years	Village Public Works Department	TBD per engineer's feasibility assessment/ $50,000 estimate	Ensure continuity of services at the Village Hall/Police Department	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-V Akron-002	Floodplain Administrator to attend training on floodplain management	3	Flood	**Problem:** Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. **Solution:** Obtain/host training and certification for	No	No	Within 5 years	ECDHSES, FPA	$3,000	Certified floodplain managers trained, and floodplain management improved.	County and village budget	High	LPR	PR

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				floodplain managers.										
2022-V Akron-003	Protect the Akron Fire Hall to the 0.2% annual chance flood event.	2	Flood	**Problem:** The Akron Fire Hall is in the SFHA, exposed to the flood hazard. **Solution:** The village will conduct a feasibility study to determine and implement best action to protect the Akron Village Fire Hall. Coordinate with USACE regarding creekbank erosion.	Yes	Yes	Within 2 years	Village Fire Company, Village Board	$50,000 estimate	Protect facility from flooding and ensure continuity of emergency operations	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-V Akron-004	Protect village water facility from earthquake threat	1	Earthquake	**Problem:** A potable water facility on Crittendon Road is located within the earthquake hazard zone. **Solution**: Determine which mitigation measures would best protect the facility from the earthquake threat. Village DPW will then implement these measures.	Yes	Yes	Within 5 years	Village DPW, Village Board	TBD by feasibility study/	Preserve continued service from this critical facility.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-V Akron-005	Protect Village Waste Water Treatment Plant	1	Flood	**Problem**: The Village Waste Water Treatment	Yes	No	Within 3 years	Village DPW	TBD by engineering analysis	Preserve continued service from	FEMA HMGP, BRIC,	High	SIP	PP

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	from flood hazard			Plant is at risk from flooding. **Solution**: Installation of protective dyke/berm system to protect Akron Village Wastewater Treatment Plant.						this critical facility.	USDA Community Facilities Grant Program, EMPG			
2022-V Akron-006	Protect homes along Brooklyn Street	1	Flood	**Problem**: Several homes are threatened by erosion from Murder Creek. **Solution**: Arrange for buyout of selected properties along Murder Creek in the Brooklyn Street neighborhood.	No	No	Within 3 years	Village Board	TBD per cost of acquiring specified properties	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP
2022-V Akron-007	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share with homeowners	High	SIP	PP

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).										
2022-V Akron-008	Identify locations for permanent housing	1,2	All Hazards	**Problem:** There are no identified locations for permanent housing in the village for use in case of disaster. **Solution:** The village will work with the county to identify locations	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	EAP	ES

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				for permanent housing.										
2022-V Akron-009	Complete infrastructure and waterworks projects	1	Flood, Severe Storm	**Problem:** Village water and other infrastructure is vulnerable to the impacts of natural hazards on segments of East Avenue, Main Street and Skyline Avenue. **Solution:** Village has secured funding and/or progressed infrastructure and water projects that will protect residents against flooding and severe storm impacts. DPW should ensure that these projects progress to completion.	No	No	Within 2 years	Village Department of Public Works	Staff time, DPW resources	Ensure safe travel	Municipal budget, secured funding sources	High	SIP	PP
2022-V Akron-010	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	Flood, HazMat	**Problem:** Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron. **Solution:** Stockpile sand piles, bags, and associated	No	No	Within 1 year	Town Emergency Management, and Village of Akron Board	$100,000	Protect life and property from flooding and Hazmat danger	Town budget, EMPG	High	SIP	ES

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				equipment. Share cost and maintenance and access to material with Village Akron.										
2022-V Akron-011	Clear debris from drainage waterways	2	Flood, Severe Storm	**Problem:** Numerous storm water channels are blocked and create local flooding. **Solution:** The DPW will open storm water channels and culverts and remove debris from key drainage waterways within village to better accommodate storm water/flooding capacities.	No	No	Within 2 years	Village DPW	$20,000/year	Clear drainage ways will allow for proper drainage of water	Municipal budget	High	NSP, SIP	PR
2022-V Akron-012	Protect village electrical facilities	1	Cyber Attack/Terrorism	**Problem:** Village electrical facilities are vulnerable to cyber-attack or other malicious attack. **Solution:** Hardening of primary Akron Village electric substation access (bollards, access, etc.)	Yes	No	Within 2 years	Village DPW	TBD by engineering feasibility	Ensure continued electrical service to the village.	BRIC, HMGP, EMPG, municipal budget	High	SIP	PR

Commented [HC1]: Added SIP because it includes har structure.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Akron-013	Waterline upgrade	1	All Hazards	**Problem:** The Village waterline is vulnerable to disruption that could affect the entire village. **Solution:** The Village applied for CDBG Grant funds in 2020 to complete a waterline upgrade. This project would give redundancy in the water system in the Skyline Drive and Main Street areas.	No	No	Within 2 years	Village DPW	TBD by engineering feasibility	Ensure continued water service to the Village	BRIC, HMGP, municipal budget	High	SIP	PR

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:
The time required for completion of the project upon implementation

Cost:
The estimated cost for implementation.

Benefits:
A description of the estimated benefits, either quantitative and/or qualitative.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

OEM *Office of Emergency Management*

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Akron-001	Protect the village municipal building by installing a backup generator.	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V Akron-002	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-V Akron-003	Protect the Akron Fire Hall to the 0.2% annual chance flood event.	1	1	1	0	1	1	0	1	1	1	0	1	1	0	10	High
2022-V Akron-004	Protect Village water facility from earthquake threat	1	1	1	1	1	1	0	1	1	0	0	1	1	0	10	High
2022-V Akron-2005	Protect Village Waste Water Treatment Plant from flood hazard	0	1	1	1	1	1	0	1	1	1	0	1	1	0	10	High
2022-V Akron-2006	Protect homes along Brooklyn Street	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High
2022-V Akron-007	Residential Property Flood Mitigation.	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High
2022-V Akron-008	Identify locations for permanent housing	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2022-V Akron-009	Complete infrastructure and waterworks projects	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2022-V Akron-010	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	1	1	1	1	0	0	1	1	1	0	1	1	0	11	High
2022-V Akron-011	Clear debris from drainage waterways	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.3-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Akron-012	Protect village electrical facilities																
2022-V Akron-013	Waterline upgrade	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.3.9 Action Worksheets

The following action worksheets have been developed by the Village of Akron to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Akron Action Worksheet			
Project Name:	Protect the village municipal building by installing a backup generator.		
Project Number:	2022-V Akron-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. Village Hall lacks backup generator power. The Police Department is housed in the Hall and does bookings and arrests in the Hall. The facility houses emergency management functions.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will research what size generator is necessary to supply backup power to the Village Hall. The village will then install a backup power generator and necessary electrical components.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protection from power failures	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of critical facilities from the village facilities
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	TBD per engineer's feasibility assessment/$50,000 estimate	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediately after funding received
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Village DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the village municipal building by installing a backup generator.	
Project Number:	2022-V Akron-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of the Village Hall
Property Protection	1	Project will protect Village Hall from power loss
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	1 year
Agency Champion	1	Village Public Works Department, Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Akron Action Worksheet			
Project Name:	Protect the Village Fire Hall to the 0.2% annual chance flood event		
Project Number:	2022-V Akron-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Akron Fire Hall is in the SFHA, exposed to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will conduct a feasibility study to determine and implement best action to protect the Akron Village Fire Hall. The Fire Department will then implement these mitigation measures. The Fire Department will coordinate with the USACE regarding creekbank erosion.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the Fire Hall
Useful Life:	20 years	**Goals Met:**	2
Estimated Cost:	$50,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediately after funding received
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Village Fire Company, Village Board,	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Village Fire Hall by installing a backup generator.	
Project Number:	2022-V Akron-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of the Village Fire Department
Property Protection	1	Project will protect Village Fire Department from power loss
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	Village Public Works Department, Fire Department, Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 42-Section-9.3-Akron-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.4 Town of Alden

This section presents the jurisdictional annex for the Town of Alden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Alden's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.4.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Alden's hazard mitigation plan primary and alternate points of contact. The Town of Alden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: the supervisor and code enforcement official. The supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.4-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Dean Adamski, Town Supervisor Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x3 Email: aldensuper@yahoo.com	Name/Title: Colleen Rogers, Deputy Supervisor Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x3 Email: aldensuper@yahoo.com
NFIP Floodplain Administrator	
Name/Title: Christopher Snyder, Code Enforcement Officer Address: 3311 Wende Rd, Alden, NY 14004 Phone Number: (716) 937-6969 x4 Email: building@erie.gov	

9.4.2 Municipal Profile

The Town of Alden is located on the eastern border of Erie County and was formed from the larger Town of Clarence. The town incorporated in 1823. The Town of Newstead forms the town's northern boundary. The Town of Darien (Genesee County) lies to the east and the Town of Marilla and a portion of the Town of Bennington in Wyoming County form the town's southern border. Within the Town of Alden is the Village of Alden which incorporated in 1869. The town contains several unincorporated hamlets and remains a mostly rural community. The town's surface topography is nearly flat in northern portions while the south portion is gently undulating. Ellicott Creek and Cayuga Creek flow through the town.

The town and village were once famous for the "black water" baths. Mineral rich "black water" was discovered while drilling for natural gas in 1891. Many of the earliest patrons of these "black water baths" were immigrants

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

from Europe. According to the U.S. Census, the 2010 population for the Town of Alden was 8,260. The estimated 2019 population was 7,418, a 9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 2.8 percent of the population is 5 years of age or younger and 16.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.4.3 Jurisdictional Capability Assessment and Integration

The Town of Alden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.4.3). The Town of Alden's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Alden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.4-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 109 (Building Code Administration)	Local	Building Department
Comment: This chapter is adopted in order to promote the health, safety and the general welfare of the inhabitants of the Town of Alden by regulating the occupancy and maintenance of homes.					
Zoning Code	Yes	No	Chapter 365 (Zoning)	Local	Building Department
Comment*: Goals: 1) Promote and protect to the fullest extent permissible the environment of Alden and its public health, safety, convenience, comfort, prosperity and the general welfare. 2) The purpose of the Wellhead Protection Area (WPA) is, in the interest of public health, safety and general welfare, to preserve the quality and quantity of groundwater resources in order to ensure a safe and healthy drinking water supply.* *Actions: 1) All individual lots shall be graded in a manner which will avoid surface water runoff on adjacent lots, divert water away from buildings, and prevent standing water and soil saturation detrimental to structures and lot use. E. Conform to the general storm drainage pattern for the area. 2) Site plan shall include a detailed description of the proposed development's impact on groundwater quality.*					
Subdivision Ordinance	Yes	No	Chapter 365 (Zoning), Article VI (Subdivision Clusters); Chapter	Local	Planning Board

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
			A374 (Land Subdivision Regulations)		
Comment: *This article of the zoning code is intended to promote imaginative, well-designed subdivisions which preserve open space, respect the physical qualities of the land and reduce overall development costs. It is municipal policy to consider the subdivision of land and the subsequent development of the subdivided plat as subject to the control of the municipality pursuant to the official Master Plan of the municipality for the orderly, planned, efficient, and economical development of the municipality.*					
Stormwater Management Ordinance	Yes	Yes	Chapter 300 (Stormwater Management and Erosion and Sediment Control)	Local	Town of Alden DPW
Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within the town. The objectives of this chapter include: • *Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-15-003, or as amended or revised;* • *Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-0-15-002, or as amended or revised* • *Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* • *Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* • *Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* • *Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.*					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".					
Growth Management	No	-	-	-	-
Comment:					
Site Plan Review	Yes	No	Updated in 2018 365-68	Local	Town Engineer
Comment*: The purpose of these supplemental regulations is to promote the health, safety and general welfare of the residents of the Town, to provide standards for the safe provision of telecommunications consistent with applicable federal and state regulations and to protect the natural features and aesthetic character of the Town of Alden.*					
Environmental Protection Ordinance	Yes	Yes	2018 A374-8 Chapter 198.	Local	Town Engineer
Comment: *The preservation and improvement of the quality of the natural and man-made environment within the Town and Village of Alden, in the face of population growth, urbanization and technological change with their accompanying demands on natural resources, are found to be of increasing and vital importance to the health, welfare and economic well-being of present and future inhabitants and require forthright action by the governing body of the Town of Alden. It is recognized that the biologic integrity of the natural environment of which man is dependent for survival and the natural and functional beauty of our surroundings which condition the quality of our life experience cannot be protected without the full cooperation and participation of all of the people of the Town of Alden, working in partnership with local and state officials and with various public and private institutions, agencies and organizations. Establishment of the Commission for Conservation of the Environment is a necessary step in fostering unified action on environmental problems.*					

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 198 (Flood Damage Prevention)	Local	Town Building officer
Comment: The purpose of this chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: • *Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* • *Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* • *Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* • *Control filling, grading, dredging and other development which may increase erosion or flood damages;* • *Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* • *Qualify for and maintain participation in the National Flood Insurance Program.* *The Code Enforcement Officer is identified as the local administrator to administer and implement this chapter. Responsibilities include: permit application review; use of flood data; notifications; construction inspections; issuing certificate of compliance; and retaining information.* *Any development within the floodplain must apply for a floodplain development permit. The chapter requires all new development or substantial improvements of structures in the floodplain be elevated to BFE+2 feet.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Ch. 293-2 Updated 2018	Local	Town of Alden DPW
Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Alden through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems.					
Emergency Management Ordinance	No	-	-	-	-
Comment:.					
Climate Change Ordinance	No	-	-	-	-
Comment:					
Disaster Recovery Ordinance	No	-	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Reviewed and updated 2018	Local	Alden Town Board
Comment: The Comprehensive Plan includes the following statements guiding the municipal plan. *1) Promote the protection of floodplains and environmentally significant wetland areas, minimize negative impacts of erosion, sedimentation and storm drainage on natural resources. 2) Create an Aquifer overlay district to focus on protection of groundwater resources. 3) Promote programs to identify and mitigate failing septic systems and explore potential grant opportunities to assist local residents in remedying failing systems. 4) Work with the Cooperative Extension and Erie County Soil and Water District to educate and promote the minimization of non-point source pollution. 5) Support and sponsor educational opportunities on groundwater protection and septic system maintenance.*					
Capital Improvement Plan	No	-	-	-	-

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Disaster Debris Management Plan	No	-	-	-	-
Comment:					
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No	-	-	-	-
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	No	-	-	-	-
Comment:					
Shoreline Management Plan	No	-	-	-	-
Comment:					
Community Wildfire Protection Plan	No	-	-	-	-
Comment:					
Forest Management Plan	No	-	-	-	-
Comment:					
Transportation Plan	No	-	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment:					
Agriculture Plan	No	-	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	County Emergency Plan	Local	Emergency Management Coordinator
Comment: The County maintains an emergency management plan that includes the town of Alden.					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment:					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Alden to oversee and track development.

Table 9.4-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Tracked by floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Alden and their current responsibilities which contribute to hazard mitigation.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.4-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Zoning Board	Yes	Zoning Board of Appeals conducts oversight of development. The Zoning Board of Appeals is a quasi-judicial body comprised of local citizens appointed by the Alden Town Board. The function of the Board is to hear appeals and grant relief from the strict application of the Town of Alden zoning regulations.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Economic Development Committee of Planning - The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Public Works/Highway Department	Yes	Highway Department - The Highway Department is the most visible service agency in town government. From snowplowing in the winter, to street paving, brush removal, leaf collection, park maintenance and drainage projects during the remainder of the year, this department is deeply involved and committed to the lives of Alden residents.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/ Building Officer
Emergency Management/Public Safety Department	Yes	Emergency Manager - The Alden Office of Emergency Management (OEM) provides emergency mitigation, preparedness, response and recovery services to the Town & Village of Alden. OEM leads the development and maintenance of the Comprehensive Emergency Management Plan, which encompasses all natural and man-made disasters and provides a basis for the development of programs and procedures to save lives and minimize disaster damage. Alden OEM manages the town & village Emergency Operations Center (EOC) during large scale disasters and events. During a disaster the EOC coordinates all response activities within the Town and Village, including Governmental Operations, Public Works/Highway, Fire/EMS. All of this is done through a Unified Command Network. Following a disaster or large-scale event OEM coordinates all recovery activities. Alden OEM actively participates in many preparedness programs such as, hazards analysis studies, maintaining a special needs registry, emergency planning for the Town & Village including all special events, training drills/exercises. OEM staff is also available to give presentations on emergency preparedness to your association, civic group, business or faith community.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Ready Erie
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Highway Department is responsible for snow clearing, street paving, removing brush, collecting leaves, and completing drainage projects.
Mutual aid agreements	Yes	Fire Department

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board - The Planning Board made up of local citizens appointed by the Alden Town Board. The Board serves in an advisory capacity to the Alden Town Board on matters concerning subdivisions of land, site use plans, home occupancy permits, special use permits and the rezoning of property.
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Management Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Alden.

Table 9.4-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Alden.

Table 9.4-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor
Personnel skilled or trained in website development	Yes	Clerk – as needed
Hazard mitigation information available on your website	Yes	Office of Emergency Management Page
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Alden

Table 9.4-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	3/7/2020
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.4-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Strong
Flood	Strong
Hazardous Materials	Strong – plan in place
Landslide	Strong
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.4.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Christopher Snyder, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Alden.

Table 9.4-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Alden	9	19	$187,358	4	0

Source: *July and September, 2021 NFIP Data.*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

Southern portions of the town have in recent years previously experienced flooding due to ice melt. In general, the town is not prone to flooding. The town does not maintain a list of properties interested in flood mitigation but works with individual property owners as needed. There are no RiskMAP projects underway at this time. Building/ code inspector is designated to determine substantial damage determinations. No properties have been mitigated or elevated over the years and the town is thus not significantly prone to flooding. The flood maps are an accurate representation of existing floodplains.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The building/code inspector and town engineer are responsible for floodplain management. No certified floodplain managers are on staff within the town. The town has limited resources to address conditions to climate change. The town does not need any assistance for training or support at this time due to limited concerns around flooding in the community. The NFIP administrator reviews permits and conducts inspections as needed to reduce risk to building in hazard areas. The assessor and building inspector determine improvement value to determine substantial improvements. The town does not have any outstanding NFIP violations. The Town of Alden had a Community Assistance Call (CAC) on May 11, 2010 and a Community Assistance Visit (CAV) on September 11, 2020. The Flood Damage Prevention Ordinance is Chapter 198 local law #2 last updated in 2019.

9.4.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Alden has identified the following routes and procedures to evacuate residents prior to and during an event.

- Broadway St., Genesee Street, Walden Avenue

Sheltering

The Town of Alden has identified the following designated emergency shelters within the town.

Table 9.4-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Line Church	1159 Town Line Rd, Alden, NY	100	Unknown	Yes	Yes	First AID kit, AED	Food/ Beverage Service

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Alden has identified the following sites suitable for placing temporary housing units.

Table 9.4-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Hall Parking Lot	3311 Wende	50 acres	Parking Lot/ Open Space	All	None
Fire Company Parking Lot	Various Locations	100 acres	Parking Lot/ Open Space	All	None

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Alden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.4-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Alden Town Park	Along Rt. 20	30	Park	All	Acquisition

9.4.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.4-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.4-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	6	0	6	0	5	0	8	0	7	0	12	0
Multi-Family	0	0	0	0	0	0	1	0	1	0	3	0
Other (commercial, mixed-use, etc.)	0	0	0	0	1	0	0	0	0	0	0	0
Total Permits Issued	**6**	**0**	**6**	**0**	**6**	**0**	**9**	**0**	**8**	**0**	**15**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None identified					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.4.7 Jurisdictional Risk Assessment

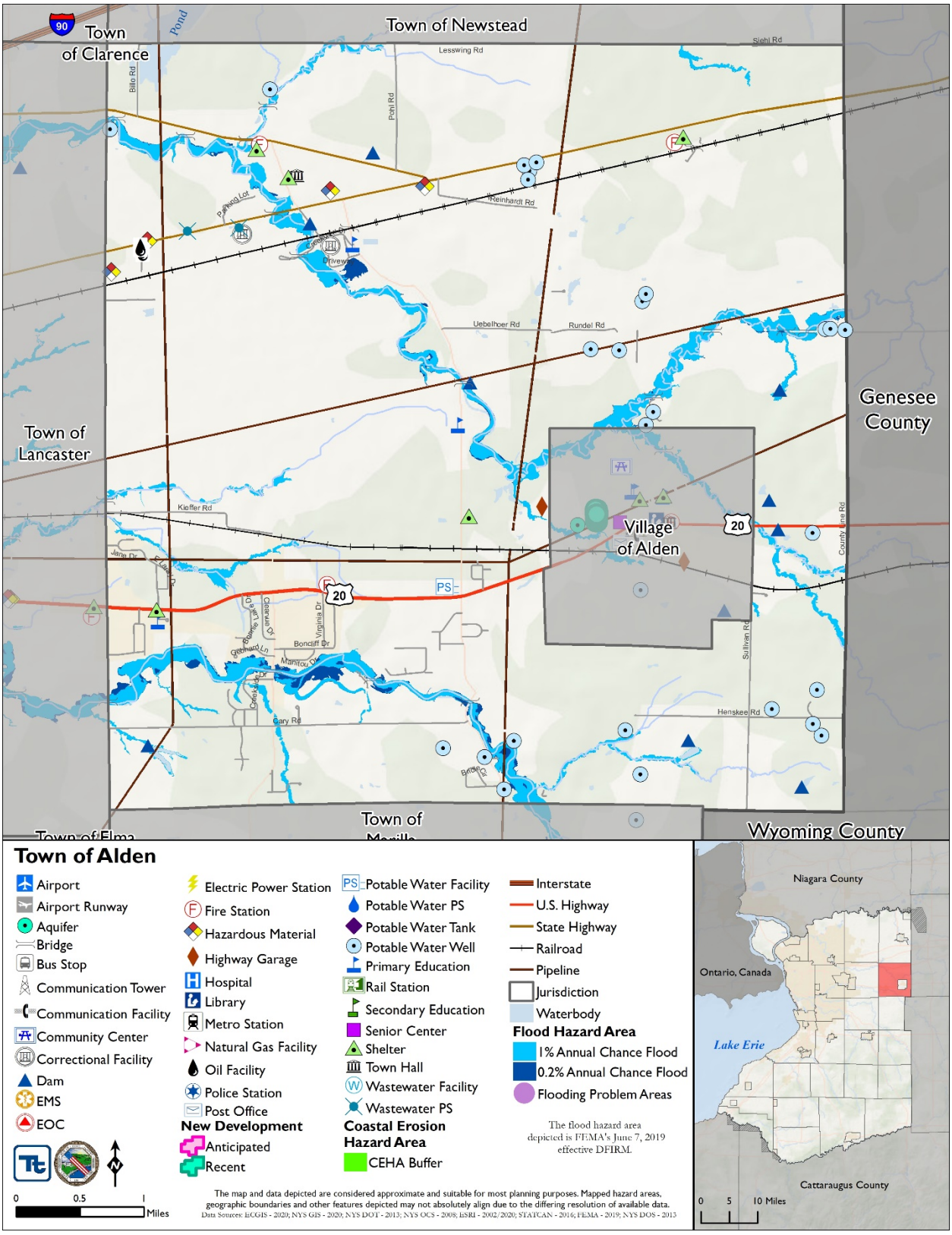
The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Alden's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Alden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

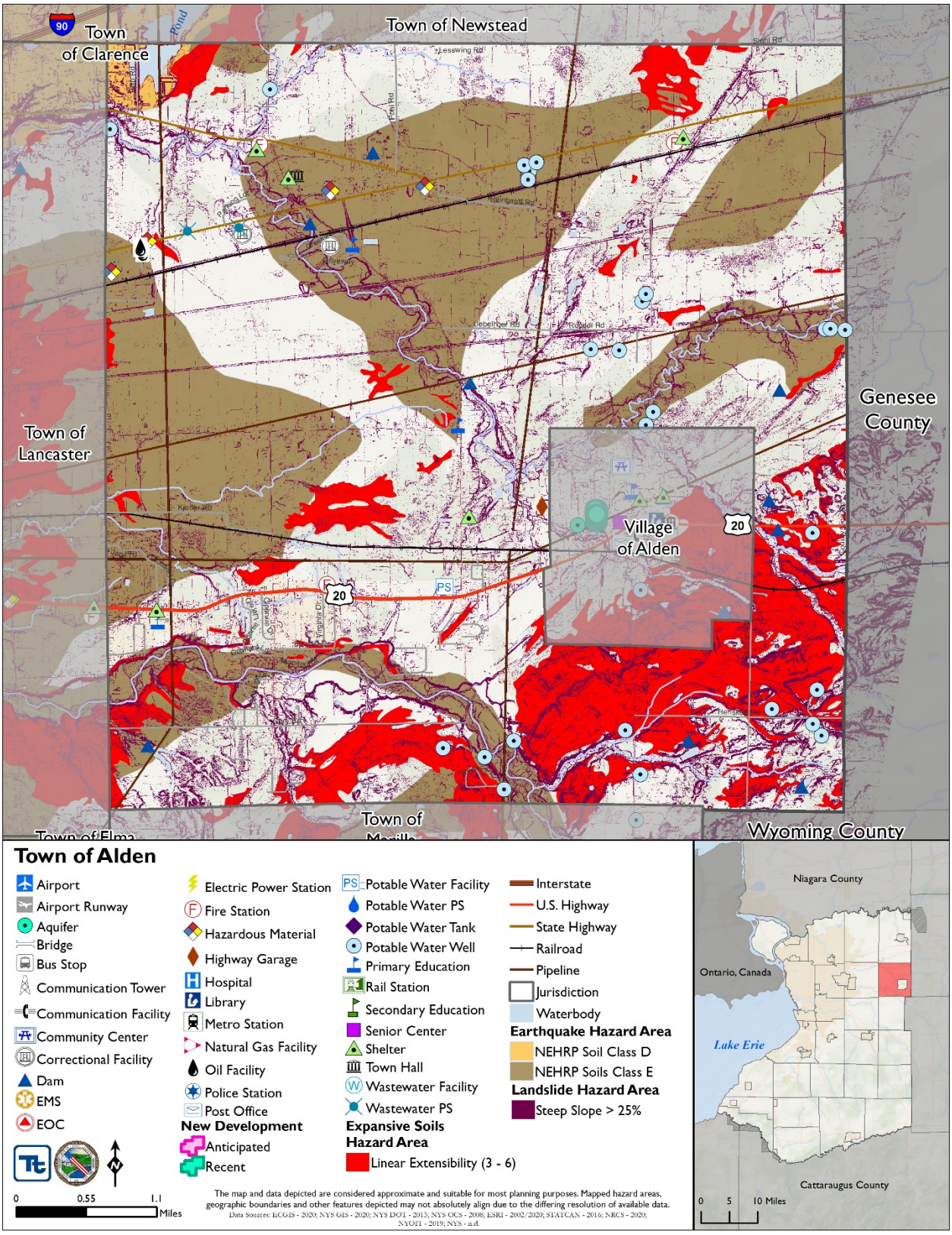
Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.4-1. Town of Alden Hazard Area Extent and Location Map 1



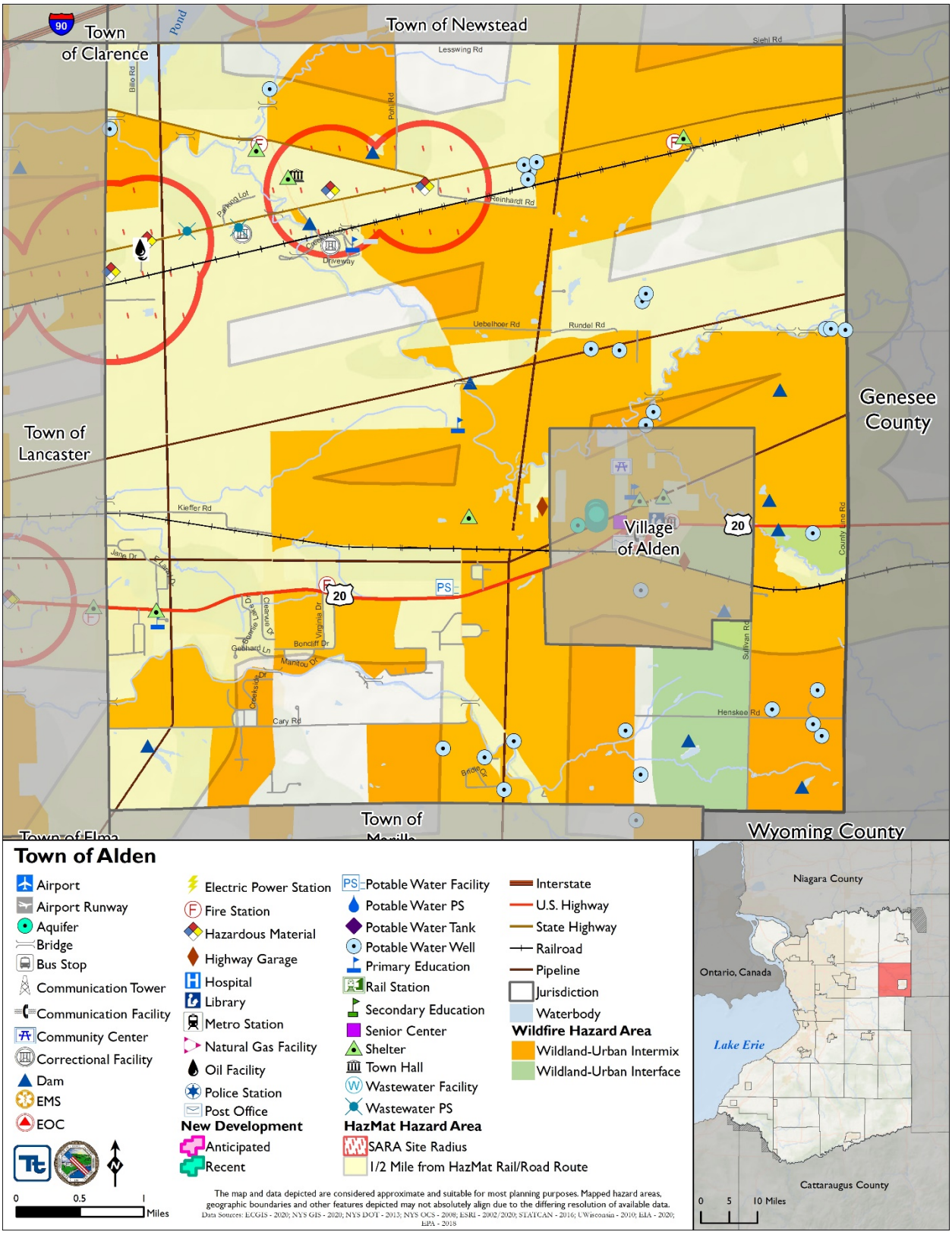
Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.4-2. Town of Alden Hazard Area Extent and Location Map 2



Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.4-3. Town of Alden Hazard Area Extent and Location Map 3



Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Alden's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.4-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.4-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Flooding from ice accumulation
December 24-29, 2017	Lake-effect Snow	No	Flooding from ice accumulation
January 2, 2018	Blizzard	No	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
2020-21	COVID 19	Yes	Various Losses

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Alden's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Alden. The Town of Alden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town agreed with the following hazard rankings.

- The town indicated that earthquakes are a rare occurrence and thus should be re-ranked from high to low.
- Flooding, given its common issues across the region has been reranked from low to medium.
- Severe storm and Utility Failure are all interconnected and thus have been ranked based on frequency of events from high to medium.
- Severe winter storms are especially common and have been re-ranked as high.
- Wildfires do not occur in the town and thus have been re-ranked from high to low.

Table 9.4-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Medium	Low

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	High	Medium	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.4-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Vranic Dam	Dam	X	X	2022-Town of Alden-001

Source: 2021 GIS

Identified Issues

After review of the Town of Alden's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Alden has identified the following vulnerabilities within their community:

- The Vranic Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Hugenschmidt Marsh Dam, NY Central Railroad Company Dam, Warren Bippert Pond Dam, 7-Eleven Store #35254, Alden HazMat Facility, United Precious Metal Refining, Inc., Griffith Energy Inc., and Saint John the Baptist School are in the earthquake hazard area.
- The Alden Rod & Gun Club Dam, Fr Strate Pond Dam, Hugenschmidt Marsh Dam, Nathan Sweet Marsh Dam, Vranic Dam, Walden Roberts Dam, and the Alden Mennonite Church are located in the wildfire hazard area.
- The Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall may be at risk of being exposed to hazardous materials incidents.
- Public and private facilities may be at risk from off-site hazardous materials incidents.
- The Hugenschmidt Marsh Dam, Bippert Pond Dam are located on steep slopes and may be at risk of landslides.
- The Fr Strate Pond Dam and Nathan Sweet Marsh Dam (public) may be at risk of experiencing damages caused by expansive soils.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The Town Highway Department has a generator that is under capacity for the facility. The Town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event.
- The town will designate the town hall as an additional emergency shelter as the existing church facility might not meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- Lack of resources to address impacts from climate change.

9.4.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.4-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Meeting with NYSEG about possibility of adding second transmission line to local substation	All Hazards	Not Identified	Emergency Management	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	Low High Energy Security	1. Discontinue 2. 3. Complete.
2	Support and fund CERT programs that include a mitigation component	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing.
3	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing.
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Code Enforcement	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	Low High Compliance	1. Discontinue 2. 3. Complete
5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Code Enforcement	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Not relevant.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Alden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Various culvert rightsizing projects across the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Alden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.4-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	-	-	-	-	X	X
Cyber Attack	-	X	-	-	-	-	-	-	X	X
Earthquake	-	X	-	X	X	-	X	-	X	X
Expansive Soils	-	X	-	-	-	-	-	-	X	X
Extreme Temperature	-	X	-	-	-	-	-	-	X	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	-	X	-	X	-	-	X	-	X	X
Landslide	-	X	-	X	-	-	X	-	X	X
Pandemic	-	X	-	-	-	-	-	-	X	X
Severe Storm	-	X	-	-	-	-	-	-	X	X
Severe Winter Storm	-	X	-	-	-	-	-	-	X	X
Utility Failure	-	X	-	-	-	-	-	-	X	X
Wildfire	-	X	-	X	-	-	X	-	X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.4-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Alden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.4-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.4-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-001	Dam Flood Control	All	Flood	**Problem**: The Vranic Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of Alden-002	Earthquake Structure Evaluation	All	Earthquake	**Problem**: The Hugenschmidt Marsh Dam, NY Central Railroad Company Dam, Warren Bippert Pond Dam, 7-Eleven Store #35254, Alden HazMat Facility, United Precious Metal Refining, Inc., Griffith Energy Inc., and Saint John the Baptist School are in the earthquake hazard area. **Solution**: Conduct outreach and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.	Yes	None	Within 6 months for outreach	Town of Alden	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential earthquake damage	Town Budget	High	EAP	PI

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-003	Work with the private facility owners to protect the facilities from wildfires	All	Wildfire	**Problem:** The Alden Rod & Gun Club Dam, Fr Strate Pond Dam, Hugenschmidt Marsh Dam, Nathan Sweet Marsh Dam, Vranic Dam, Walden Roberts Dam, and the Alden Mennonite Church are located in the wildfire hazard area. **Solution:** Work with property owners and conduct outreach to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities.	Yes	None	Within 6 months for outreach	Town Budget	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Alden-004	Protect the following facilities from HazMat incidents: Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall	1,2	Hazardous Materials Incidents	**Problem:** The Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	Town of Alden	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	SIP	SP

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-005	Protect public and private facilities from off-site hazardous materials incidents	1,2	Hazardous Materials Incidents	**Problem:** Public and private facilities may be at risk from off-site hazardous materials incidents. **Solution:** Work with public and private organizations in the town to develop emergency plans for responding to an off-site hazardous materials incident.	Yes	None	Within 6 months for outreach	Town of Alden	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	SIP	SP
2022-Town of Alden-006	Work with Hugenschmidt Marsh Dam, Warren Bippert Pond Dam, and Alden Mennonite Church to protect them from landslides	All	Landslide	**Problem:** The Hugenschmidt Marsh Dam, Bippert Pond Dam are located on steep slopes and may be at risk of landslides. **Solution:** Conduct outreach and Work with the facility owner to determine if landslide risk exists and to assess the structure and determine necessary mitigation measures to protect it from landslides.	Yes	None	Within 6 months for outreach	Town of Alden	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential landslide damage	Town Budget	High	EAP	PI
2022-Town of Alden-007	Protect the following facilities from expansive soils: Fr Strate Pond Dam and Nathan Sweet Marsh Dam	1,2	Expansive Soils	**Problem:** The Fr Strate Pond Dam and Nathan Sweet Marsh Dam (public) may be at risk of experiencing damages caused by expansive soils. **Solution:** Conduct outreach and work with the facility owners to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.	Yes	None	Within 6 months for outreach	Town of Alden	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the dams from expansive soils	Town Budget	High	EAP	PI

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Alden-008	Floodplain Management Training	3	Flood	**Problem:** Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. **Solution:** Obtain/host training and certification for floodplain managers.	No	None	Within 5 years	Erie County Emergency Management	$3,000	Certified floodplain managers trained Floodplain management improved.	County budget	High	LPR	PR
2022-Town of Alden-009	Generator installation for Highway Building	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Failure	**Problem:** The Town Highway Department has a generator that is under capacity for the facility. The Town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event. **Solution:** The town will install a new generator that meets energy requirements of town. The town engineer will determine the needs of the facility and provide guidance as to what type of generator the town would purchase and where the equipment would be installed by the municipal engineer and maintained by the DPW, accordingly.	Yes	No	Within 2 years	Town of Alden Engineer	$100k	Continued operation of facility at all times	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Town of Alden-010	Emergency Shelter Designation	1,2	All	**Problem:** The town will designate the town hall as an additional emergency shelter as the existing church facility might not	Yes	No	5 years	Town Board	$100k-1 million	Meet emergency shelter needs of town	HMGP, FEMA HMGP and BRIC, USDA Community Facilities Grant Program,	High	SIP	SP, ES

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter. **Solution:** The town shall conduct a feasibility study to determine the needs of the existing facility to initiate the process of redeveloping the new town hall. This study shall address, backup power needs, heating/ cooling/ existing infrastructure, utility vulnerability, supply needs and storage, and medical supply needs. The facility will also need to be structurally examined and redesigned to safely accommodate residents during hazard events. Ultimately, these finding will be implemented over the following years.							Emergency Management Performance Grants (EMPG) Program, Municipal Budget			
2022-Town of Alden-011	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners,	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.4-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Alden-001	Work with the Vranic Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2022-Town of Alden-002	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	0	1	1	1	0	0	1	1	1	11	High
2022-Town of Alden-003	Work with the private facility owners to protect the facilities from wildfires	1	1	1	1	1	0	1	1	1	0	0	1	1	1	11	High
2022-Town of Alden-004	Protect the following facilities from HazMat incidents: Alden Fire Station, Crittendon Fire Station, Millgrove Volunteer Fire Station, and Alden Town Hall	1	1	1	1	1	1	-1	1	1	1	0	0	0	1	9	High
2022-Town of Alden-005	Protect public and private facilities from off-site hazardous materials incidents	1	1	1	1	1	1	-1	1	1	1	0	0	0	1	9	High
2022-Town of Alden-006	Work with Hugenschmidt Marsh Dam, Warren Bippert Pond Dam, and Alden Mennonite Church to	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	protect them from landslides																
2022-Town of Alden-007	Protect the following facilities from expansive soils: Fr Strate Pond Dam and Nathan Sweet Marsh Dam	1	1	1	1	1	1	-1	1	1	1	1	0	0	1	10	High
2022-Town of Alden-008	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Town of Alden-009	Generator installation for Highway Building	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Alden-010	Emergency Shelter Designation	1	1	1	0	0	0	-1	1	1	1	1	1	1	1	9	High
2022-Town of Alden-011	Residential Property Flood Mitigation.	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.4.9 Action Worksheets

The following action worksheets have been developed by the Town of Alden to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Generator installation for Highway Building		
Project Number:	2022-Town of Alden-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	Town Highway Department has a generator that is under capacity for the facility. The town Highway Garage is a critical facility needed during all hazard events and with an unreliable energy source, the town is unable to meet town demand to provide service during emergency event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install a new generator that meets energy requirements of town. The town engineer would need to determine the needs of the facility and provide guidance as to what type of generator the town would purchase and where the equipment would be installed.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program, Add in Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Engineer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Generator installation for Highway Building	
Project Number:	2022-Town of Alden-009	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm, Utility Failure
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Emergency Shelter Designation.		
Project Number:	2022-Town of Alden-010		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The town would like to designate the town hall as an additional emergency shelter as the existing church facility might not meet the demand of the town during a hazard event. However, the town hall, in its current state, is not equipped and prepared to be an emergency shelter.		
Action or Project Intended for Implementation			
Description of the Solution:	The town shall conduct a feasibility study to determine the needs of the existing facility to initiate the process of redeveloping the new town hall. This study shall address, backup power needs, heating/ cooling/ existing infrastructure, utility vulnerability, supply needs and storage, and medical supply needs. The facility will also need to be structurally examined and redesigned to safely accommodate residents during hazard events. Ultimately, these finding will be implemented over the following years.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Development of new emergency facility
Useful Life:	35 years	**Goals Met:**	1, 2
Estimated Cost:	1 million dollars	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP
Responsible Organization:	Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation and preparedness

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Designate City of Buffalo shelters as town shelters	Low	Too far away
	Develop emergency shelter	High	Best option in the long run

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Emergency Shelter Designation.	
Project Number:	2022-Town of Alden-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project saves lives
Property Protection	1	This project can protect property
Cost-Effectiveness	1	This is cost effective in the long run
Technical	0	Technical issues have not yet been determined
Political	0	Political issues have not been identified
Legal	0	There can be some unclear legal issues
Fiscal	-1	There are inadequate financial resources
Environmental	1	There are no environmental issues with this project
Social	1	This has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses all hazards of concern
Timeline	1	This timeline is feasible
Agency Champion	1	The town board
Other Community Objectives	1	This contributes to the community's goal to become a safer place
Total	9	
Priority (High/Med/Low)	High	

Attachment: 43-Section-9.4-Alden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.5 Village of Alden

This section presents the jurisdictional annex for the Village of Alden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Alden's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.5.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Alden's hazard mitigation plan primary and alternate points of contact. The Village of Alden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Office of Emergency Management, Mayor, and Code Enforcement. The Office of Emergency Management Coordinator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.5-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark Pruitt, Office of Emergency Management Coordinator Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 380-1593 Email: map1sultan@aol.com	Name/Title: Michael Manicki, Mayor Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 937-9216 x112 Email:aldenmayor@rochester.rr.com
NFIP Floodplain Administrator	
Name/Title: Joseph Czechowski, Code Enforcement Officer Address: 13336 Broadway, Alden, NY 14004 Phone Number: (716) 937-9216 x121 Email: ceojoe@rochester.rr.com	

9.5.2 Municipal Profile

The Village of Alden is located approximately 15 miles east of downtown Buffalo and is 2.5 square miles in area. The village incorporated in 1869 and is located entirely within the Town of Alden. Residential and commercial development in the village is concentrated around the central business district, with open space remaining in the north and south portions of the village (Village of Alden 2021). Ellicott Creek runs through the village.

The Village of Alden was once famous for its black water baths. Mineral rich "black water" was discovered while drilling for natural gas in 1891. Many of the earliest patrons of these "black water baths" were immigrants from Europe who knew about "the waters" of Europe.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

According to the U.S. Census, the 2010 population for the Village of Alden was 2,605. The estimated 2019 population was 2,577, a one percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 17.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.5.3 Jurisdictional Capability Assessment and Integration

The Village of Alden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.5.3). The Village of Alden's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Alden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.5-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 78 (Building Construction and Fire Prevention); adopted 2003	Local	Village Code Enforcement
Comment: *The goal and purpose for the building code are as stated: the protection of property, the preservation of property values and the elimination of fire, safety and health hazards. It is the purpose of this chapter to provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Alden. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.*					
Zoning Code	Yes	No	Chapter 210 and 211 (Zoning); adopted 2003	Local	Village Planning
Comment: *The goal and purpose for the building code are as stated: 1) Promote and protect to the fullest extent permissible the environment of the village and its public health, safety, convenience, comfort, prosperity and the general welfare. 2) Limit development on flood-prone lands abutting Ellicott Creek and its tributaries in order to enable Ellicott Creek to carry and store its maximum amount of water without restrictions; prevent encroachments on its floodplain; prevent any increased threat to health, safety and property to the immediate area as well as to those downstream; and protect the water quality and general ecology. 3) Allow for Planned Unit Developments (PUD) in the*					

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
zoning code in order to conserve land, permit more usable open space for recreation, community activities and the preserve natural features including such features as trees or outstanding or unique natural topography, including marshlands and other geological features. 1) No structure, fill, deposit, obstruction, excavation, storage of materials or other use shall be permitted in the conservation district which would adversely affect the efficiency or storage capacity of the floodplain or which would tend to increase flood heights. 2) No structure for human habitation shall be permitted in the conservation district. 3) A PUD plan must include the existing site conditions, including property lines, contours at five-foot intervals, watercourses, drainage ditches in the village storm drainage system, 100-year floodplains, unique natural features, wetlands, tree cover, soil information and evaluation for the uses proposed, and the existing and proposed major storm drainage system including direction and quantity of flow. 4) A PUD must include a tracing overlay showing all soil areas and their stratification and those areas, if any, with moderate to high susceptibility to ponding or flooding and moderate to high susceptibility to erosion. For areas with potential erosion problems, the overlay shall also include an outline and description of existing vegetation and the program to be undertaken to correct potential erosion problems.					
Subdivision Ordinance	Yes	No	Chapter 181 (Subdivision of Land); adopted 2003	Local	Village Board
Comment: *The goal and purpose for the building code are as stated: 1) Preliminary plat approval for a major subdivision: Particular attention shall be given to the arrangement, location and width of streets and their relation to the topography of the land, water supply, sewage disposal, drainage, lot sizes and arrangement, and the future development of adjoining lands as yet unsubdivided. Each element must adhere to the requirements of the Master Plan, the Official Map11 and zoning regulations, if such exist. 2) Subdivider must install sanitary sewer lines, storm sewer lines, water mains and fire hydrants, aboveground drainage facilities, i.e., ditch, swale, sluiceway, etc.*					
Stormwater Management Ordinance	Yes	Yes	Chapters 175 and 176 (Stormwater Management); adopted 2007	Local	Village Board
Comment: *The goal and purpose for the building code are as stated: 1) Establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. 2) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels. 3) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality. 4) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable. 5) Reduce stormwater runoff rates and volumes, soil erosion, and nonpoint source pollution through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. A Site map/construction drawing(s) for the project will include a general location map; show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent offsite surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s).*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *The goal and purpose for the building code are as stated: Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	Yes	-	-	-
Comment:					
Site Plan Review	Yes	No	Local Law No. 1-2012	Local	Village Board
Comment: *The purpose of these supplemental regulations is to promote the health, safety and general welfare of the residents of the Village, to provide standards for the safe provision of telecommunications consistent with applicable federal and state regulations and to protect the natural features and aesthetic character of the Village of Alden.*					
Environmental Protection Ordinance	Yes	Yes	Local Law No. 1-2012	Local	Environmental Conservation Commission
Comment: *The goal and purpose for the building code are as stated: 1) Establish a commission for conservation of the environment that will advise the Board of Trustees and the Mayor on matters affecting the preservation, development, and use of the natural and man-made features and conditions of the Village of Alden. 2) Maintain an up-to-date inventory or index of all open spaces in public and private ownership within the municipality, including but not limited to natural landmarks,*					

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
glacial and other geomorphic or physiographic features, streams and their floodplains, swamps, marshland and other wetlands, unique biotic communities, scenic and other open areas of natural or ecological value, and of the ownership, present use and proposed use of such open areas, so as to provide a base of information for recommendations by the Commission for their preservation and/or use.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 105 (Flood Damage Prevention)	Local	Building Code Enforcement
Comment: *The Board of Trustees of the Village of Alden finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Village of Alden and that such damages may include destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages, this chapter is adopte*d. *BFE+2 feet for all construction in the SFHA (residential and non-residential)*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 176 (Stormwater Management – Illicit Discharge)	County	County SWCD
Comment: *1) To prohibit Illicit Connections, Activities and Discharges to the MS4. 2) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.*					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	Yes	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other: Building Construction and Fire Prevention	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Village of Alden 2015 Comprehensive Plan	Local	Planning
Comment: *1) Preserve and protect lands that serve as important natural drainage channels, maintain a quality infrastructure system and a safe and efficient transportation network that appropriately serves the needs of the community. Promote intra-community cooperation to protect the quality of the sole source groundwater aquifer. 2) Participate in watershed protection programs that affect the village. 3) Minimize the use of road salt and utilize alternatives for roadway de-icing to protect surface and groundwater quality. 4) Identify Ellicott Creek as part of a stream corridor of regional significance and identify means to preserve and enhance this stream corridor. 5) Limit the amount and type of development that can occur within floodplains. 6) Minimize the negative impacts of erosion, sedimentation, and storm drainage on natural resources. 7) Upgrade storm drainage in areas that experience flooding problems. 8) Develop a contingency plan to provide for future inter-municipal connections with the Erie County Water Authority to enhance public safety options in the event such emergency need should arise. 9) Ensure proper maintenance of storm drainage appurtenances to prevent recurrent flooding under the viaduct on Broadway.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment:					
Response/Recovery Planning					

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	Yes	Alden Comprehensive Emergency Management Plan	Local	OEM Coordinator
Comment: *The Alden Office of Emergency Management (OEM) provides emergency mitigation, preparedness, response and recovery services to the Town & Village of Alden. OEM leads the development and maintenance of the Comprehensive Emergency Management Plan, which encompasses all natural and man-made disasters and provides a basis for the development of programs and procedures to save life's and minimize disaster damage.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Alden to oversee and track development.

Table 9.5-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The Building Department and Code Enforcement Officer are responsible for reviewing building permit applications and approving.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Alden and their current responsibilities which contribute to hazard mitigation.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.5-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Village of Alden Planning Board is responsible for the review and approval of all applicable subdivisions of land within the Village of Alden. The Planning Board reviews applications for site plan approval, special permits, and rezoning requests. The Planning Board provides recommendations to the Village of Alden Board of Trustees for these types of projects. The Planning Board reviews and maintains the Village of Alden Master Plan.
Zoning Board of Adjustments	Yes	The Village of Alden Zoning Board of Appeals is responsible for hearing area and use variance requests. Typically, a variance is sought from an applicant who cannot meet the requirements of the Zoning Code of the Village of Alden.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Recognizing the need to address the subject of economic development and its role in helping the Alden community deal with growth pressures, the Alden Economic Development Committee was formed in 2004. The Committee is represented by members of both Town and Village Boards, the Alden Chamber of Commerce, Alden School District and local business and civic leaders. Funding for the operation of the Committee is shared by the Town of Alden, Village of Alden and the Chamber of Commerce, based upon a mutually agreed upon budget. Pursuant to the obvious need to be proactive in embracing economic growth issues, the Alden Economic Development Committee has been formed to aid the committee and its leaders in addressing pertinent alternatives, as they arise. Also in progress, are several new programs designed to enable Town and Village officials to play the significant leadership roles and guidance needed to balance the need for economic growth with the equal emphasis on the character and tradition of the Alden community. Interested parties and potential project sponsors for the economic development future of Alden are encouraged to contact the village/town or chamber to begin the process.
Public Works/Highway Department	Yes	The Village of Alden Department of Public Works started in 1897 with the organization of a Board of Water Commissioners. From that beginning, the department has expanded to provide a wide variety of services to the Village. Currently the Department of Public Works is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees.
Construction/Building/Code Enforcement Department	No	The Village of Alden Building Department, under the direction of the Code Enforcement Officer, is responsible for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code, as well as Zoning, Subdivision, and other laws and ordinances provided for in the Code of the Village of Alden.
Emergency Management/Public Safety Department	Yes	Presently 50 plus members serve in the Alden H&L FC and the company operates three pumpers, a 75' aerial - pumper, one rescue

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		truck, two ambulances and a water rescue truck complete with a 15' rescue boat and trailer. The members are led by a Fire Chief and three Assistant Chiefs.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW staff – the department is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	DPW staff - The Village of Alden Department of Public Works started in 1897 with the organization of a Board of Water Commissioners. From that beginning, the department has expanded to provide a wide variety of services to the Village. Currently the Department of Public Works is responsible for refuse & recycling pick-up, water & sewer services, street & sidewalk repair & maintenance, municipal building maintenance, snow removal, street lighting, parks, storm sewers and shade trees.
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	OEM Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Alden.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.5-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Alden.

Table 9.5-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	The village maintains a website
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	The village operates a Facebook page where they post upcoming events, meetings, news, and notifications.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Alden.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.5-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.5-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak - NA
Cyber Attack	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	High
Flood	Medium
Hazardous Materials	Medium
Landslide	High
Pandemic	High
Severe Storm	High
Severe Winter Storm	High
Utility Failure	Medium
Wildfire	High

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.5.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Joseph Czechowski, Code Enforcement Officer.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Alden.

Table 9.5-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Alden	0	5	$4,711	0	0

Source: FEMA July 2020 and FEMA September 2020
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village identified the intersection of Route 20 and Kellogg Street that is prone to flooding. The village does not maintain a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the village. The village makes Substantial Damage determinations by using their Village Code Chapter 105 which states "substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred." No properties have been mitigated in the jurisdiction. The village flood maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Village of Alden Building Department/ Code Enforcement is responsible for floodplain management. There are not any certified floodplain managers on staff, or access to resources to determine possible future flooding conditions from climate change. The village does not need additional assistance at this time. The NFIP administration services the village provides include permit review, review subdivision and other proposed development, inspections, and stop-work orders. The NFIP floodplain administrator determines if proposed development would qualify as substantial improvement by verifying the construction materials and utility equipment is resistant to flood damage and constructed using methods and practices that minimize flood damage. The substantial improvements should have the lowest floor elevated at least three feet above the highest adjacent grade.

The village does not have any barriers to running an effective NFIP program and the village does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) June 6, 1989. The local law number of the flood prevention ordinance is Village Code Chapter 198, revisions adopted April, 2019. The floodplain management program meets the minimum requirements. There are no other local ordinances, plans, or programs that support the floodplain management and the village does not participate in the CRS.

9.5.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Alden has identified the following routes and procedures to evacuate residents prior to and during an event.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Route 20 – Broadway (East/ West)
- Exchange St. (South) Crittenden (North)

Sheltering

The Village of Alden has identified the following designated emergency shelters within the village.

Table 9.5-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Municipal Building	13336 Broadway	145	Yes	Yes	Yes	House fire and EMS Department	Full kitchen
Alden Station 2	11856 Broadway	75	Yes	Yes	Yes	House fire and EMS Dept	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Alden has identified the following sites suitable for placing temporary housing units.

Table 9.5-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Alden Town Park	W Main St.	Unknown	Park	Water, Electric, and Septic	None
Darien Lakes State Park	Rt 20	Unknown	Park	Water and Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Alden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.5-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
3311 Wende Rd, Alden, NY 14004	3311 Wende Rd, Alden, NY 14004	TBD	Lot	None	Unknown

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.5.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.5-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.5-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	3	0	4	0	6	0	5	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	2	0	0	0	1	0	0	0	0	0
Total Permits Issued	**0**	**0**	**5**	**0**	**4**	**0**	**7**	**0**	**5**	**0**	**1**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Ledge Stone Apartments	Residential	Two 4 Units Four 6 Units Club House	11290 Broadway Street	None	In progress
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

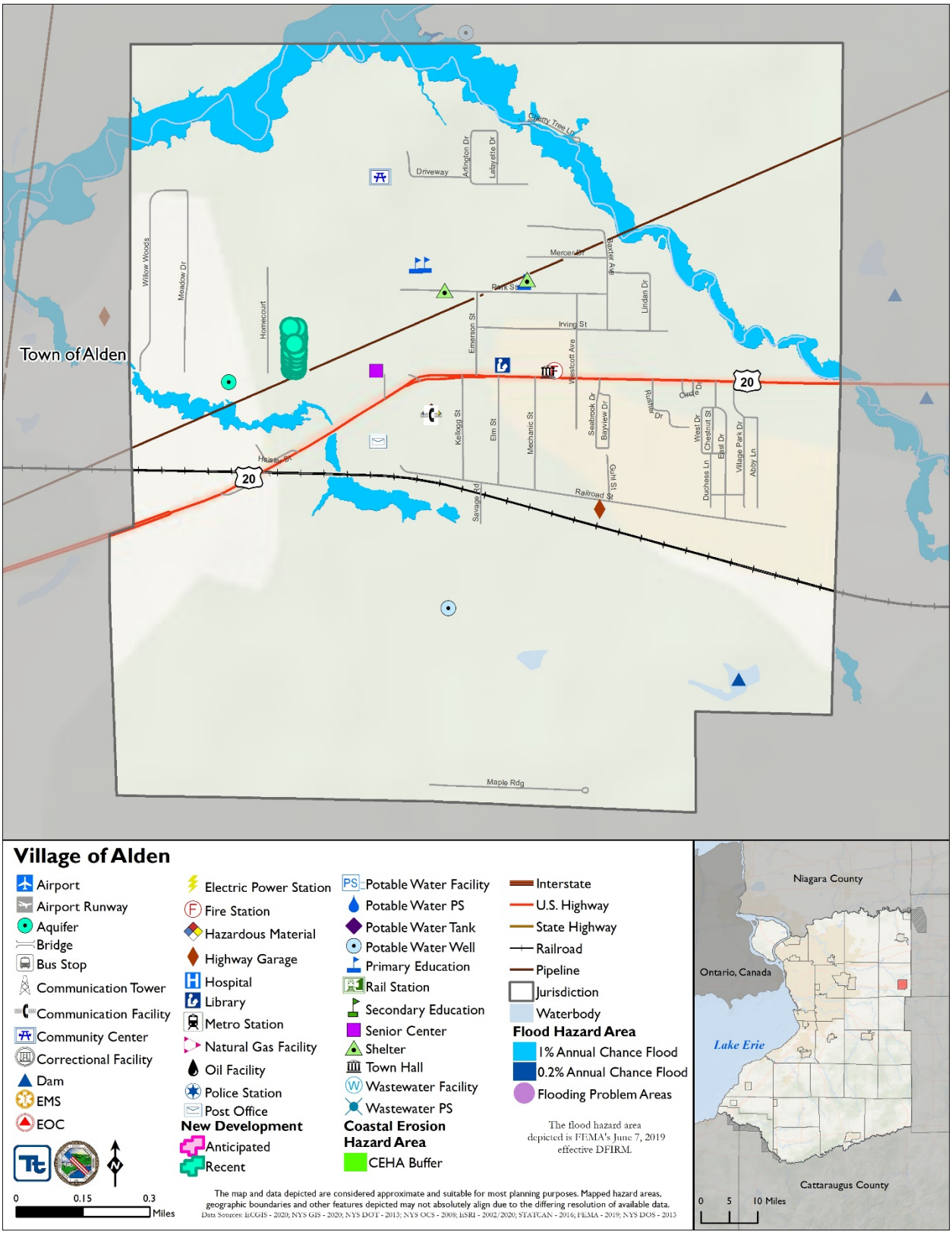
9.5.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Alden's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Alden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

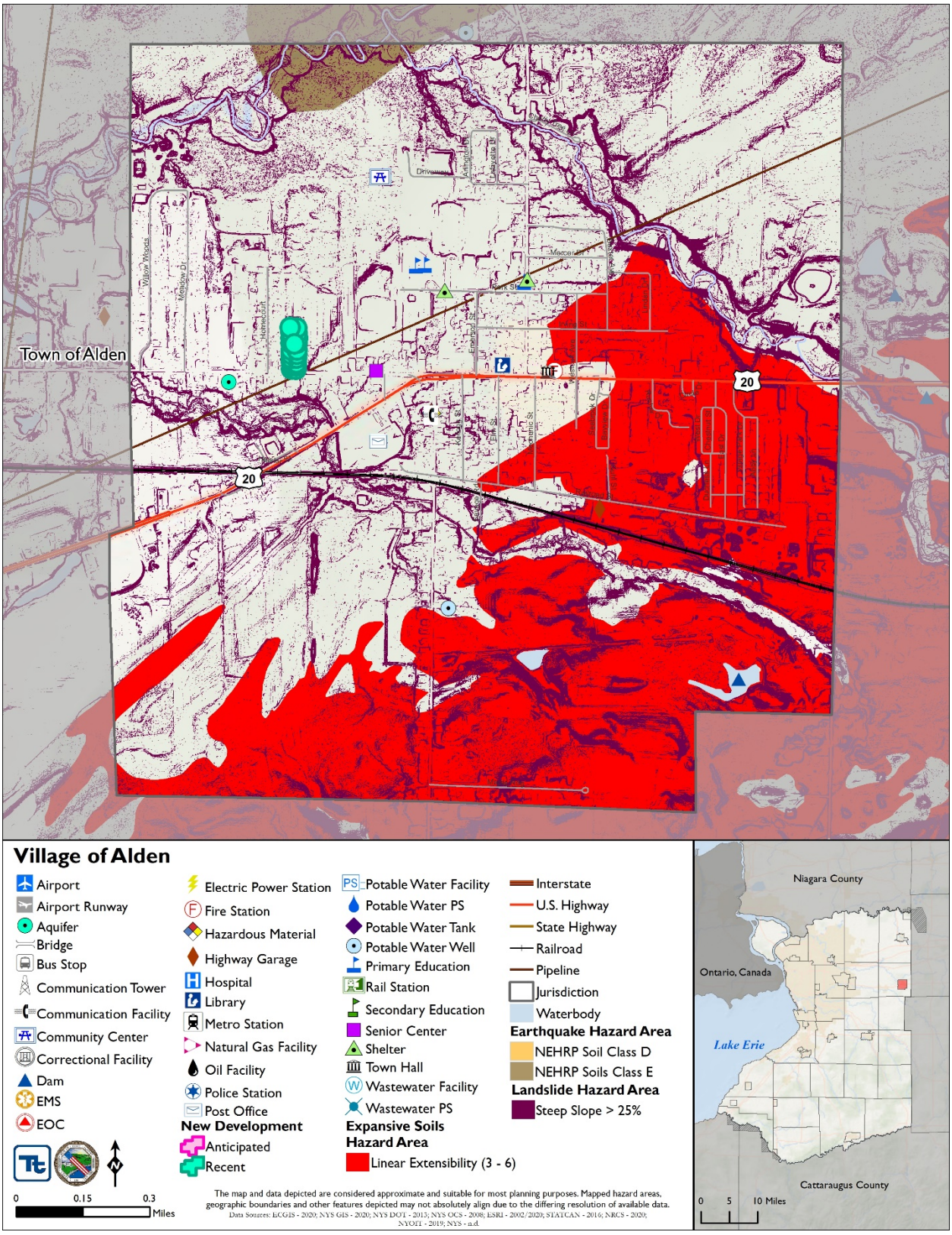
Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.5-1. Village of Alden Hazard Area Extent and Location Map 1



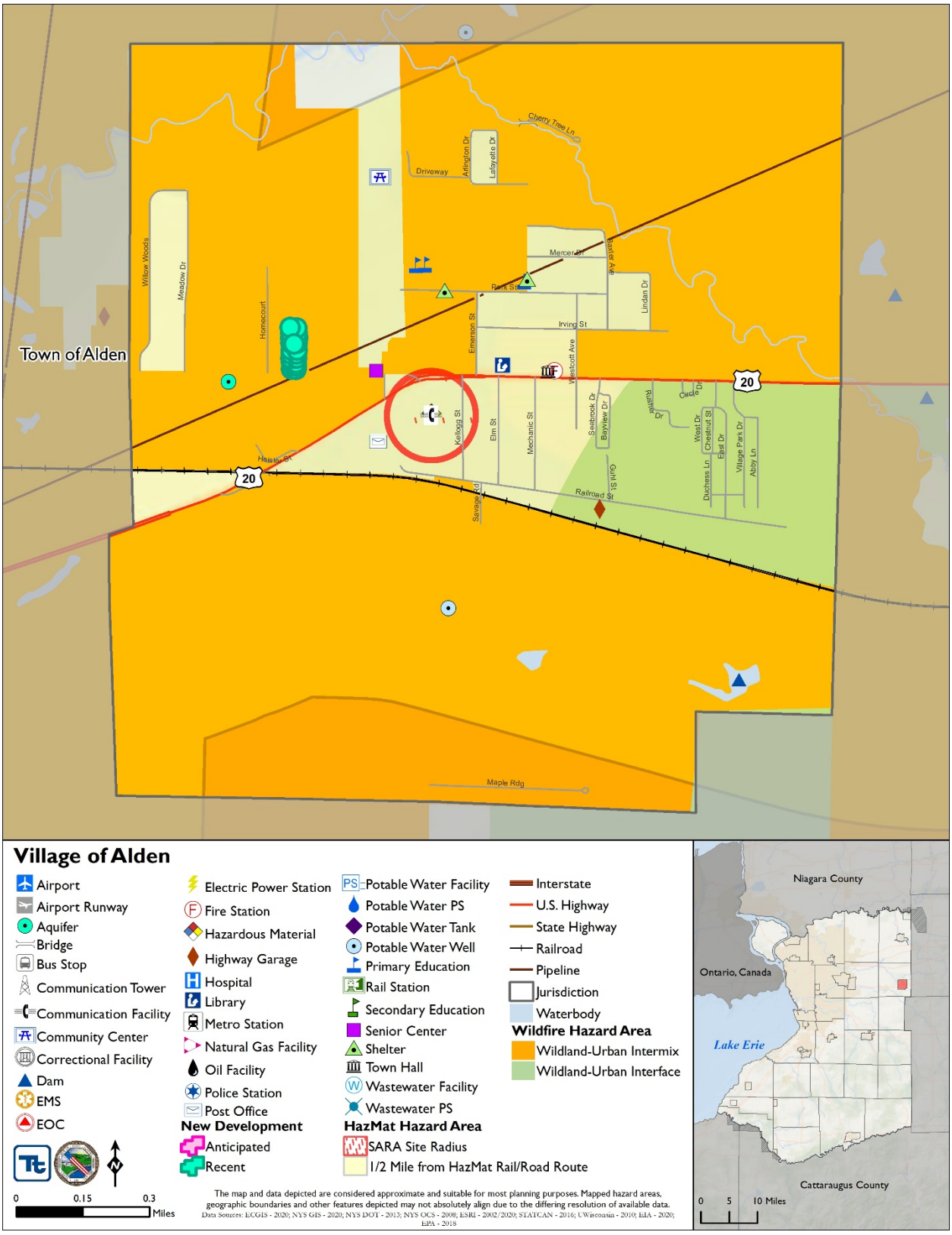
Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.5-2. Village of Alden Hazard Area Extent and Location Map 2



Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.5-3. Village of Alden Hazard Area Extent and Location Map 3



Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Alden's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.5-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.5-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	No damages were reported for the Village of Alden
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	No damages were reported for the Village of Alden
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	No damages were reported for the Village of Alden
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	No damages were reported for the Village of Alden

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	No damages were reported for the Village of Alden
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	No damages were reported for the Village of Alden
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	No damages were reported for the Village of Alden
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	No damages were reported for the Village of Alden

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	No damages were reported for the Village of Alden
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	No damages were reported for the Village of Alden
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	No damages were reported for the Village of Alden
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	No damages were reported for the Village of Alden
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	No damages were reported for the Village of Alden

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	No damages were reported for the Village of Alden
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	No damages were reported for the Village of Alden
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	No damages were reported for the Village of Alden
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	No damages were reported for the Village of Alden
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	No damages were reported for the Village of Alden
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	No damages were reported for the Village of Alden

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	No damages were reported for the Village of Alden
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	No damages were reported for the Village of Alden
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	No damages were reported for the Village of Alden
2020-21	Covid 19	Yes	Pandemic	Various losses including facility closures and social distancing requirements/ enforcements.

\Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Alden's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Alden. The Village of Alden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village made the following changes.

- No expansive soil issues have been identified. Thus will be re-ranked low from high.
- The village has rail and Route 20 that carry hazardous material, thus should be ranked medium from low.
- The village is rural and is not vulnerable to pandemic and will be re-ranked from medium to low.
- Severe storms are not a significant threat and will be re-ranked from high to medium.
- The village does not identify wildfires as a major concern and will reranked from high to low.

Table 9.5-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Medium

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Low	Medium	High	High	Low

Note: *The scale is based on the hazard rankings established in Section 5.3*

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.5-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Highway Garage 1-1	Highway Garage	Yes	No	006

Source: 2021 GIS

Identified Issues

After review of the Village of Alden's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Alden has identified the following vulnerabilities within their community:

- The village does not receive adequate snow removal services, especially during snow emergencies. The village would need the county to expand its existing capabilities/ facilities to adequately respond to future snow storms. Proposed DPW Actions will address this.
- The village has been experiencing freight trains disrupting traffic. The village is concerned with the potential derailment of the trains and the resulting damage that could occur. The village has experienced a previous derailment in the 1960s which caused major disruption to the village services and connection to external emergency services. The village would like to have the county/ external municipalities to coordinate emergency service planning in case of a future derailment. Proposed in action number 3.
- The Raymond May Pond Dam and Alden Senior Center are located in the wildfire hazard area.
- The Highway Garage ID: 119.08-2-14, Alden Post Office, Potable Water Well ID: E3846, and Village of Alden Hall may be exposed to hazardous materials incidents.
- Public and private facilities may be at risk from off-site hazardous materials incidents.
- The Highway Garage may be at risk of experiencing damages caused by expansive soils.
- The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village's services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed.
- The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.
- The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village's services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed.
- The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage.
- The village does not have emergency backup water supply during water facility failure. With potential risk to drought and past historical events when the village water facility did not have adequate water supply for the entire village, the municipality identified this as a critical issue that needed to be addressed to reduce vulnerability to drought and utility failure.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.5.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.5-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Meeting with NYSEG about possibility of adding second transmission line to local substation	All Hazards	Emergency Management	Meeting with NYSEG about possibility of adding second transmission line to local substation	No progress	Cost	-	1. Discontinue 2. 3. no longer applicable
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Support and fund CERT programs that include a mitigation component	All Hazards	Emergency Management	Support and fund CERT programs that include a mitigation component	No Progress	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	All Hazards	Emergency Management	Procure and implement web-based emergency management software to facilitate efficient disaster response and mitigation	No Progress	Cost	-	1. Discontinue 2. 3. No longer applicable
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood		Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Compliance	
5	Require staff involved in floodplain management and ordinance enforcement to	Flood		Require staff involved in floodplain management and ordinance enforcement to	No Progress	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	become Certified Floodplain Managers (CFMs)			become Certified Floodplain Managers (CFMs)				

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Alden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Alden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.5-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils				X			X			
Extreme Temperature										
Flood		X				X			X	X
Hazardous Materials	X			X			X			X
Landslide										
Pandemic										
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X							X	X
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.5-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Alden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.5-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.5-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-001	Alden Senior Center Mitigation	All	Wildfire	**Problem**: The Raymond May Pond Dam and Alden Senior Center are located in the wildfire hazard area. **Solution**: Conduct outreach to property owners to determine the risk from wildfires and identify property maintenance actions, if needed, to help protect the facilities.	Yes	None	Within 6 months for outreach	Village Board	<$100 for outreach	The facility owners are aware of options to protect the facilities from potential wildfire damage	Village Budget	High	EAP	PI
2022-Village of Alden-002	Critical Facilities and Hazardous Material Incidents	All	Hazardous Materials Incidents	**Problem:** The Highway Garage ID: 119.08-2-14, Alden Post Office, Potable Water Well ID: E3846, and Village of Alden Hall may be exposed to hazardous materials incidents. **Solution:** Develop an education/ outreach plan to ensure that the facilities can safely continue operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	Village of Alden	<$100 for outreach	Continuity of operations in place	Village Budget	High	LPR	ES
2022-Village of Alden-003	Hazardous Material Facility Mitigation	All	Hazardous Materials Incidents	**Problem:** Public and private facilities may be at risk from off-site hazardous materials incidents. **Solution:** Work with County and public and private organizations in the village to develop emergency plans for responding to an off-site hazardous materials incident.	Yes	None	Within 6 months for outreach	Village of Alden Board of Trustees	<$100 for outreach	Continuity of operations in place	Village Budget	High	EAP	PI

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-004	Protect the Highway Garage ID: 119.08-2-14 from expansive soils	All	Expansive Soils	**Problem:** The Highway Garage may be at risk of experiencing damages caused by expansive soils. **Solution:** The village will work with the facility owner to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.	Yes	None	Within 6 months for outreach	Highway Department	<$100 for outreach, TBD if mitigation is needed	The facility owner is aware of options to protect the Highway Garage from expansive soils	Village Budget	High	EAP	PI
2022-Village of Alden-005	Highway Garage Generator	1,2	Severe Storms, Severe Winter Storms, Utility Failure	**Problem**: The Village Highway Garage does not have adequate backup power installed. The highway facility is a critical component to the village's services and needs to be in operation at all time. Without backup power, the facility is unable to respond, and thus additional backup power is needed. **Solution**: The village will conduct an assessment of the existing facility to determine the energy needs of the building. Once this is determined, the village will purchase an appropriate generator that will be placed in an area that is safe from flooding (as the facility is located in a 100-year flood zone).	Yes	Yes	1 year	Village DPW	$100,000	Continuity of Operations	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-006	Highway Garage Retrofitting and Expansion	1,2	Flood	**Problem:** The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood. **Solution:** This will be a multi-phased project. The first phase will be floodproofing the existing garage. This will include sealing the walls of the building and elevating utilities above the BFE. The second phase will include expanding the existing facility. The addition will be done in accordance with municipal, state and any federal guidelines. Additionally, the addition will also be floodproofed including sealing walls and elevating equipment.	Yes	Yes	3 years	Village DPW	High	Continuity of Operations	HMGP, FMA, BRIC, USDA Community Facilities Grant Program	High	SIP	PP

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-007	Generator Installation at Lift Stations	1, 2	Severe Storms, Severe Winter Storms, Flood, Utility Failure	**Problem:** Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage. **Solution:** Install generator at three (four total within the village) locations. The village does not have necessary information to determine the energy need of these facilities and would need to conduct a full assessment of the existing facilities and their needs. Once each facility has been identified and energy demand has been determined, the village would need to purchase three separate generators that would be installed at each facility. Each generator would need to be installed in a way that protects it from flooding as well as other natural elements that could cause harm to the generator.	No	Yes	2 years	Village DPW	Up to $500,000	Continued Operations	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Alden-008	Expansion of Erie County Water System to Village system.	1,2	Utility Failure	**Problem:** The village does not have emergency backup water supply during water facility failure. With potential risk to drought and past historical events when the village water facility did not have adequate water supply for the entire village, the municipality identified this as a critical issue that needed to be addressed to reduce vulnerability to drought and utility failure. **Solution:** The village has identified a solution to work with the county water department and connect with the existing county water supply system. The project would entail connection of the municipal water system with the county water system and thus entail the collaboration between the village and the county. Additional agreements might also be needed with neighboring municipalities like the Town of Alden. Once the two water systems are connected, the village would continue to use its existing water system but would rely on the county water system in case of localized emergency water shortages.	No	Yes	2 years	Erie County Water Department/ Village DPW	$40k	Reliable water supply	Municipal Budget, County Water Department Funding	High	SIP	SP

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022 Village of Alden-009	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

NFIP *National Flood Insurance Program*
OEM *Office of Emergency Management*

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.5-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Alden-001	Protect the following facilities from wildfires: Raymond May Pond Dam and Alden Senior Center	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Alden-002	Critical Facilities and Hazardous Material Incidents	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Alden-003	Hazardous Material Facility Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Alden-004	Protect the Highway Garage ID: 119.08-2-14 from expansive soils	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Alden-005	Highway Garage Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Alden-006	Highway Garage Retrofitting and Expansion	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Alden-007	Generator Installation at Lift Stations	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Alden-008	Expansion of Erie County Water System to Village system.	1	1	1	1	1	1	-1	0	1	0	0	1	1	1	9	High
2022 Village of Alden-009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.5.9 Action Worksheets

The following action worksheets have been developed by the Village of Alden to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Generator Installation at Lift Stations		
Project Number:	2022-Village of Alden-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storms, Severe Winter Storms, Flood, Utility Failure		
Description of the Problem:	Sanitary Lift Stations do not have generator backup power. These are located across the municipality and provide critical village services to deal with wastewater and sewage. Without these facilities having the ability to operate at all times, the village sewage system would be overwhelmed and would lead to clogging and potential contamination and spillage.		
Action or Project Intended for Implementation			
Description of the Solution:	Install generator at three (four locations total within the village). The village does not have necessary information to determine the energy need of these facilities and would need to conduct a full assessment of the existing facilities and their needs. Once each facility has been identified and energy demand has been determined, the village would need to purchase three separate generators that would be installed at each facility. Each generator would need to be installed in a way that protects it from flooding as well as other natural elements that could cause harm to the generator.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Continued Operations
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	Up to $500,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Unsteady power source
	Generators	High	Most feasible option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Generator Installation at Lift Stations	
Project Number:	2022-Village of Alden-007	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	-
Property Protection	1	Allows facility to operate during power outages
Cost-Effectiveness	1	This is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	-
Legal	1	-
Fiscal	-1	Need grant funding to complete project
Environmental	0	-
Social	1	Positive social impact
Administrative	1	Municipal DPW
Multi-Hazard	1	Severe Storms, Severe Winter Storms, Flood, Utility Failure
Timeline	1	To be completed within 2 years
Agency Champion	1	-
Other Community Objectives	1	-
Total	11	
Priority (High/Med/Low)	High	

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Highway Garage Retrofitting and Expansion		
Project Number:	2022-Village of Alden-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The highway garage does not have adequate space for offices and equipment. The facility is also located in a 100-year flood zone and thus is subject to potential flooding. While the facility has not previously experienced any flooding, given the facility is located in a floodplain, flood hazard does pose potential threat. The village would therefore need to adequately prepare the facility to be equipped in case of a future flood.		
Action or Project Intended for Implementation			
Description of the Solution:	This will be a multi-phased project. The first phase will be floodproofing the existing garage. This will include sealing the walls of the building and elevating utilities above the BFE. The second phase will include expanding the existing facility. The addition will be done in accordance with municipal, state and any federal guidelines. Additionally, the addition will also be floodproofed including sealing walls and elevating equipment.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☒	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continued Operations
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	High	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, FMA, BRIC, USDA Community Facilities Grant Program
Responsible Organization:	Village DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Rebuild new facility	High	No land available
	Retrofit existing facility	High	Most realistic solution

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Highway Garage Retrofitting and Expansion	
Project Number:	2022-Village of Alden-006	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	-
Property Protection	1	Highway Garage will be protect from future flood events
Cost-Effectiveness	1	Benefits outweigh the costs
Technical	1	-
Political	1	-
Legal	1	-
Fiscal	-1	Village needs grant funding to complete this project
Environmental	0	-
Social	1	-
Administrative	1	Municipal DPW
Multi-Hazard	0	Flood
Timeline	1	To be completed within 3 years once funding is obtained
Agency Champion	1	-
Other Community Objectives	1	-
Total	10	
Priority (High/Med/Low)	High	

Attachment: 44-Section-9.5-Alden-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.6 Town of Amherst

This section presents the jurisdictional annex for the Town of Amherst. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Amherst's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.6.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Amherst's hazard mitigation plan primary and alternate points of contact. The Town of Amherst followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including Code Enforcement and Emergency Services. The Department of Emergency Services represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.6-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Zymanek, Director of Emergency Services and Safety Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7121 Email: jzymanek@apdny.org	Name/Title: Brandon Peters, Emergency Services and Safety Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7133 Email: bpeters@apdny.org
NFIP Floodplain Administrator	
Name/Title: Mark Berke, Commissioner of Building Address: 5583 Main Street Williamsville, NY 14221 Phone Number: 716-631-7080 Email: mberke@amherst.ny.us	
Additional Contributors	
Name/Title: Laurie Stillwell, Community Development Director Method of Participation: Completed capabilities and additional worksheets	
Name/Title: Dan Ulatowski, Town Planner Method of Participation: Completed capabilities worksheets	
Name/Title: Mark Berke, Commissioner of Building Department Method of Participation: Completed NFIP worksheet	

9.6.2 Municipal Profile

Amherst is the most populous town in western New York and is an inner ring suburb of Buffalo. Amherst is 54 square miles, making it the second largest town by area in Erie County. Amherst was formed in 1818 from part

of the Town (later City) of Buffalo. The Village of Williamsville is located entirely within the Town of Amherst. The town is bordered on the north by Tonawanda Creek and the Erie Canal which comprise the border here between Niagara and Erie counties. The Town of Tonawanda borders on the east, the Town of Clarence on the west and the City of Buffalo and Town of Cheektowaga on the south. Ellicott Creek flows through the town.

The opening of the Erie Canal in 1825 spurred growth in Amherst, bringing new settlers and increased commerce. German farming immigrants settled in the northern part of the town, attracted by its fertile land. The town's water resources encouraged development of grist mills, saw mills, and other manufacturers along Ellicott Creek. Several hamlets that are still in existence started to develop around this time: Williamsville (1810s), Eggertsville and Snyder (1830s) East Amherst and Swormville (1850s and Getzville (1860s). Education is central to Amherst's character. The town is home to the University at Buffalo's north campus, the graduate campus of Medaille College, a satellite campus of Bryant & Stratton College, and also Daemen College (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Town of Amherst was 117,066. The estimated 2019 population was 120,276, a 2.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.0 percent of the population is 5 years of age or younger and 13.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 Jurisdictional Capability Assessment and Integration

The Town of Amherst performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.6.3). The Town of Amherst's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Amherst. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.6-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL1-2009, Chapter 83 Building Construction Administration	Local	Building and Zoning/Town Supervisor
Comment: The Code requires that all parking lots shall be so graded that stormwater will flow away from any building and will not drain upon abutting properties, sidewalks, and pavements. Yards and areas must always be properly drained and connected to a storm sewer or other approved outfall. 4) Front, side, and rear yards of lots upon which a structure is to be constructed shall be drained by a stormwater drainage system designed to drain a minimum ten-year, six-hour event storm.					
Zoning Code	Yes	No	Part. II Chapter 203 Zoning	Local	Planning Department
Comment: The Zoning Code requires that review of proposed developments in the town must consider exposure to natural hazards and their impact.					
Subdivision Ordinance	Yes	No	LL2-2009, Town of Amherst Subdivision Code, 2009	Local	Building Department
Comment: The Town's Subdivision code establishes a process by which the Building Department and the Planning Board review and approve subdivision proposals.					
Stormwater Management Ordinance	Yes	Yes	Part II Chapter. 172 Stormwater and Erosion Control; Illicit Discharges, LL2-2007	Local	Engineering Department
Comment: The Stormwater and Erosion Control ordinance mandates that the municipality must provide protection from accidental discharge of prohibited materials or other wastes.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Comprehensive Plan Section 7.2 7.3 & 7.4 Goals & Policies	Local	Planning Department
Comment: No ordinance, but the Comprehensive Plan has goals and policies that speak to limiting sanitary sewer expansion over repairs to existing infrastructure, etc. Amherst Bicentennial Comprehensive Plan Inventory and Analysis Report (2001). Amended 2014 & 2019.					
Site Plan Review	Yes	No	Part II Chapter 203 Sec. 8-7 Site Plan Review	Local	Planning Department
Comment: Site Plan review incorporates consideration of hazard exposure					
Environmental Protection Ordinance	Yes	Yes	LL3-1982, Environmental Protection	Local	Planning Board and Planning Department
Comment: Permit applications require submission of an Environmental Assessment Form describing the proposed action and the effect it may have on the environment.					
Flood Damage Prevention Ordinance	Yes	Yes	Part II Chapter 203 Part 7 Section 7-7 Provisions for Flood Hazard Reduction	Local	Floodplain Administrator
Comment: Amended 6/3/2019. BFE+2 feet for all construction in the SFHA (residential and non-residential). It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities. B. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; D. control filling, grading, dredging and other development which may increase erosion or flood damages; E. regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and					

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
F. qualify and maintain for participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Part II Chapter 172 Stormwater and Erosion Control; Illicit Discharges	Local	Engineering Department
Comment: The Stormwater and Erosion Control ordinance mandates that the municipality must provide protection from accidental discharge of prohibited materials or other wastes.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Amherst Bicentennial Comprehensive Plan, 2011	Local	Supervisor, Town Board
Comment: The Plan recommends incentivizing retention of open space in private developments, and the use of "best management practices" to reduce water quality impacts of development. The Plan recommends development of flooding and other stormwater management mitigation measures. Maintain habitat and drainage patterns. The Plan looks to improve the hydraulic efficiency of the creek and ditch channels in the lower reaches to drain storm water from the local watersheds more quickly.					
Capital Improvement Plan	Yes	No	Amherst 2021-2026 Capital Improvement Plan	Local	Planning Department
Comment: The town' Capital Improvement Program is a means to fund hazard mitigation projects.					
Disaster Debris Management Plan	Yes	No	Debris Management component of the Comprehensive Emergency Management Plan	Local	Emergency Services
Comment: The Debris Management Plan is a component of the Comprehensive Emergency Management Plan					
Floodplain or Watershed Plan	Yes	No	Floodplain or Watershed Plan Regional Plan. Healthy Niagara - Regional Niagara River/Lake Erie Watershed Management Plan – Phase 1 & 2 (2014 & 2019) County & State Comment:	Local/County/State	-
Comment: This is a regional Erie County Watershed Management Plan that includes Amherst's watersheds.					
Stormwater Plan	Yes	No	2018 Stormwater Management Plan	Local	Engineering Department
Comment: Proactive management of stormwater					
Open Space Plan	Yes	No	Town of Amherst Parks and Recreation Master Plan (2018)	Local	Youth and Recreation Department

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Protection of open space can, among other positive, allow for unobstructed flow of flood waters.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	Regional Plan	No	Buffalo and Niagara River Habitat Strategy	County	Department of Environment and Planning
Comment: The Habitat Strategy provides a means for agencies and municipalities and other stakeholders to protect habitat along the Buffalo and Niagara Rivers.					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	Drafting LWRP	Yes	See Comments	Local	Planning Department
Comment: Local Waterfront Revitalization Plan is under development currently, anticipated adoption December 2021. WRA Boundary is in draft form and currently at DOS awaiting approval.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Draft in development	No	Under development	Local	Highway
Comment: Currently under development, anticipated completion date 2022. Town's Tree Law was also updated/adopted March 2020. Tree Law can be found at Chapter 179 in Town Code.					
Transportation Plan	No	No	See Comments	-	-
Comment: The Town does not have a separate Transportation plan per say, but transportation elements are addressed as a chapter in the Bicentennial Comprehensive Plan.					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	Drafting	No	See Comments	Local	Planning Department
Comment: Currently under development and anticipated to be completed in 2021.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Amherst Comprehensive Emergency Management Plan	Local	Department of Emergency Services
Comment: The Town's Comprehensive Emergency Management Plan contains a Flood Response Action Plan.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification &	No	Yes	-	-	-

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Risk Assessment (THIRA)					
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	Under Development	No	-	Local	Planning Committee
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Amherst to oversee and track development.

Table 9.6-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Building Department
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	No, the town does not maintain a buildable land inventory. Amherst is primarily built out in its southern two-thirds of town, with a few select areas expecting redevelopment and in-fill development over the next decade: Boulevard Mall Area/Census Tract 92 area. The northern 1/3 of town, is primarily underdeveloped and zoned rural Suburban Agriculture and while rezoning may be applied for to allow development beyond single-family residential and agricultural uses there may be other constraints that limit growth on specific lots, such as wetlands, floodplain, and infrastructure access/connectivity. Because of this, this area of town has developed at a slower pace than the rest of Amherst.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Amherst and their current responsibilities which contribute to hazard mitigation.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.6-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven Person Planning Board, two Planning Department Staff assigned to administer the Zoning Code. The powers of the Amherst Planning Board are: • Review and approval of site plans • Review and approval of subdivision applications • Review and approval of coordinated sign plans • Review of rezoning applications and recommendation to the Town Board • Participation in the development of Comprehensive Plans • Review of any matter referred by the Town Board and report to the Town Board
Zoning Board of Adjustments	Yes	Five Person Zoning Board of Appeals, with two Planning Department staff assigned to administer the Zoning Code. The Zoning Board of Appeals is authorized to grant relief from any provision of the Town of Amherst Zoning Ordinance, or any decision of an administrative official charged with the enforcement of that ordinance. In addition, the Board is empowered to grant special use permits in certain instances as spelled out in the Zoning Ordinance. Town Law specifies the grounds and criteria that the Zoning Board of Appeals must use to grant a variance.
Planning Department	Yes	The Amherst Planning Department has four primary responsibilities: • development plan review; • long-range planning; • community development and housing program administration; andprogram implementation. Nine Planners, one Landscape Architect, five support staff among the Planning Board and Building Department staff.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Amherst Conservation Advisory Council advises the Planning Board and Town Board about land conservation.
Open Space Board/Committee	Yes	The Town's Open Space Committee advises the Planning Board and Town Board about open space conservation opportunities which can help mitigate flooding risk.
Economic Development Commission/Committee	No	The town's Economic Development Office staff assist with economic development initiatives. https://www.amherst.ny.us/content/departments.php?dept_id=dept_29
Public Works/Highway Department	Yes	The Town Highway Department manages culverts, highways, ditches, mosquito control, tree removal and trimming, and maintenance of other assets impacted by natural hazards.
Construction/Building/Code Enforcement Department	Yes	The primary purpose of the Building Department is to ensure building safety through the enforcement of municipal, state, and federal regulations and codes. All plans for development are first reviewed by the department for adherence to regulatory statutes. Upon approval of proposed plans, permits are issued that allow for the construction and alteration of structures. Throughout the building process, field inspectors visit active work sites reviewing work and approving various stages of construction. Final inspections signal the end of the review process with new or renovated buildings receiving a formal certificate of occupancy, which allows the structure to become occupied. The primary Divisions of the Building Department are:

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		• Building Code Enforcement • Plumbing Code Enforcement • Electrical Code Enforcement • Fire Safety Code Enforcement • Property Maintenance Code Enforcement • Building Maintenance of Town Owned Facilities
Emergency Management/Public Safety Department	Yes	The Department of Emergency Services and Safety coordinates the town's response to emergency needs.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Town warning systems are operational and in use.
Maintenance programs to reduce hazard (stormwater maintenance, tree trimming, etc.)	Yes	The Town Highway Department manages culverts, highways, ditches, and other assets impacted by natural hazards. This includes tree trimming.
Mutual aid agreements	Yes	The Town maintains mutual aid agreements with neighboring jurisdictions for Fire and Department of Public Works/Highway Department operations
Other		Committee on Disabilities, Clean Energy Community Committee, Invasive Plant Species Committee, Recreation and Waste Committee, Tree Board.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	9 Planners by training with various levels of experience, volunteer members of the Planning Board.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Two town staff understand natural hazards.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Office of Emergency Management, Building and Engineering Departments
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning has eight planning staff/board members who may be skilled in GIS, none have used HAZUS
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	The floodplain administration activities are housed in the Town Building Department
Surveyor(s)	No	-
Emergency Manager	Yes	The OEM coordinates the town's response to emergency needs
Grant writer(s)	Yes	Three staff members
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Fiscal Capability

The table below summarizes financial resources available to the Town of Amherst.

Table 9.6-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Applicable CFA's, EPF, DOS, DEC grants
Open Space Acquisition funding programs	Department of State or Agriculture & Markets Conservation Easements or the Buffalo Erie Niagara Land Improvement Corp (BENLIC) – Land Bank
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Applicable grants, if awarded

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Amherst.

Table 9.6-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Department of Information Technology
Hazard mitigation information available on your website	No	Note: website is being overhauled and will soon include hazard mitigation information.
Social media for hazard mitigation education and outreach	Yes	The town employs Facebook and Twitter as social media outreach including messaging about hazard mitigation. The town's website is also being updated and will include information.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Amherst Traffic Safety Board, Amherst Conservation Advisory Commission, Tree Board, Invasive Plant Species Committee
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Community Classifications

The table below summarizes classifications for community programs available to the Town of Amherst.

Table 9.6-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	Yes	Class 8	10/2015
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	None	Registered for program 5/2012
Storm Ready Certification	Yes	N/A	6/2014
Fire wise Communities classification	No	-	
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.6-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.6.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Mark Berke, CFM, Commissioner of Building Department

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Amherst.

Table 9.6-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Amherst	846	448	$1,417,565	23	353

Source: FEMA 2020a and FEMA 2020b
Notes:
RL Repetitive Loss; SRL

Flood Vulnerability Summary

Areas prone to flooding in the town are in the northeast portion of the town in a lying area where Gott Creek, Ransom Creek and Black Creek run into the Tonawanda Creek. The town maintains a list of properties that have been damaged by flooding but does not maintain such a list for owners interested in mitigating their properties. Per the town's data, there have been 1,224 properties that have been mitigated by elevation measures. Annually, the town sends a letter to all property owners within the floodplain. All property owners interested in flood mitigation are provided pertinent information. There are no Risk MAP projects currently underway in the town. The town indicated that no properties have been mitigated and that a list of property owners interested in mitigation is not maintained. The town's flood hazard maps adequately address the flood risk within the jurisdiction. The town does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Town of Amherst does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in June 2020. The Building Inspector is responsible for floodplain administration and this individual is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town Building Department includes two staff who are Certified Floodplain Managers. The town stated its staff would benefit from training about the revised Community Rating System requirements. The town makes Substantial Determination's following FEMA guidelines. Any property where damage is 50 percent or greater than the value of the property is classified as substantial damage. The town's floodplain management meets minimum requirements. The town requires floodplain development permits for any work to occur in a floodplain/floodway and provides review and approvals to process LOMA's and LOMR-Fs. Additionally, we provide education and outreach as well as inspection for work being completed within the floodplain. The town does not participate in the Community Rating System.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.6.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Amherst did not identify evacuation routes and procedures as part of this plan update. The Town will coordinate with county and state agencies as needed.

Sheltering

The town shelter is located at the Amherst Senior Center at 370 John James Audubon Parkway, Amherst, NY 14228. The town also maintains a list of regional shelters approved by the American Red Cross (ARC) in its CEMP; the town would work with the Erie County Department of Homeland Security and Emergency Services and ARC to open and operate a shelter at one of these locations.

Table 9.6-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town of Amherst Senior Center	370 John James Audubon Parkway	100	Yes	Yes	Yes	Emergency medical	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Amherst has identified the following sites suitable for placing temporary housing units.

Table 9.6-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
University at Buffalo North Campus	12 Capen Hall, Buffalo NY 14260	TBD	University campus facility	Water, sewer, electric, ample external parking lots for placement of trailers	Locate temporary housing on existing asphalt and appropriately spaced
ECC North Campus	6205 Main St, Williamsville NY	TBD	College facility	Water, sewer, electric, external sports fields for placement	Locate temporary housing on existing sports fields

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

requirements and floodplain laws. The Town of Amherst has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.6-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Boulevard Mall Site/Census Tract 92	Niagara Boulevard	DGEIS planned for 5,000 residential units over 20 years	Multistory/Mixed-use, Town Houses/Condos New construction, infill development	Water, electric (adequate sewer upgrades in planning stages)	Zoning amendments implemented, DGEIS completed, awaiting development applications

9.6.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.6-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.6-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	11	8	76	5	66	15	83	25	76	22	145	14
Multi-Family	36	2	26	3	1	1	12	4	21	0	3	2
Other (commercial, mixed-use, etc.)	31	2	31	1	25	3	24	2	25	2	41	2
Total Permits Issued	**78**	**12**	**133**	**9**	**92**	**19**	**119**	**31**	**122**	**24**	**189**	**18**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
The town estimates that as many as 5,000 units could be constructed in the town within the next 20 years					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.6.7 Jurisdictional Risk Assessment

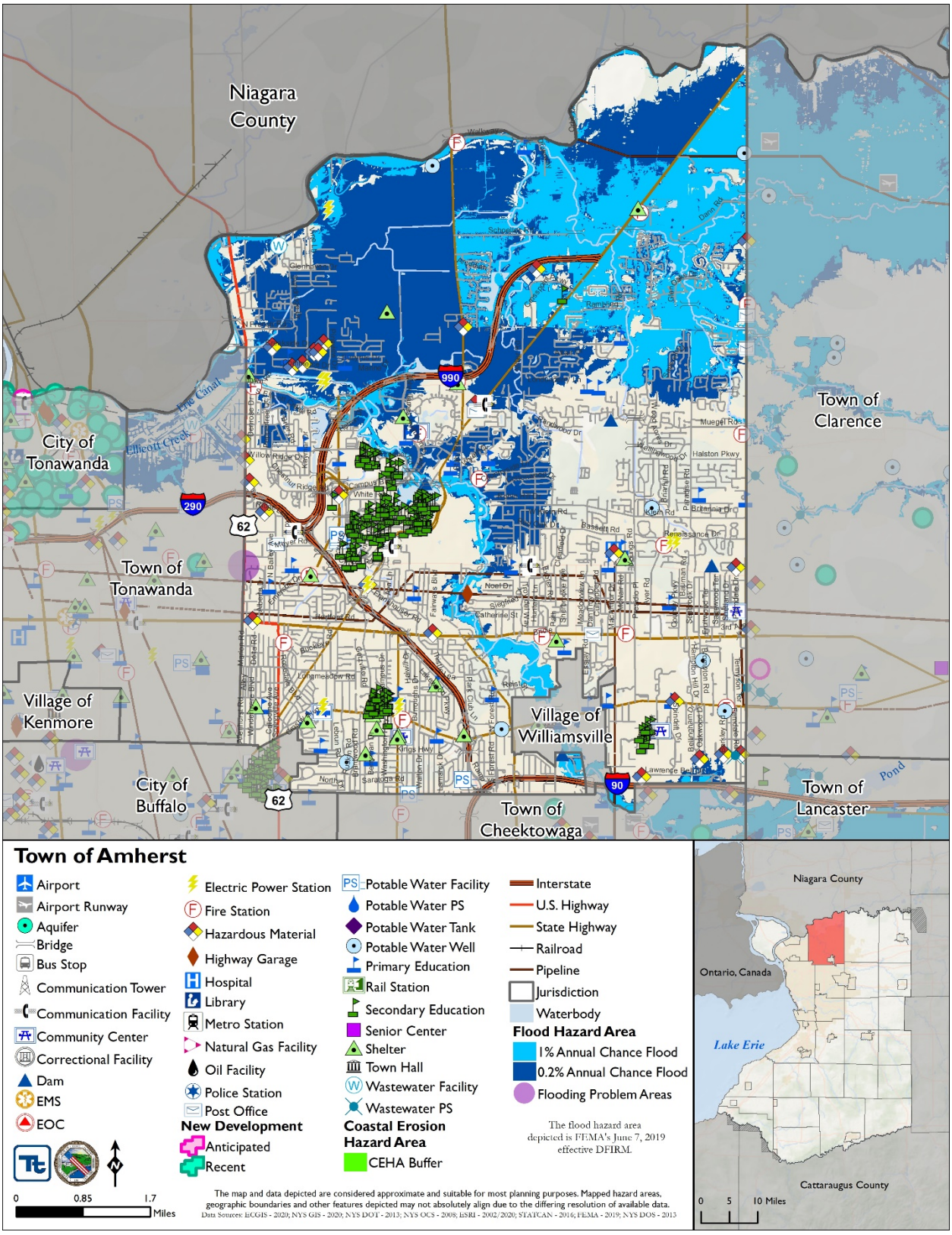
The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Amherst's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Amherst has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

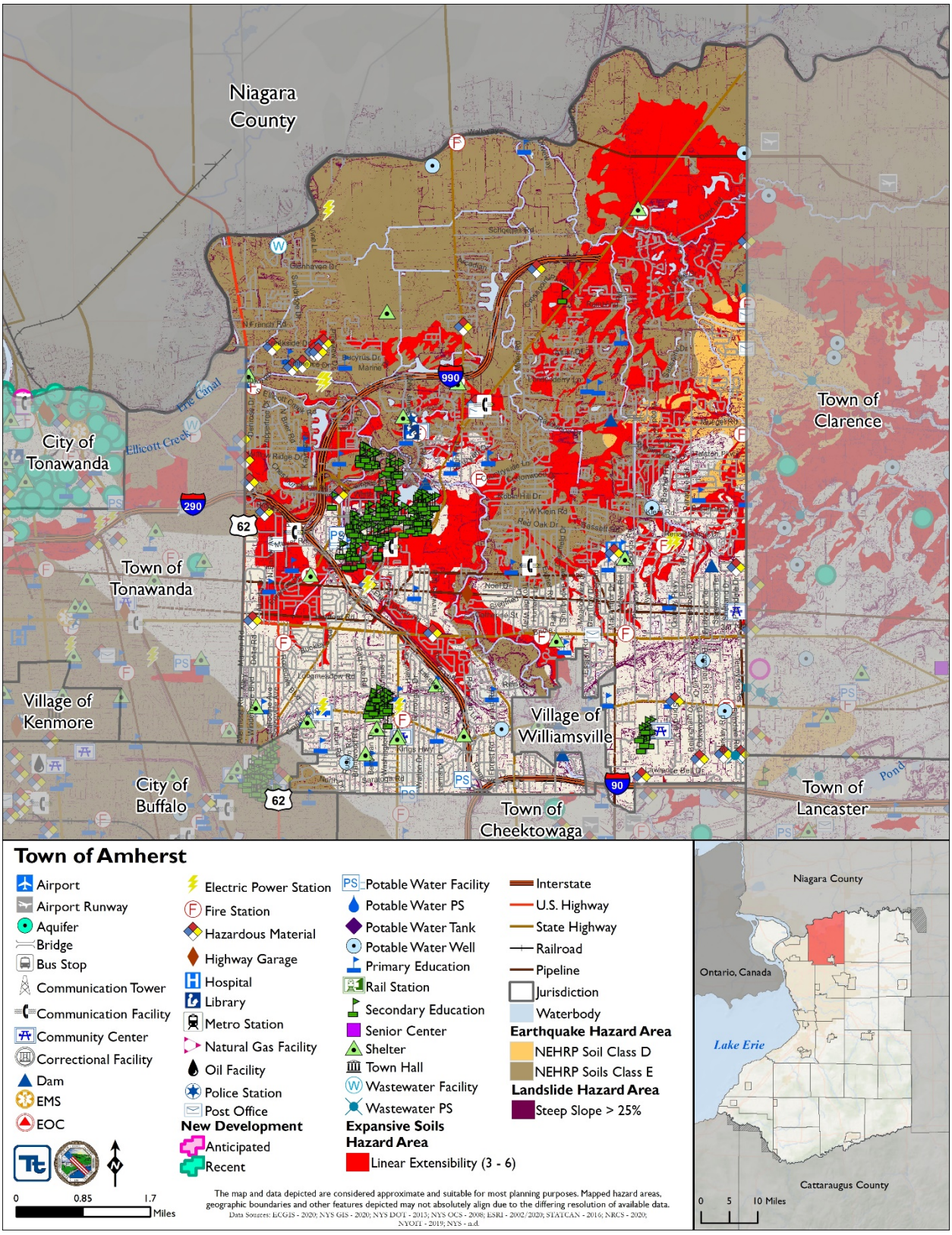
Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.6-1. Town of Amherst Hazard Area Extent and Location Map 1



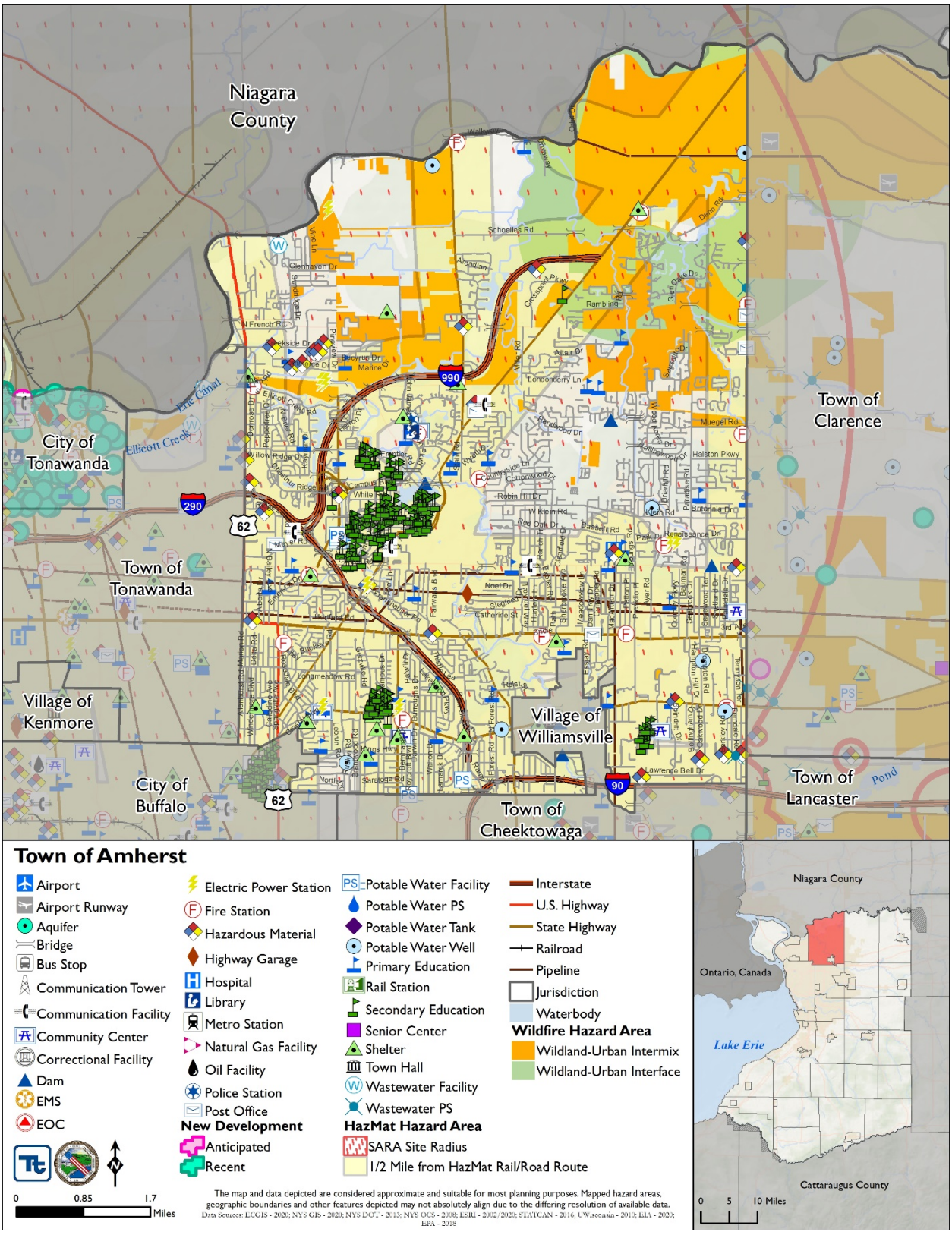
Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.6-2. Town of Amherst Hazard Area Extent and Location Map 2



Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.6-3. Town of Amherst Hazard Area Extent and Location Map 3



Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Amherst's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.6-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.6-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	*Although the county was impacted, the town did not report any damages.*
August 11-15, 2015	Flash Flood	No	*Although the county was impacted, the town did not report any damages.*
October 28-29, 2015	High Wind	No	*Although the county was impacted, the town did not report any damages.*
November 6, 2015	Thunderstorm Wind	No	*Although the county was impacted, the town did not report any damages.*
November 12, 2015	High Wind	No	*Although the county was impacted, the town did not report any damages.*
November 18, 2015	High Wind	No	*Although the county was impacted, the town did not report any damages.*
January 11, 2017	High Wind	No	*Although the county was impacted, the town did not report any damages.*
March 8, 2017	High Wind	No	*Although the county was impacted, the town did not report any damages.*
March 13, 2017	Winter Storm	No	*Although the county was impacted, the town did not report any damages.*
July 20, 2017	Tornado	No	*Although the county was impacted, the town did not report any damages.*
August 4, 2017	Thunderstorm Wind	No	*Although the county was impacted, the town did not report any damages.*
December 10-15, 2017	Lake-effect Snow	No	*Although the county was impacted, the town did not report any damages.*
December 24-29, 2017	Lake-effect Snow	No	*Although the county was impacted, the town did not report any damages.*
January 2, 2018	Blizzard	No	*Although the county was impacted, the town did not report any damages.*
October 6, 2018	Lightning	No	*Although the county was impacted, the town did not report any damages.*
February 24, 2019	High Wind, Lakeshore Flooding	No	*Although the county was impacted, the town did not report any damages.*
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	*Although the county was impacted, the town did not report any damages.*
November 27, 2019	Lakeshore Flooding	No	*Although the county was impacted, the town did not report any damages.*
January 12, 2020	Lakeshore Flooding	No	*Although the county was impacted, the town did not report any damages.*
January 18, 2020	Lakeshore Flooding	No	*Although the county was impacted, the town did not report any damages.*

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
March 2020 to present	Public Health, Pandemic, COVID-19, DR 4480	Yes	Global pandemic has killed and sickened many hundred Erie County residents.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Amherst's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Amherst. The Town of Amherst has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the Pandemic, Earthquake, Severe Storm, Utility Failure and Severe Winter Storm rankings be changed from High to Medium because of a relative low rate of occurrence or exposure to these hazards.

Table 9.6-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Medium	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.6-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Lang's Brewing Company Dam	Dam	X	X	#2022-T Amherst-002
Amherst Fire Training Facility, County owned	Fire Station	X	X	#2022-T Amherst-014
North Amherst Fire Station	Fire Station	X	X	#2022-T Amherst-019
BLK Buffalo	Hazardous Material	X	X	#2022-T Amherst-007
Potable Water Well E2424 on Tonawanda Creek Road	Potable Water Well	-	X	#2022-T Amherst-009
Wastewater Pump Station on Transit Road	Wastewater Pump Station	X	X	#2022-T Amherst-003
Potable Water Well E3466 on Transit Road	Potable Water Well	X	X	2022-T Amherst-013

Identified Issues

After review of the Town of Amherst's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the town has identified the following vulnerabilities:

- Floodplain administration staff could benefit from additional training.
- Additional flood gauges are needed on certain streams.
- There are Repetitive Loss flood properties located in the town.
- The Lang Brewery Dam is in the Special Flood Hazard Area.
- A town wastewater pump station is in the Special Flood Hazard Area.
- Debris, including trees and limbs, block the flow of storm waters through the floodway. The blockages can contribute to localized flooding.
- There are locations along Gott Creek, Ellicott and Ransom Creeks that experience localized flooding.
- The BLK Buffalo facility stores hazardous materials and is in the SFHA.
- Municipal and non-municipal potable water wells are located within the Special Flood Hazard Area.
- Two Fire Stations are located within the 0.2 percent annual chance flood area.
- The Skinnersville Dam needs protection from flooding
- The town lacks and urban water management plan
- Nine facilities are located within the 0.2 percent annual chance flood area that store hazardous materials. which could be dangerous if flooding impacts the facility.
- There are several privately owned critical facilities located upon earthquake vulnerable soils.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding.
- The town should define the capacity of temporary housing locations
- The town is developing several important plans that related to hazard mitigation.

9.6.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.6-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Flood Mitigation Efforts to include the continued aggressive stream and creek debris removal program that has been implemented. This will also continue our program of working with Erie county Public works personnel.	Flooding	The town highway department has crews out year round checking local creeks and stream performing mitigation activities by removing debris as necessary in accordance with State and federal regulations.	Highway Department	Choose an item.	Cost Level of Protection Damages Avoided; Evidence of Success	 	1. Discontinue 2. 3. completed
	CRS continuation, outreach education efforts, and add additional information to our website, through mailers along with making this information available through our Emergency Services Facebook, LinkedIn, and Twitter accounts.	Flooding	Not Identified	Building and Emergency Services	Choose an item.	Cost Level of Protection Damages Avoided; Evidence of Success	 	1. Discontinue 2. 3. ongoing
	Active participants in the NOAA programs. We are active on the NWS Chat site, just renewed our Storm Ready designation in 2011 and promote the storm watcher program and NOAA website	Winter driving, extreme weather events, winter storms, flooding, numerous natural events	Not Identified	Emergency Services	Choose an item.	Cost Level of Protection Damages Avoided; Evidence of Success	 	1. Discontinue 2. 3. ongoing

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	programs to our community and through our local CERT trained residents.							
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Building/ Planning Department	Choose an item.	Cost		1. Discontinue 2. 3. ongoing
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Amherst did not identify any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Amherst participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.6-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	-	-	-	X	-	-	-	-	X
Cyber Attack	X	-	-	-	X	-	-	-	-	X
Earthquake	X	X	-	-	X	X	-	-	-	X
Expansive Soils	X	-	-	-	X	-	-	-	-	X
Extreme Temperature	X	-	-	-	X	-	-	-	-	X
Flood	X	X	X	X	X	X	X	X	-	X
Hazardous Materials	X	X	-	-	X	-	-	-	-	X
Landslide	X	-	-	-	X	-	-	-	-	X
Pandemic	X	-	-	-	X	-	-	-	-	X
Severe Storm	X	X	-	-	X	-	-	X	-	X
Severe Winter Storm	X	-	-	-	X	-	-	-	-	X
Utility Failure	X	-	-	-	X	-	-	-	-	X
Wildfire	X	-	-	-	X	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.6-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Amherst would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.6-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Amherst -001	Floodplain Administrator to attend training on floodplain management	3	Flood	**Problem:** Floodplain Managers require training to fully implement the NFIP program within the town. **Solution:** Obtain/host training and certification for floodplain managers	No	No	Within 2 years	ECDHSES, FPA	$3,000	Certified floodplain managers are trained to implement an effective floodplain management program	County and town budgets	High	LPR	PR
2022-T Amherst -002	Protect Lang Brewery Dam to the 0.2% annual chance flood even	1,2	Flood	**Problem:** The Lang Brewery Dam is in the Special Flood Hazard Area. **Solution:** The town will contact the facility managers of privately owned dams and discuss options for protecting the dams to the 0.2% annual chance flood event.	Yes	No	Within 5 years	Town Highway Department	<$500 for outreach, Project cost TBD by engineering for county owned dams	Ensure facility remains in service, protected from flood risk.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-T Amherst -003	Protect the town's wastewater pump station to the 0.2% annual chance flood.	1	Flood	**Problem:** A town wastewater pump station is in the Special Flood Hazard Area. The pump station is on Transit Road, near Lapp Road. **Solution:** The town will conduct an engineering study to determine most appropriate measures to protect the town's wastewater pump to the 0.2% annual chance flood event.	Yes	Yes	Within 5 years	Town Highway Department	TBD by feasibility assessment	Ensure continued operation of this critical infrastructure facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -004	Clear debris from Ellicott Creek	2	Flood	**Problem:** Debris, including trees and limbs, block the flow of storm waters through the floodway. This blockage can	No	No	Within 2 years	Town Highway Department	$50,000	Maintain the flow of the Ellicott Creek to	HMGP, BRIC	High	NSP	NR

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				contribute to localized flooding. **Solution:** Purchase equipment to maintain and regularly clear the Ellicott Creek bed.						carry storm waters and to mitigate future flooding				
2022-T Amherst -005	Implement flood mitigation measures along Ransom Creek	1,2	Flood	**Problem:** There are locations along Ransom Creek that experience localized flooding **Solution:** In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Ransom Creek. Resilient New York Flood Mitigation Initiative: Ransom Creek The town should pursue completion of mitigation measures including removal of flood prone facilities, adaptation to flood resilience, remove repetitive damage properties, among other options.	No	No	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Ransom Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -006	Implement flood mitigation measures along Gott Creek	1	Flood	**Problem:** There are locations along Gott Creek that experience localized flooding **Solution:** In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek The town should pursue	No	No	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Gott Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				completion of these mitigation measures. The town should pursue completion of mitigation measures including removal of flood prone facilities, adaptation to flood resilience, remove repetitive damage properties, among other options.										
2022-T Amherst -007	Protect the BLK Buffalo facility to the 0.2% annual chance flood event.	1	Flood	**Problem:** The BLK Buffalo facility stores hazardous materials and is in the SFHA **Solution:** The town will work the facility owner to conduct a feasibility study to determine and implement best mitigation actions to protect the BLK Buffalo facility from flooding	Yes	Yes	Within 2 years	Town Highway Department	TBD by feasibility study	Protect facility from flooding and potential release of hazardous material	Municipal Budget, staff time	High	EAP	PI
2022-T Amherst -008	Protect the Skinnersville Dam from exposure to the flood hazard.	1	Flood	**Problem:** The dam is located within the 0.2% annual floodplain, exposed to the 0.2% annual chance flood event. **Solution:** The town will conduct a feasibility assessment to determine what additional floodproofing measures are Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	No	Within 5 years	Engineer Town Public Works	TBD by feasibility assessment	Ensure continuity of critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program	High	SIP	PP

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Amherst -009	Protect Potable water well ID: E2424	1, 2	Flood	**Problem:** Potable well is vulnerable to flooding from the 0.2% annual chance flood. **Solution:** Fire Department will ensure that facility is assessed for best mitigation measures to protect against flooding and will implement these measures.	Yes	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -010	Protect the Getzville Fire Station and Ellicott Creek Vol. Fire Co., to the 0.2% annual chance flood event	1,2	Flood	**Problem:** These two Fire Stations are located within the 0.2% annual chance flood area **Solution:** The town will assess the flood risk at the facilities and take mitigation action as needed	Yes	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -011	There are nine critical facilities located in the town that are vulnerable to the HazMat hazard risk	1,2	HazMat	**Problem:** Nine facilities are located within the 0.2% annual chance flood area that store Hazardous materials which could be dangerous if flooding impacts facility. **Solution:** The town will coordinate with facility owners to assess the risk of facilities to the hazardous materials hazard	Yes	Yes	Within 5 years	Town engineer, private facility managers	TBD by feasibility assessment	Ensure continuity of operations at these critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-T Amherst -012	Protect critical facilities within the	1	Earthquake	**Problem:** There are several privately owned critical facilities located upon earthquake vulnerable soils	Yes	Yes	Within 5 years	Town engineer, private	TBD by feasibility assessment	Ensure continuity of operations at	FEMA HMGP, BRIC, USDA	High	SIP	PP

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	town that are exposed to the earthquake hazard			**Solution:** Work with property owners to ensure that properties are protected against the earthquake hazard.				facility managers		these critical facility	Community Facilities Grant Program, EMPG			
2022-T Amherst -013	Potable water well located on Transit Road is located within the SFHA	1	Flood	**Problem:** The potable water well is vulnerable to the flood risk due to location within the SFHA. **Solution:** The town will conduct an engineering study to determine most appropriate measures to protect the town's well to the 0.2% annual chance flood event.	Yes	Yes	Within 5 years	Town Fire Departments and Town Board	TBD by feasibility assessment of potential mitigation actions	Ensure continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -014	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	1	Flood	**Problem**: The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will encourage the county to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Training Facility to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility	Yes	Yes	Within 5 years	Engineer, Town Fire Department	TBD by feasibility assessment	Ensures continuity of operations of the critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				•Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-T Amherst -015	Repetitive Loss Properties	1	Flood	**Problem:** There may be numerous homes and other buildings that have flooded. These should be considered for purchase and removal. **Solution:** Work with local homeowners of repetitively flooded properties to determine interest in inclusion in a grant application to FEMA for mitigation project funding (floodproof/elevate/acquire) and apply to FEMA on homeowner behalf.	No	No	Within 5 years	FPA	TBD per property acquisition	Protect life and property at properties vulnerable to flooding.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Amherst -016	Install flood gauges	1	Flood, Severe Storm	**Problem:** More timely and accurate data about creek levels is needed to improve flood readiness **Solution:** Install creek gauging stations. Conduct annual flood channel inspections/clearing.	No	No	Within 1 year	FPA	TBD by cost of flood gauge installation.	Improve emergency response	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	NR
2022-T Amherst -017	Develop Urban Water Management Plan	1	Flood, Severe Storm	**Problem:** The town's LWRP recommends development of an Urban Water Management Plan.	No	No	Within 3 years	Town Highway Department and FPA	$100,000	Protect community from flooding and	FEMA HMGP, BRIC,	High	LPR	PR

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The Town Board will dedicate adequate funding or seek external funding to develop an Urban Water Management Plan that mitigates against natural hazards impacts.						storm damage	municipal budget			
2022-T Amherst -018	Complete plans that are under development	2	All Hazards	**Problem:** The town is in the process of updating the Local Waterfront Revitalization Plan, the Forest Management Plan and the town's Agricultural Plan **Solution:** The town will complete the Local Waterfront Revitalization Plan. the Forest Management Plan and the town's Agricultural Plan. Ensure that hazardous materials risk reduction is included into these plans.	No	No	Within 3 years	Town Board	Staff time/consultant time	Protect shoreline in the town from erosion, substandard development	NYS DOS	High	LPR	PR
2022-T Amherst -019	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	1, 2	Flood	**Problem:** The North Amherst Fire Station is in the SFHA, exposed to the flood hazard. **Solution:** The town will conduct a feasibility study to determine and implement best action to protect the fire station.	Yes	Yes	Within 3 years	North Amherst Fire Company, Town Board	$50,000 estimate	Protect facility from flooding and ensure continuity of emergency operations	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
ECDHSES	*Erie County Dept. of Homeland Security and Emergency Services*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-001	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T Amherst-002	Protect Lang Brewery Dam to the 0.2% annual chance flood even	1	1	1	0	1	0	0	1	1	1	0	1	1	1	12	High
2022-T Amherst-003	Protect the town's wastewater pump station to the 0.2% annual chance flood.	1	1	1	1	1	1	0	1	1	1	0	1	1	0	12	High
2022-T Amherst-004	Clear debris from Ellicott Creek	1	1	0	0	0	1	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-005	Implement flood mitigation measures along Ransom Creek	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T Amherst-006	Implement flood mitigation measures along Gott Creek	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-T Amherst-007	Protect the BLK Buffalo facility to the 0.2% annual chance flood event.	1	1	1	1	1	1	0	1	0	0	0	1	1	1	10	High
2022-T Amherst-008	Protect the Skinnersville Dam from exposure to the flood hazard.	1	1	1	0	0	0	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-009	Protect Potable water well ID: E2424	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-010	Protect the Getzville Fire Station and Ellicott Creek Vol. Fire Co., to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-T Amherst-011	There are nine critical facilities located in the town that are vulnerable to the HazMat hazard risk	1	1	0	0	0	1	0	1	1	1	1	1	1	1	10	High
2022-T Amherst-012	Protect critical facilities within the town that are exposed to the earthquake hazard	1	1	1	1	0	0	0	1	1	1	1	1	1	1	11	High
2022-T Amherst-013	Potable Water well located on Transit Road is located within the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-014	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	0	0	10	High
2022-T Amherst-015	Repetitive Loss Properties	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-016	Install flood gauges	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.6-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Amherst-017	Develop Urban Water Management Plan	1	1	1	1	1	1	0	0	0	0	1	1	1	1	10	High
2022-T Amherst-018	Complete plans that are under development	1	1	1	1	1	1	1	0	0	0	1	1	1	1	11	High
2022-T Amherst-019	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	1	1	1	1	1	1	0	1	1	1	0	1	0	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.6.9 Action Worksheets

The following action worksheets have been developed by the Town of Amherst to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet			
Project Name:	Protect the town's wastewater pump station to the 0.2% annual chance flood.		
Project Number:	2022-T Amherst-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	A town wastewater pump station is in the Special Flood Hazard Area. The pump station is vulnerable to the flood hazard. The pump station is in East Amherst on Transit Road, near Lapp Road.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct an engineering study to determine most appropriate measures to protect the town's wastewater pump to the 0.2% annual chance flood event.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Engineer, Town Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new wastewater pump station	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet		
Project Name:	Protect the town's wastewater pump station to the 0.2% annual chance flood. The pump station is in East Amherst on Transit Road, near Lapp Road.	
Project Number:	2022-T Amherst-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the wastewater pump
Property Protection	1	Project will protect a wastewater pump from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	1 year
Agency Champion	1	Town Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet			
Project Name:	Protect Potable water well ID: E2424		
Project Number:	2022-T Amherst-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	A town potable water well is vulnerable to flooding from the 0.2% annual chance flood.		
Action or Project Intended for Implementation			
Description of the Solution:	Fire Department will ensure that facility is assessed for best mitigation measures to protect against flooding and will implement these measures.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Fire Departments and Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new potable water well	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet		
Project Name:	Protect Potable water well ID: E2424	
Project Number:	2022-T Amherst-009	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the well
Property Protection	1	Project will protect a well from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 5 years
Agency Champion	1	Town Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet			
Project Name:	Potable water well located on Transit Road is located within the SFHA		
Project Number:	2022-T Amherst-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The potable water well is vulnerable to the flood risk due to location within the SFHA.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct an engineering study to determine most appropriate measures to protect the town's well to the 0.2% annual chance flood event.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the wastewater pump station
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Fire Departments and Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new potable water well	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet		
Project Name:	Potable water well located on Transit Road is located within the SFHA	
Project Number:	2022-T Amherst-013	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the well
Property Protection	1	Project will protect a well from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 5 years
Agency Champion	1	Town Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet			
Project Name:	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event		
Project Number:	2022-T Amherst-014		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The county-owned Amherst Fire Training Facility is in the special flood hazard area and is vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Training Facility to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations and protection of assets at the Amherst Fire Training Facility
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	5 year
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Engineer, Town Fire Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Shutdown the Fire Training Facility	Medium	Loss of facility for training of critical emergency personnel
	Construct new Fire Training Facility outside the flood hazard area	High	Expensive, likely less expensive to mitigate
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet		
Project Name:	Protect the Amherst Fire Training Facility to the 0.2% annual chance flood event	
Project Number:	2022-T Amherst-014	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the fire training facility
Property Protection	1	Project will protect the important fire training facility
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	5 year
Agency Champion	1	Town Engineer/Fire Department
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet			
Project Name:	Protect the North Amherst Fire Station to the 0.2% annual chance flood level		
Project Number:	2022-T Amherst-019		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The North Amherst Fire Station is in the SFHA, exposed to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility study to determine and implement best action to protect the fire station.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations and protection of assets at the Amherst Fire Training Facility
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	$50,000 estimate	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	5 year
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	North Amherst Fire Company, Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Shutdown the Fire Station	Medium	Loss of emergency response capability
	Construct new fire station outside the flood hazard area	High	Expensive, likely less expensive to mitigate
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Amherst Action Worksheet		
Project Name:	Protect the North Amherst Fire Station to the 0.2% annual chance flood level	
Project Number:	2022-T Amherst-019	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the fire station
Property Protection	1	Project will protect the important fire station
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	3 years
Agency Champion	1	North Amherst Fire Company, Town Board
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 45-Section-9.6-Amherst-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.7 VILLAGE OF ANGOLA

This section presents the jurisdictional annex for the Village of Angola. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Angola's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.7.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Angola's hazard mitigation plan primary and alternate points of contact. The Village of Angola followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: The Clerk-Treasurer, the Mayor's Office, Code Enforcement, and the Department of Public Works. The Clerk-Treasurer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.7-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mayor Howard Frawley Address: 41 Commercial St Angola, NY 14006 Email: angolamayor@verizon.net	Name/Title: Nicole Milks, Clerk-Treasurer Address: 41 Commercial St Angola, NY 14006 Phone Number: 716-549-1126 Email: angolaclerk@verizon.net
NFIP Floodplain Administrator	
Name/Title: Phil Tremblay, Code Enforcement Officer Address: 41 Commercial St Angola, NY 14006 Phone Number: 716-548-2372	

9.7.2 Municipal Profile

The Village of Angola has a long rich history as a waterfront and railroad community. The village is one square mile in size is entirely located within the Town of Evans and is approximately 22 miles south of downtown Buffalo.

In 1804, Joel Harvey was the first white person to settle in Angola on the west side of Eighteen Mile Creek. Immigration increased significantly after the War of 1812. Eighteen Mile Creek and other waterbodies spurred development of grist and sawmills which stimulated development. The arrival of a railroad in 1852 was another economic boost. The village incorporated in 1873. During the 1900's shifts from railroads to personal automobiles resulted in a decline in village commercial activity, though seasonal residences continued to thrive.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The latter half of the 20th Century saw several major employers in the village shut down. In June 2004, an attempt to dissolve the village was unsuccessful (Village of Angola website 2020).

According to the U.S. Census, the 2010 population for the Village of Angola was 2,127. The estimated 2019 population was 2,373, a 12 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.4 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.7.3 Jurisdictional Capability Assessment and Integration

The Village of Angola performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.7.3). The Village of Angola's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Angola. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.7-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	1974 Village Code	Local	Mayor
Comments: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	1974 Village Code	Local	Mayor
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan"11 or "in accordance with a comprehensive plan."12 Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan"					

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level					
Subdivision Ordinance	Yes	Yes	1974 Village Code	Local	Mayor
Comment: Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified in a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).					
Stormwater Management Ordinance	Yes	Yes	2007 Village Code	Local	Mayor
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System (SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department.					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	No	-	-	-	-
Comment: None					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 108 - 2021	Local	Code Enforcement
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. • It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	No	-	-	-	-
Comment: None					

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Evans/ Village of Angola Comprehensive Plan Update, 2013	Local	Supervisor/Mayor
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level.					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Angola to oversee and track development.

Table 9.7-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	SFHA (100-year floodplain)
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Angola and their current responsibilities which contribute to hazard mitigation.

Table 9.7-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	Yes	No Comment
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The village Building Department oversees Building Permits, Zoning Board of Appeals applications, rental permits for rental units, and operating permits for the use of manufacturing, storing, or handling hazardous materials and high-occupancy buildings.
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	The Village of Angola has a Volunteer Fire Department available, and uses shared services with the Town of Evnas Police Department.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	No Comment
Mutual aid agreements	Yes	Town of Evans
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	No Comment
Engineers or professionals trained in building or infrastructure construction practices	Yes	No Comment
Planners or engineers with an understanding of natural hazards	Yes	No Comment
Staff with expertise or training in benefit/cost analysis	Yes	No Comment
Professionals trained in conducting damage assessments	Yes	No Comment
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Angola.

Table 9.7-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Angola.

Table 9.7-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk-Treasurer
Personnel skilled or trained in website development	Yes	Clerk-Treasurer
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Village of Angola Facebook
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Village of Angola Facebook
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	Unknown	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Angola.

Table 9.7-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.7-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.7.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Phil Tremblay, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Angola.

Table 9.7-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Angola	1	18	$83,162	5	0

Source: FEMA, 2019

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*

RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

The Village of Angola has minimal areas prone to flooding and does not keep a list of properties that have been damaged by flooding. The flood hazard maps adequately address risk within the village. There are currently no RiskMAP projects underway.

NFIP Compliance

The Village Code Enforcement Officer is responsible for floodplain management. There are no CFMs on staff within the jurisdiction and the village does not need additional assistance or training to support floodplain management. The floodplain management program meets minimum requirements, and was last updated on May 10, 2021. The last CAC visit was on June 20, 2007, and the CAV was conducted on April 1, 1983. There are no outstanding compliance issues.

9.7.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Angola has identified the following routes and procedures to evacuate residents prior to and during an event.

- South Main Street Residents shall take South Main Street to Route 20
- Residents on the north side of the railroad tracks shall take Commercial Street to Route 5; Lake Street to Route 5; or North Main Street to Beach Road

Sheltering

The Village of Angola has identified the following designated emergency shelters within the Village.

Table 9.7-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
MPB	22 Prospect	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Fire Station 2	151 S. Main	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
JT Waugh School	100 High St.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Angola has identified the following sites suitable for placing temporary housing units.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.7-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Lake Shore Schools Athletic Fields	100 High St.	Unknown	Unknown	Unknown	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Angola has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.7-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify Permanent Housing Locations. See Mitigation Action 2022-V. Angola-#001.					

9.7.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.7-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.7-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	1	0	0	0	2	0	0	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

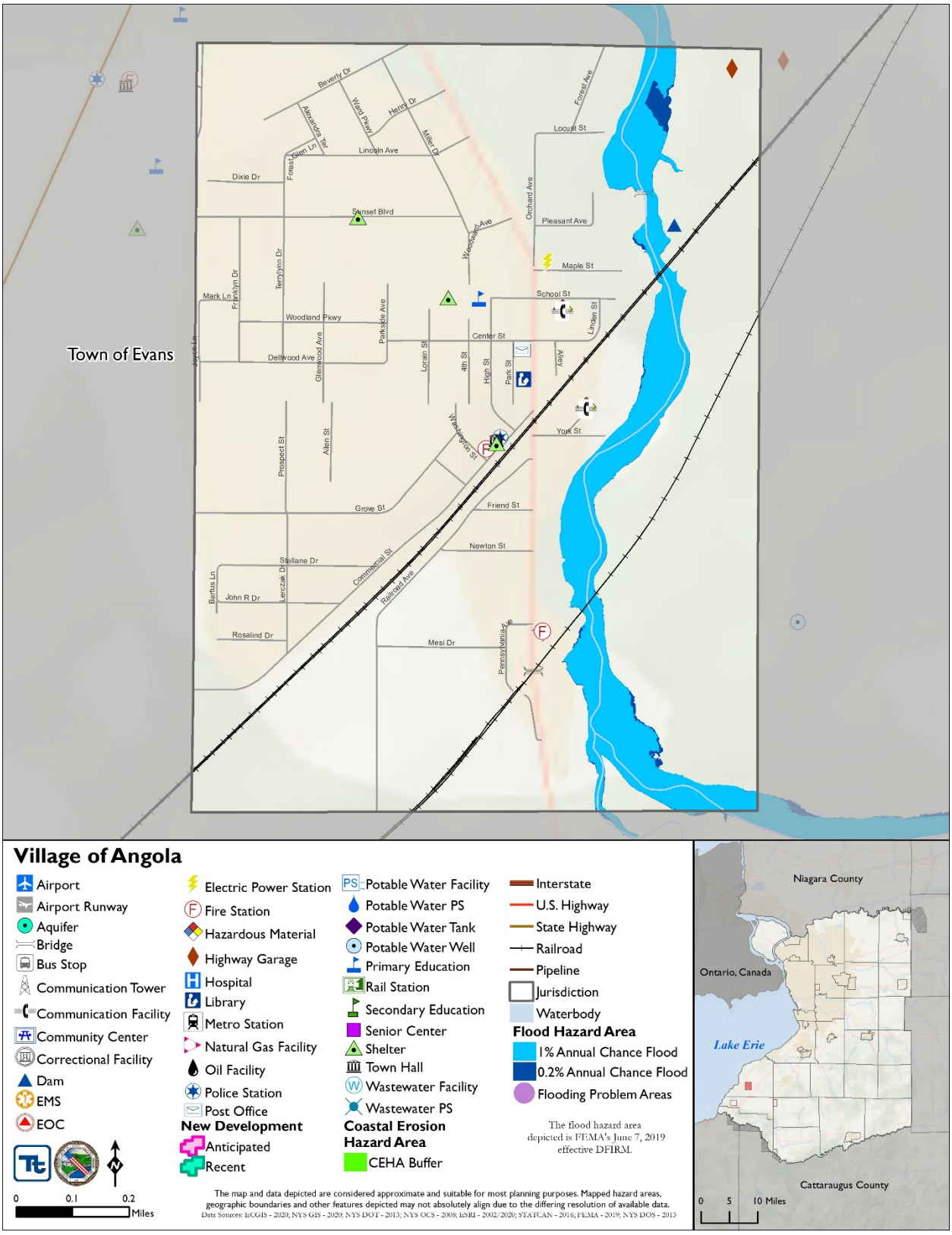
9.7.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Angola's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Angola has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

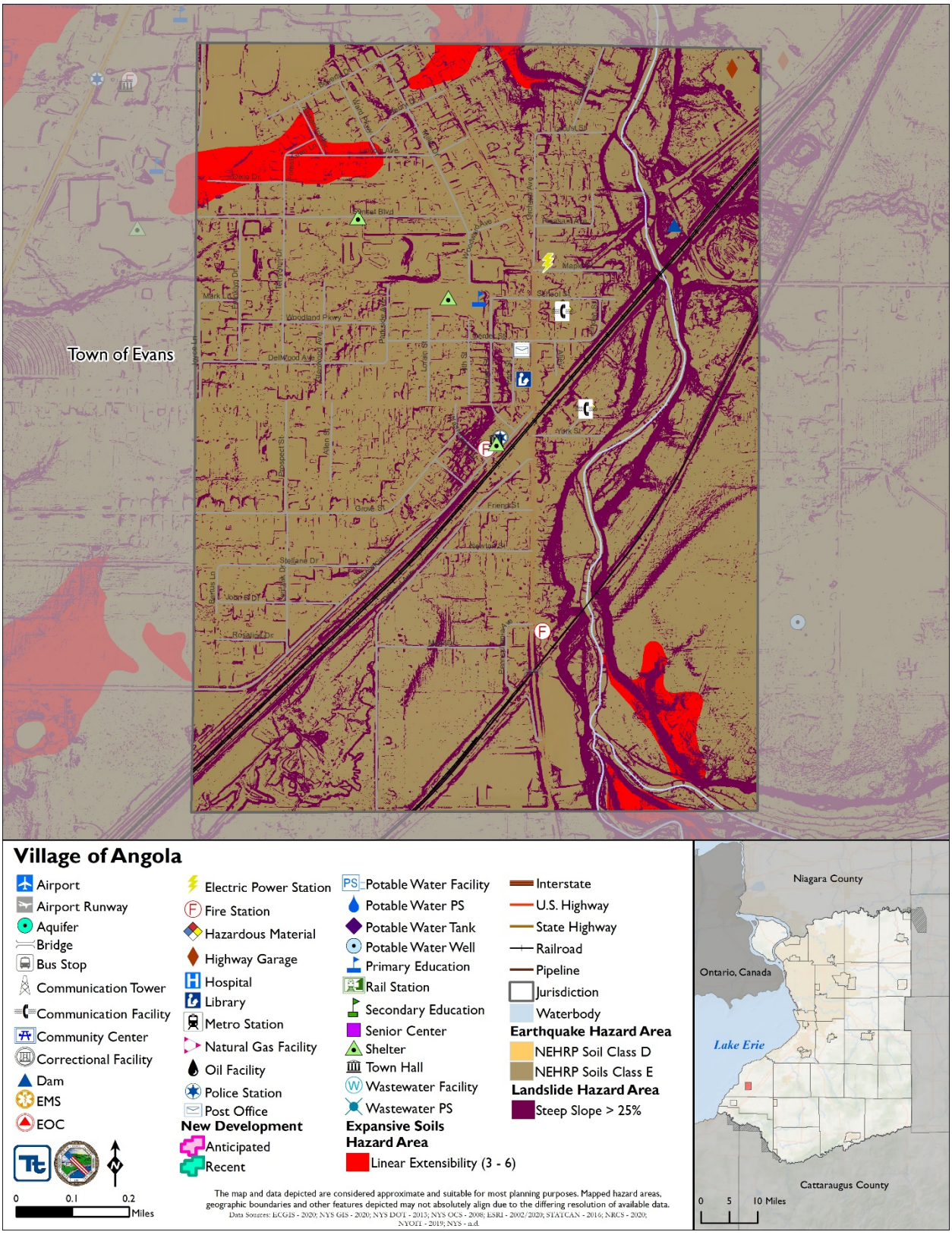
Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.7-1. Village of Angola Hazard Area Extent and Location Map 1



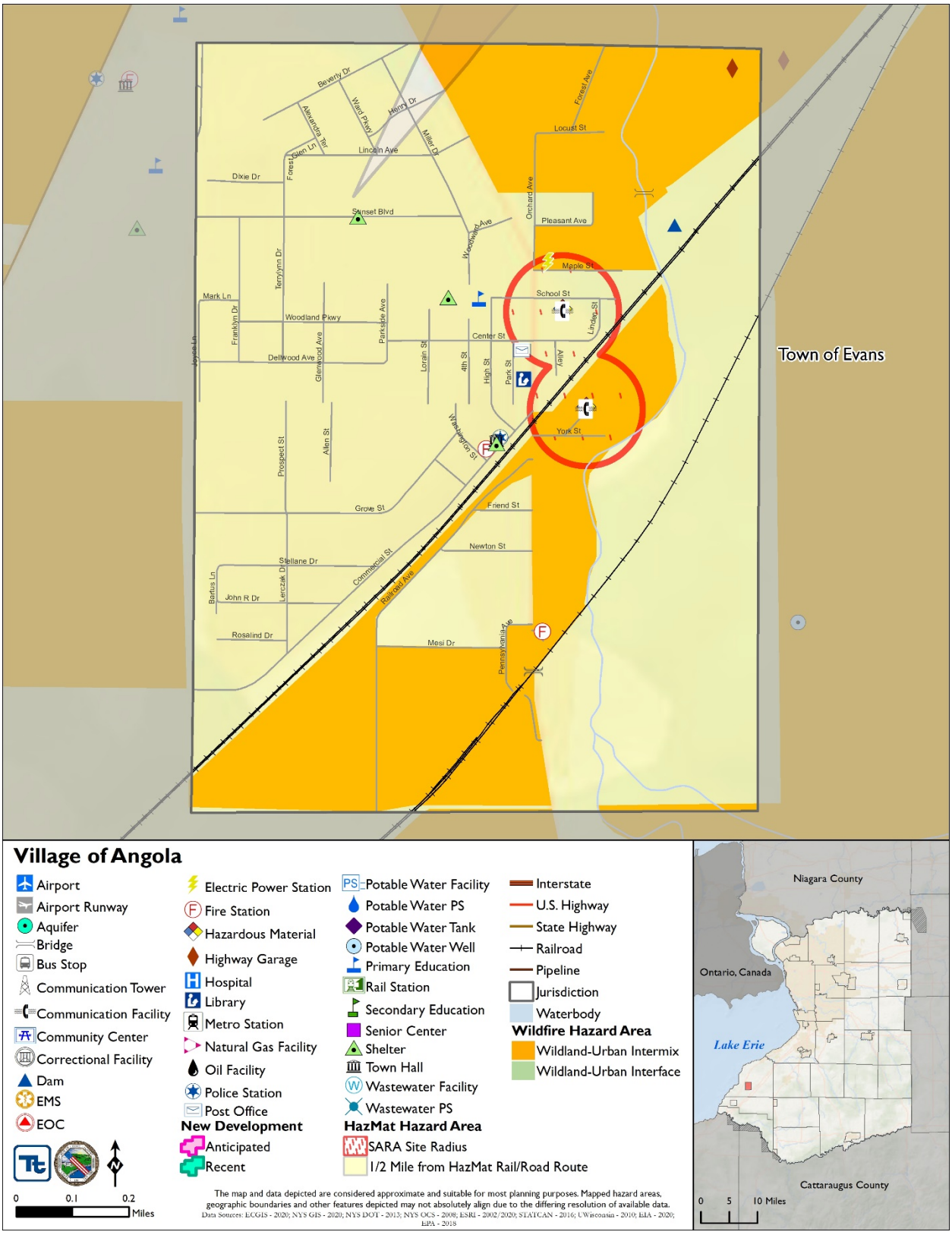
Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.7-2. Village of Angola Hazard Area Extent and Location Map 2



Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.7-3. Village of Angola Hazard Area Extent and Location Map 3



Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Angola's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.7-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.7-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	Seiche	No	A strong low-pressure system with persistent winds produced a seiche on Lake Erie. Water levels rose nearly six feet in a few hours with the water level crest in Buffalo reaching 9.15 feet.	Flooding was reported in Angola along Route 5. Route 5 was temporarily closed in areas multiple times due to high water and debris on the roadway.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 25 inches of snow was reported in Angola. The greatest snow accumulations of the event occurred in Angola.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or mere and school busses were unable to bring students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	Four to five inches of snow per hour fell in Angola, bringing traffic to a standstill. Plows were unable to keep up with clearing the snow and people abandoned their cars on the New York Thruway and local roads. Total snowfall report in Angola amounted to 19 inches.
October 27-November 1, 2019	Lakeshore Flooding and High Winds	DR-4472-NY	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	More than 500 NYSEG customers lost power in Evans and Angola.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Angola's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Angola. The Village of Angola has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village indicated that an earthquake is unlikely in the area, and reduced the calculated risk to being Medium.

Table 9.7-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.7-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of Angola's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Angola has identified the following vulnerabilities within their community:

- The village has expressed interest in developing a plan for evacuation in the event of a train derailment.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- The availability of cleaning supplies, personal protective equipment, medical professionals, and having a Contingency/back-up plan for staffing has been an emerging issue for schools amid the Covid-19 Pandemic.

9.7.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.7-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	N/A	Flooding	Highway Department	Maintenance of creek bed to prevent flooding	Ongoing Capability	Cost	-	1. Complete 2. 3. Discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2		All Hazards	Fire Department/ Disaster Coordinator	Program to educate residents on what to do during and after a disaster	In Progress	Cost	-	1. Yes 2. To include in 2022 HMP to include preparedness information on website and notify media outlets. See Mitigation Action #003 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3		Winter Storms	Code Enforcement	Review and Revise the building codes for snow loads	No Progress	Cost	-	To include in 2022 HMP. See Mitigation Action #004
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4		Winter, Severe, Wind, and Ice Storms	Code Enforcement	Work with the electric company on trimming trees to reduce power line failures throughout the Village	Complete	Cost	Low	1. Complete 2. 3. Discontinue.
						Level of Protection	High	
						Damages Avoided; Evidence of Success	Yes	
5		Flooding	Code Enforcement	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Complete	Cost	Low	1. Complete 2. 3. Discontinue.
						Level of Protection	Medium	
						Damages Avoided; Evidence of Success	Yes	
6		Flooding	Code Enforcement	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Complete	Cost	Low	1.Complete 2. 3. Discontinue.
						Level of Protection	High	
						Damages Avoided;	Yes	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Evidence of Success		
7		Flooding	Code Enforcement	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	No Progress	Cost	-	1. Discontinue 2. 3. Floodplain risk to the Village is minimal.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Angola has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Disaster Coordinator/Emergency Manager organized evacuation efforts and emergency response plans for residents on how to evacuate the village in event of a train disaster/derailment.
- The DPW & Water Department provides notification of need to boil water and distributes water in the event of contamination.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Angola participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.7-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X	X	X	X			
Cyber Attack	X			X	X	X	X			
Earthquake	X			X	X	X	X			
Expansive Soils	X			X	X	X	X			
Extreme Temperature	X			X	X	X	X			
Flood	X		X	X	X	X	X	X		
Hazardous Materials	X			X	X	X	X			
Landslide	X			X	X	X	X			
Pandemic	X			X	X	X	X			
Severe Storm	X		X	X	X	X	X	X		
Severe Winter Storm	X		X	X	X	X	X	X		
Utility Failure	X			X	X	X	X			
Wildfire	X			X	X	X	X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.7-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Angola would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.7-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Angola-001	Permanent Housing Location Identification	1, 2, 3	All Hazards	**Problem**: The village does not keep a buildable land inventory with locations to permanently relocate homes damaged by hazard events/flooding. **Solution**: The Village of Angola Planning Board and Building Department will work with County GIS and Planning to develop a list of municipal-owned land not exposed to hazard areas to keep as open space and as an opportunity to relocate and properties/buildings experiencing losses from repetitive hazard/flooding events. This buildable land inventory will be maintained on a regular basis as flood maps and new data and information is gathered.	No	No	Short	Planning Board/Building Department with support from County GIS and Planning	Low	High; Ensures land is available for permanent building relocation	Municipal Budget	Medium	LPR	PR, PP
2022-V. Angola-002	RL Homeowner Outreach	1, 2, 3	Flood	**Problem:** There are 5 RL properties within the village. **Solution:** The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	None	6 months	Floodplain Administrator	Low	High	City Budget	High	EAP	PI
2022-V.	Resident Disaster Education	1, 2, 3	All Hazards	**Problem**: The village does not have any personal disaster preparedness information	No	No	Short;	Village Clerk-Treasurer	Low	High	Municipal Budget	High	EAP	PI

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Angola-003				available on the municipal website. **Solution**: The village will support and provide programming for residents about personal disaster preparedness and actions to take before, during, and after disasters on the Village Website and social media. Information from sources such as FEMA, New York State DHSES, the American Red Cross, and others should be leveraged to provide comprehensive educational resources about disaster readiness. The Village will support any County-led courses or programs for residents to receive additional disaster information.			To being immediately							
2022-V. Angola-004	Building Code Revision	1, 2	Severe Winter Storm	**Problem**: The Village Building Code is outdated and needs to account for heavy snow loads on roofs. **Solution**: The Village Code Enforcement Department will update the building code to account for heavier weights of snow on roofs to prevent property damages and losses.	No	No	Short	Village Code Enforcement	Low	High	Municipal Budget	High	LPR	PR
2022-V. Angola-005	Emergency Management Ordinance	1, 2, 3	All Hazards	**Problem**: The village does not have a specific Emergency Management Ordinance. **Solution**: The Disaster Coordinator will work with the village government to develop an Emergency Management Ordinance to include as part of	No	No	Short	Disaster Coordinator and Village Board	Low	High	Municipal Budget	High	LPR	PR

Table 9.7-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the municipal code. The Ordinance will include a detailed plan for the deployment of emergency services before, during, and after a hazard event, and will include specifics about mitigation, preparedness, response, and recovery.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.7-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Angola-001	Permanent Housing Location Identification	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-V. Angola-002	RL Property Outreach	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
2022-V. Angola-003	Resident Disaster Education	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-V. Angola-004	Building Code Revision	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-V. Angola-005	Emergency Management Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.7.9 Action Worksheets

The following action worksheets have been developed by the Village of Angola to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Resident Disaster Education		
Project Number:	2022-V. Angola-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The village does not have any personal disaster preparedness information available on the municipal website.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will support and provide programming for residents about personal disaster preparedness and actions to take before, during, and after disasters on the Village Website and social media. Information from sources such as FEMA, New York State DHSES, the American Red Cross, and others should be leveraged to provide comprehensive educational resources about disaster readiness. The Village will support any County-led courses or programs for residents to receive additional disaster information.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High
Useful Life:	N/A	**Goals Met:**	1, 2, 3
Estimated Cost:	Low	**Mitigation Action Type:**	EAP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	To begin immediately
Estimated Time Required for Project Implementation:	To begin immediately	**Potential Funding Sources:**	Municipal Budget
Responsible Organization:	Village Clerk-Treasurer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Send information by mail	$1,000	Not cost effective, cannot be updated easily
	Call residents individually to warn about hazard events	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Resident Disaster Education	
Project Number:	2022-V. Angola-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Provides valuable information to residents
Property Protection	0	
Cost-Effectiveness	1	Low to no costs
Technical	1	Clerk can update website
Political	1	Village supports
Legal	1	
Fiscal	1	Low costs
Environmental	1	
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Building Code Revision		
Project Number:	2022-V. Angola-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Winter Storm		
Description of the Problem:	The Village Building Code is outdated and needs to account for heavy snow loads on roofs.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Code Enforcement Department will update the building code to account for heavier weights of snow on roofs to prevent property damages and losses.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures property protection and aligns with state requirements
Useful Life:	10 years	**Goals Met:**	1, 2
Estimated Cost:	Low, staff time	**Mitigation Action Type:**	LPR
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Municipal Budget
Responsible Organization:	Village Code Enforcement	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Eliminate Building Code/Standards	N/A	Not feasible, State Requirement
	Re-write entire code	N/A	Just an update of existing code is needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Building Code Revision	
Project Number:	2022-V. Angola-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures building safety
Property Protection	1	
Cost-Effectiveness	1	Low to no cost
Technical	1	
Political	1	Village supports
Legal	1	Village has jurisdiction
Fiscal	1	Low to no cost
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 46-Section-9.7-Angola-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.8 Town of Aurora

This section presents the jurisdictional annex for the Town of Aurora. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Aurora's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.8.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Aurora's hazard mitigation plan primary and alternate points of contact. The Town of Aurora followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: clerk, engineer, building inspector, and disaster preparedness coordinator. The Clerk represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.8-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Bach/ Supervisor Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: 716-652-7590 Email: supervisor@townofaurora.com	Name/Title: Elizabeth Cassidy/ Code Enforcement Officer Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: (716) 652-7591 Email: building@townofaurora.com
NFIP Floodplain Administrator	
Name/Title: Elizabeth Cassidy/ Code Enforcement Officer Address: 575 Oakwood Ave. East Aurora, New York 14052 Phone Number: (716) 652-7591 Email: building@townofaurora.com	

9.8.2 Municipal Profile

The Town of Aurora was founded in 1818, The town is 36 square miles in size and includes the Village of East Aurora, plus the hamlets of Jewettville, Griffins Mills, West Falls and a portion of South Wales. The town is part of Buffalo's "Southtowns" and is bordered on the north by the Town of Elma, on the east by the Town of Wales, on the south by the Town of Colden and on the west by the Town of Orchard Park. US Route 20A and New York State Route 240 are important transportation route through the southwest part of the town (Town of Aurora 2021).

One of the town's earliest and most prominent settlers was a young Millard Fillmore; the President's home is a National Historic Landmark. The town was a well-known center of horse racing in the late 1800s (Town of Aurora 2021). The town remains predominately rural in nature. Farming, once the predominant land use in the

region, has given way to open land and rural residential growth. Some scattered small-scale commercial and convenience retail uses have developed in the more rural areas of the town (Regional Comprehensive Plan, 2012).

According to the U.S. Census, the 2010 population for the Town of Aurora was 7,546. The estimated 2019 population was 7,599, a 0.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.8.3 Jurisdictional Capability Assessment and Integration

The Town of Aurora performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.8.3). The Town of Aurora's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Aurora. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.8-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	2020 NYS Building	Local	Code Enforcement
Comment: *The Town of Aurora Code Enforcement Officer is delegated the authority to issue building permits under the circumstances described in § 280-a of the Town Law, provided that the following conditions are met by each applicant:* *A. For ingress and egress, each applicant shall furnish proof of a fifty-foot permanent easement or right-of-way or title to an area at least 50 feet in width for ingress and egress, extending from the public street or highway to the building.* *[Amended 1-11-2010 by L.L. No. 1-2010]* *B. The front yard of the applicant's lot shall be that portion facing the public highway; and if more than one highway exists, the Code Enforcement Officer shall determine the front of the lot using the Zoning Map[1] and the Town records as a guide.* *C. The applicant shall install a culvert of a type approved by the Town Highway Superintendent.*					

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
D. Installation of culverts and excavation and backfill of pipe trenches shall be in accordance with the Standard Specifications and Details for Materials and Construction of the Town of Aurora. *E. The applicant shall conform to all other zoning requirements as set forth in Chapter 116, Zoning, and the Table of District Regulations.*					
Zoning Code	Yes	No	Chapter 116 of Aurora Town Code	Local	Code Enforcement
Comment: The zoning ordinance has the following guidance for municipal development. 1) Buildings may be erected or substantially altered in any area depicted as a floodway or special flood hazard area. 2) Future off-street parking areas must have adequate room for sanitation, snow removal, emergency and other public service vehicles. 3) Wind energy conservation systems shall provide a contour/topography map of the property and adjacent parcels of sufficient scale as to clearly indicate appropriate drainage and erosion impact on and off site as well as jurisdictional wetlands. 4) The wind energy conservation system applicant shall provide a certificate from a qualified licensed professional engineer certifying that the tower and its foundation meet applicable structural safety standards, including but not limited to wind loading and seismic effects due to soil conditions.					
Subdivision Ordinance	Yes	No	Chapter 99 of Aurora Town Code	Local	Town Board
Comment: *1) Sketch plan to include data showing how development may impact an adjoining property, the availability of utilities, the effect on drainage systems, natural watercourses, and other environmental concerns. 2) Where a subdivision or open development area is traversed by a watercourse, drainageway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width or construction, or both, as will be adequate for the purpose. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard. 4) Surface water retention facilities shall be developed where required in order that the rate of stormwater runoff after construction is no greater than the rate of runoff prior to construction.*					
Stormwater Management Ordinance	Yes	Yes	Chapter 96 of Aurora Town Code	Local	Stormwater Management Officer
Comment: Stormwater Management Ordinance states the following: *1) At a minimum, a development's site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the land development activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and the location(s) of the stormwater discharge(s). 2) A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	Yes	-	-	-
Comment:					
Site Plan Review	Yes	No	Chapter 95 Aurora Town Code	Local	Planning Board
Comment: 1) An applicant's site plan will include the following: legal data, impact on the environs, natural features, existing man-made features, proposed development, impact on stormwater pollution, and other information or materials. If a stormwater pollution prevention plan (SWPPP) is submitted pursuant to § 95-4B(6) of this chapter, such SWPPP shall be considered by the Town Board, Planning Board and others as part of an analysis of an applicant's site plan, and the site plan and SWPPP shall not be approved unless they comply with the performance and design criteria and standards in Chapter 96, Stormwater Management, of the Code. 2) Topographical features, including a map showing existing contour intervals of no more than five feet. Two-foot contour intervals will be required if the topography is relatively flat. Areas of steep slopes should be delineated as necessary. 3) Hydrologic features, which should include drainage and natural runoff patterns, flood zones, noted wetlands, vegetative cover and average depth to groundwater.					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 68 of the Aurora Town Code	Local	Planning Board/ Code Enforcement
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* *F. Qualify and maintain for participation in the National Flood Insurance Program.* **BFE+2 feet for all construction in the SFHA (residential and non-residential)*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 96 of Aurora Town Code	Local	Town Highway Department
Comment: *The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 97-1A of this chapter. This chapter seeks to meet those purposes by achieving the following objectives:* *(1) Meet the requirements of Minimum Measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised.* *(2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01, or as amended or revised.* *(3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.* *(4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality.* *(5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable.* *(6) Reduce stormwater runoff rates and volumes, soil erosion and non-point-source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.*					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	Yes	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: *The plan was drafted but not adopted.*					

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	Yes	No	Open Space Plan 2008	Local	Town Board/Bldg Dept
Comment: *The mission of the open space committee is to inventory, evaluate and prioritize the Town of Aurora's open space resources and work with the community to develop and promote a plan for the protection of these resources. The plan is meant to add information to municipal planning process to encourage strategic development to promote sustainability, natural safety, and community resilience.*					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment: *The plan was drafted but not adopted.*					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism	No	-	-	-	-

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
plan, business development plan, etc.)					
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Operations Plan	Local	Town Emergency Office
Comment: *The mission of the plan and emergency management office is to provide up-to-date communications to Town of Aurora residents during an emergency to protect lives and property.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Aurora to oversee and track development.

Table 9.8-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town Board approval
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits are required.
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Substantial fallow agricultural land throughout the Town is available for development.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Aurora and their current responsibilities which contribute to hazard mitigation.

Table 9.8-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Appointed volunteer Board – The Planning Board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development. This board also makes recommendations regarding proposed changes to the ordinance. Zoning and development issues are handled through the Building and Code Enforcement Department.
Zoning Board of Appeals	Yes	Appointed volunteer board – The Zoning Board of Appeals hears and deliberates applications for variances to the town ordinances. Applications to the Zoning Board of Appeals are handled through the Building and Code Enforcement Office.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Duty of Planning Bd. – The Planning Board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development. This board also makes recommendations regarding proposed changes to the ordinance. Zoning and development issues are handled through the Building and Code Enforcement Department.
Open Space Board/Committee	Yes	Appointed volunteer board - The Town Board created the Town of Aurora Open Space Committee in January 2007. The mission of the committee is to inventory, evaluate and prioritize the Town of Aurora's open space resources and work with the community to develop and promote a plan for the protection of these resources.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department
Construction/Building/Code Enforcement Department	Yes	Building & Code Enforcement - provide all building and code enforcement services to the town and village. They ensure safety and code compliance through the implementation and enforcement of all local, state and federal codes, regulations and zoning ordinances.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Part of Highway Dept. - The Highway Department maintains 62 miles of town roads. Generally roads are repaired and paved in the spring and summer seasons. In the winter the Highway Department plows and salts all town roads and approximately 70 miles of Erie County roads per contract with the county.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		In the spring, summer and fall, our highway crews are out mowing roadsides, trimming and cutting down dead trees, cleaning out our ditches, installing new culvert pipe when needed, chipping branches and picking up chunk wood around town. The department does not pick up brush from land clearing and tree work done by private contractors. Four times per year crews pick up junk tires and car batteries and we have one electronics recycling pick up for residents (outside of the village) in the fall. Leaf pick up begins after Columbus Day. For more information on garbage and recycling see below. In May 2020 the Town of Aurora entered into a contract with the Town of Orchard Park to provide mulch and compost to Town of Aurora residents at the same rate as Orchard Park residents. Sewer districts in the Town of Aurora are handled by the Erie County Sewer Authority.
Mutual aid agreements	Yes	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering firm on retainer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering firm on retainer
Planners or engineers with an understanding of natural hazards	Yes	Engineering firm on retainer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Dept. Personnel - All Town and Village building and code enforcement services are handled by this office. The purpose of the department is to ensure safety and code compliance through the implementation and enforcement of all local, state and federal codes, regulations and zoning ordinances.
Surveyor(s)	No	-
Emergency Manager	Yes	Appointed Emergency Management Director and Assistant
Grant writer(s)	Yes	Town Clerk and outside contractor – has various capabilities.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)		-

Fiscal Capability

The table below summarizes financial resources available to the Town of Aurora.

Table 9.8-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes*

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Capital improvements project funding	Yes*
Authority to levy taxes for specific purposes	Yes*
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes*
Incur debt through special tax bonds	Yes*
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes*
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

* All would be administered by the Town Board and/or the Town Supervisor

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Aurora.

Table 9.8-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	None	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Aurora.

Table 9.8-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.8-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Low
Cyber Attack	Medium
Earthquake	Low
Expansive Soils	Medium
Extreme Temperature	High
Flood	Medium
Hazardous Materials	High
Landslide	High
Pandemic	High
Severe Storm	High
Severe Winter Storm	High
Utility Failure	High
Wildfire	Medium

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.8.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Elizabeth Cassidy, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Aurora.

Table 9.8-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Aurora	12	12	$96,661	7	1

Source: July and September, 2021 NFIP Data.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Flood prone areas in the Town of Aurora include properties along Cazenovia Creek, East Branch South of the Village of East Aurora, Municipal boundary and Cazenovia Creek, and West branch south of West Falls. There is no list of properties that have been damaged, based on municipal records.

The town does not maintain a list of property owners interested in flood mitigation at this time and does not have any RiskMAP project underway. The town has not had any substantial damage determinations and has not mitigated any properties within the jurisdiction. Based on municipal knowledge, the existing flood maps adequately address the flood risk in the jurisdiction.

NFIP Compliance

The town of Aurora Code Enforcement office is responsible for NFIP compliance and does not have any certified floodplain managers on staff. The department also does not have adequate resources to determine future damage due to climate change and would need occasional training in basic floodplain management.

The municipal officer provides permit review as NFIP administration services and determines substantial improvement determination based on plan and code review of project.

The town does not have any barriers to running an effective NFIP program and does not have any NFIP compliance violations. The town's most recent Community Assistance Visit was March 18, 2008 and had a CAC visit on 05/04/2005 and is due for another visit soon. The local law number for the local flood damage prevention ordinance is Chapter 68 of the town Code and was last amended on April 8, 2019. Finally, the town does not exceed the floodplain requirements set by FEMA and does not have any other plans or ordinances that support the NFIP program. The town is not interested in participating in the FEMA CRS program due to their lack of knowledge of the program.

9.8.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability. Information for this section was provided by the town clerk with input from the engineer, building inspector, and disaster preparedness coordinator.

The Emergency Operations Center is available at the East Aurora Fire Department, 33 Center Street, East Aurora, New York 14052. The (alternate) Emergency Operations Center is located at the Town of Aurora Parks and Recreation Maintenance Facility Offices, 251 Quaker Rd. East Aurora New York 14052. Other EOC facilities will be utilized as necessary as determined by size, severity, and relocation due to disaster damage.

The following core functions shall be addressed prior to an emergency with warning or during an emergency without warning, to an incident or event: I. Direction and control II. Communications III. Warning IV. Emergency public information V. Evacuation VI. Mass care VII. Health and medical services VIII. Emergency response by local fire, rescue, EMS, and police IX. Resource management X. Protective measures.

The Emergency operations center (EOC) will prioritize resource acquisition based on the following criteria:

- Provide warning and support evacuations
- Support dissemination of emergency public information
- Reestablish communications to assist response actions

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Reestablish access to impacted areas and facilities
- Establishment of search and rescue operations, transport of victims, and medical care
- Support mass care operations including food, water, shelter
- Restoration of critical infrastructure
- Protection of public property and environment
- Initiation of short and long-term recovery programs

All response and recovery activities are detailed in department/division procedures and SOPs, and appropriate state and federal recovery guidelines. The process for collecting and analyzing data, developing objectives and action plans, and documenting critical incident information in the EOC, is guided by the Information and planning SOP.

Evacuation Routes and Procedures

The town would rely on the local Police, County Sheriffs, and the three volunteer fire companies, along with local, County, State and Federal emergency personnel to coordinate evacuation routes depending on the event/situation. There are several main transportation routes in the town, including but not limited to state roads: Route 20A, Route 400, Route 16; county roads: Mill Road, Center Street, Bowen Road, Porterville Road and Girdle Road.

Sheltering

The Town of Aurora has identified the following designated emergency shelters within the town.

Table 9.8-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Aurora Senior Center	101 King St., E. Aurora	100	No	Yes	Yes	None – local FD or EMT would be called	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Aurora has identified the following sites suitable for placing temporary housing units.

Table 9.8-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Parking lot/fields	1003 Center Street	Unknown	Parking lot/fields	Electric, Gas, Water	No	EAUF School District
Park	Emery Road east of Underhill	Unknown	Park	Electric, Gas, Water	No	Erie County

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Baseball fields	300 Gleed Avenue	Unknown	Baseball fields	Electric, Gas, Water	No	Town of Aurora
Park	736 Warren Drive	Unknown	Park	Electric, Gas, Water	No	Town of Aurora
Park	401 West Falls Road	Unknown	Park	Electric, Gas, Water	No	Town of Aurora
Park	Buffalo Road west of village line;	Unknown	Park	Electric, Gas, Water	No	NYS Office of Parks
Park	Knox Road west of village line; south side of road	Unknown	Park	Electric and Gas	No	NYS Office of Parks - managed by Town of Aurora
Field	Girard Avenue at Buffalo Road	Unknown	Field	Electric, Gas, Water	No	Fisher Price Inc./Mattel
Parking lot/field	141 Girard Avenue	Unknown	Parking lot/field	Electric, Gas, Water	No	EAUF School District

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The town would rely on County, State and Federal guidance, along with Red Cross and FEMA guidance, as to where to place temporary and/or permanent housing units in the event of an occurrence that would require these units. The town believes it should not designate a site that is not owned by the town i.e., school grounds, private property, county property or state property. Most of the large tracts of land that would/could accommodate the units are town, county or state parks. Water, gas and electric are available at the road throughout most of the Town of Aurora. Public sewer is available in limited areas that are already developed with residential housing. The location of private septic systems is a function of the Erie County Health Department.

Table 9.8-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
1003 Center St.	1003 Center St.	200 sites	Field	All	None

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.8.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.8-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.8-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	19	0	20	0	19	0	19	0	51	0	31	0
Multi-Family	0	0	1	0	0	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0		0	1	0	0	0	0	0
Total Permits Issued	19	0	21	0	19	0	21	0	51	0	31	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Aurora Mills	Residential	85	Mill Rd/Aurora Mills Dr/Creekstone Dr/ Millstone Dr	Wildfire-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roads	50% complete
Reed Hill	Res	33	Reed Hill Dr/Creekview Dr	Wildfire-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roads	50% complete
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

*** The number of permits noted in the preceding chart do not include permits issued for additions, alterations, fences, accessory structures (ex: porches, pools, etc.); accessory buildings (ex: sheds, garages, etc.)*

**** This property could not be geocoded to perform a spatial analysis.*

9.8.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Aurora's risk assessment results and data used to determine the hazard ranking discussed later in this section.

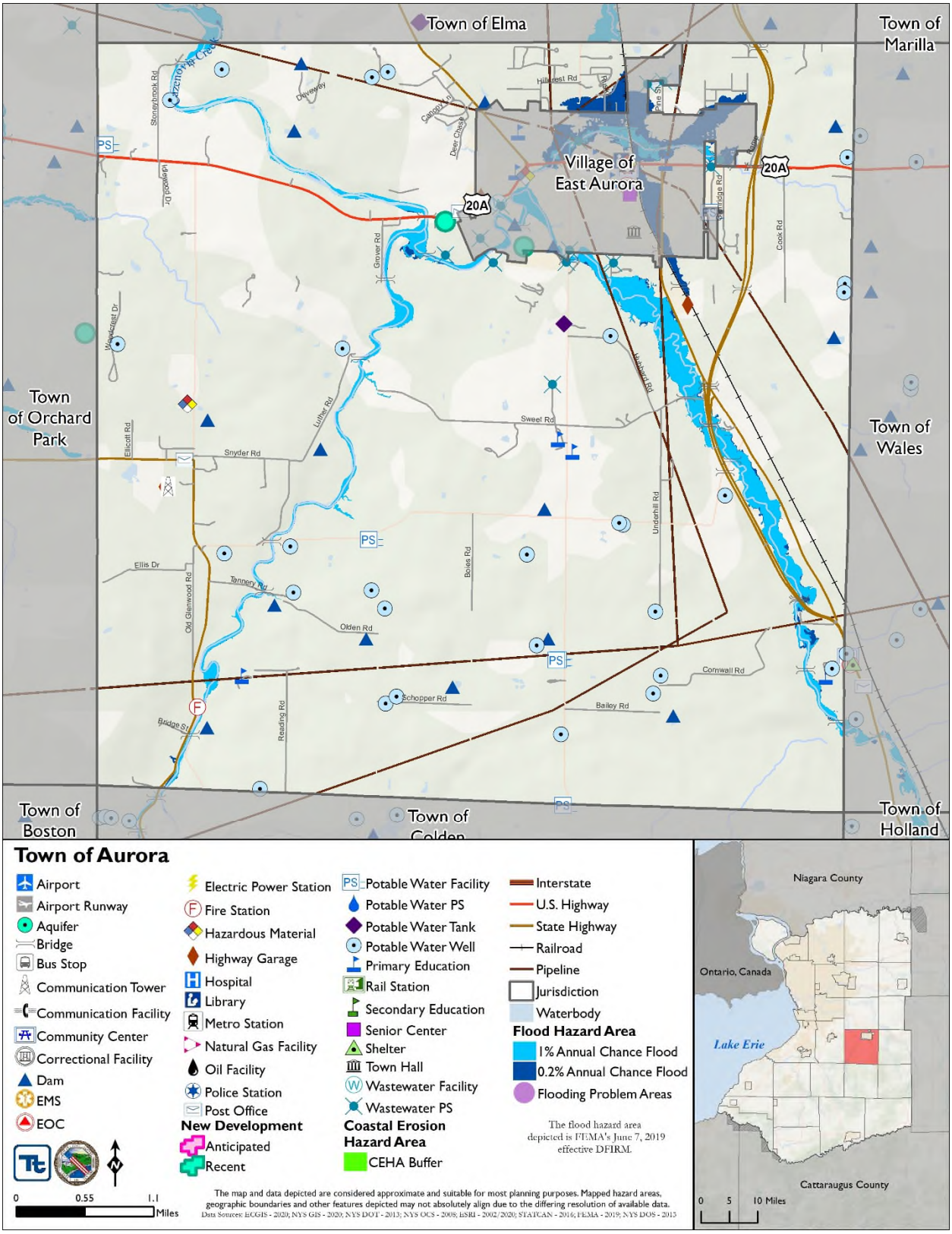
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Aurora has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

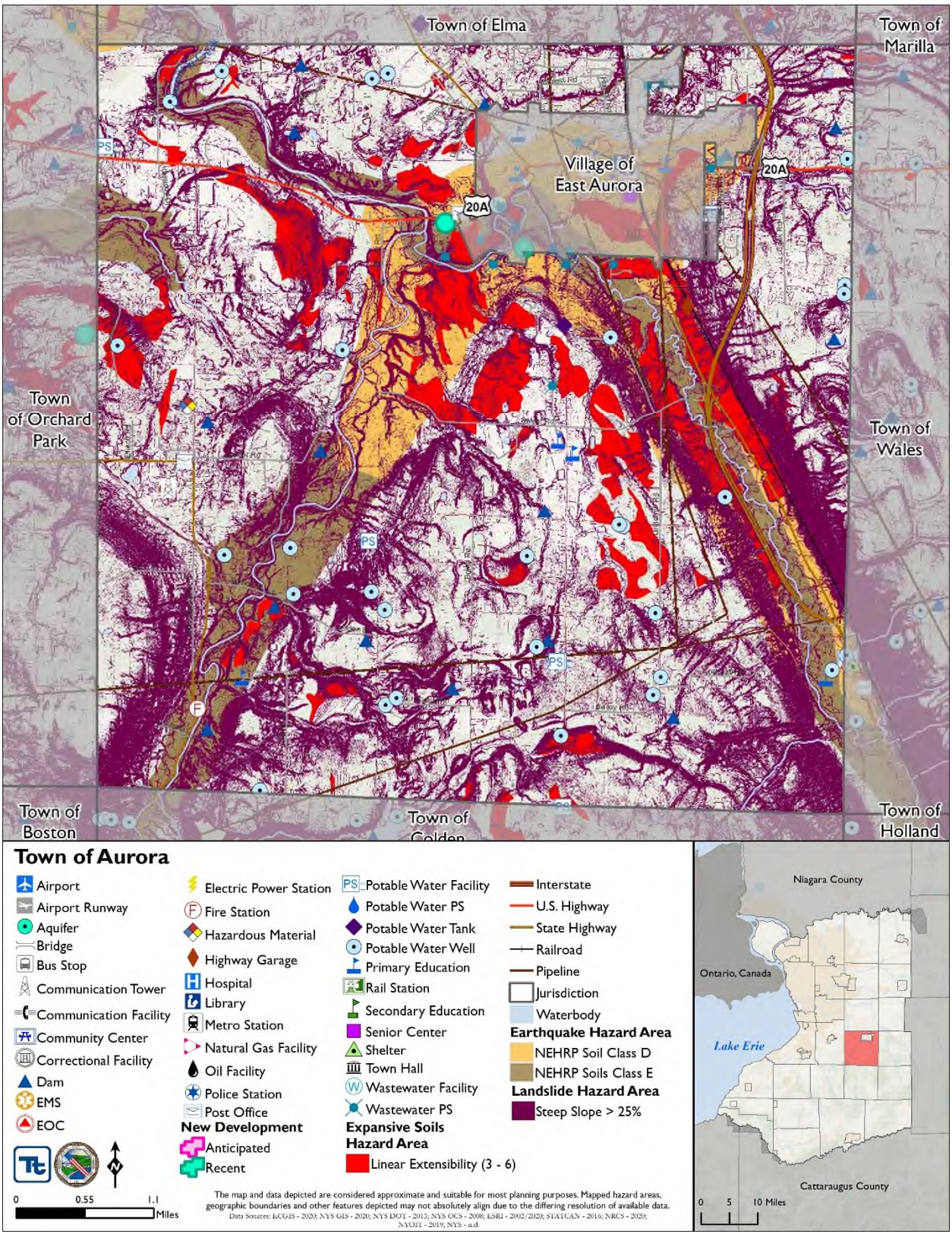
Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.8-1. Town of Aurora Hazard Area Extent and Location Map 1



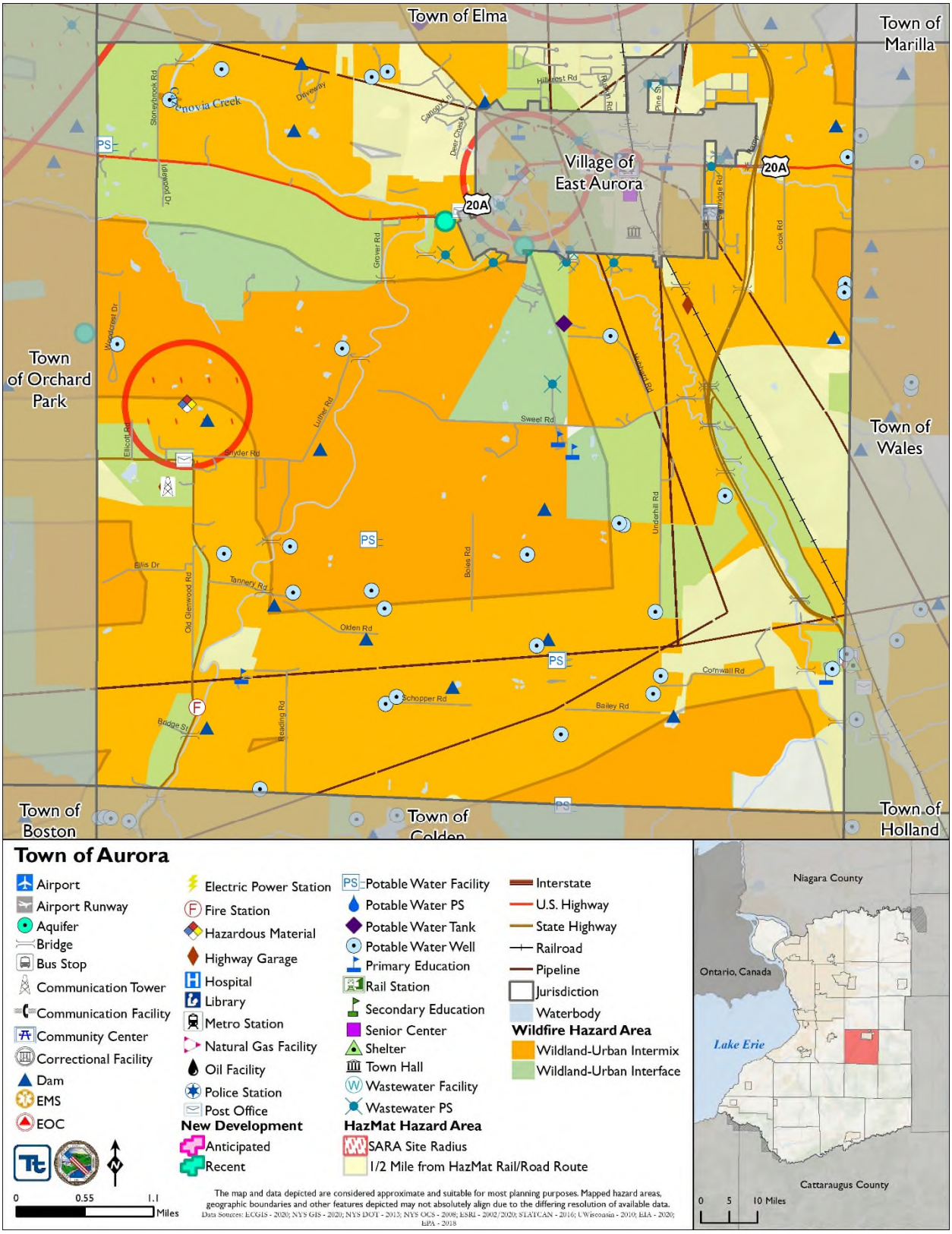
Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.8-2. Town of Aurora Hazard Area Extent and Location Map 2



Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.8-3. Town of Aurora Hazard Area Extent and Location Map 3



Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Aurora's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.8-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.8-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19 - EM-3434	Yes	Pandemic	Businesses closing, social distancing, and multiple deaths across the region.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Aurora's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Aurora. The Town of Aurora has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- High wind events are occurring on more frequent basis (wind speeds in excess of 50-60 mph) which result in downed trees and power outage.
- Recent replacement of culverts on Tannery Brook and work on stream banks will result in less flooding and ice jam along the stream.
- No changes in Coastal Erosion, Earthquake, Expansive Soils, Extreme Temperatures, Landslides, Tornados, Wave Action, Wildfire, and Winter Storm since the 2015 plan hazard rankings.
- Coastal erosion is not an issue since the town does not have coast. Flood is the highest concern of all hazards. Pandemic is an issue, but town has limited capabilities to prevent this. Severe Storm, Severe Winter storm, are not the highest hazard and thus are ranked lower. Wildfire is not a major issue, while utility failure is a big issue with storms and flood.

Based on the above, the town will re-rank flooding from Low to High, Severe Storm from High to Medium, Severe Winter Storm from High to Medium, and Wildfire from High to Low.

Table 9.8-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	High	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Medium	Medium	Medium	Medium	High	Low

Note: *The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction*

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.8-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	**0.2% Event**	
None identified				

Source: FEMA 2021

Identified Issues

After review of the Town of Aurora's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Aurora has identified the following vulnerabilities within their community:

- Weather conditions are a concern. While Lake Erie and Ontario temper the summer weather, it is not unusual for severe summer weather to occur. Severe thunderstorms, heavy rains, downbursts, and occasional tornado watches and warnings. A history of tornados and micro bursts is noted with minor damage. Heavy rains have caused localized flooding in areas around Tannery Brook as previously stated.
- In winter, the path of storms and the proximity of Lake Erie combine to create extreme winter weather conditions.
- Tannery Brook has continuously seen major flooding and properties along the waterbody have and continue to be vulnerable to frequent flooding along the creek, especially the nursing home.
- The Federal Readiness and Emergency Management in Schools (REMS) has guidance on schools to conduct necessary mitigation measures to determine readiness around hazards which is not something the town is participating in at this time.
- The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply.
- The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.8.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.8-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Nursing Home Vulnerability: Revise Emergency Response Plan	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Complete	Cost	Low	1. Discontinue 2. 3. Project is within the Village of East Aurora.
						Level of Protection	Unsure	
						Damages Avoided; Evidence of Success	Unsure	
2	Nursing Home Vulnerability: Mitigate flooding potential along Tannery Brook	Flooding	Not Identified	Emergency Management	No progress	Cost	-	1. Discontinue 2. 3. Project is within the Village of East Aurora.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Nursing Home Vulnerability: Conduct evacuation exercise	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Project is within the Village of East Aurora.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Flood Control: Clearing of accumulating debris along Tannery Brook from Pine St to Whaley Ave	Flooding	Not Identified	DPW/Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Flood Control: Surveil and, as necessary, take immediate action clear the Main St grates for Tannery Brook underpass to prevent destructive erosion of Main St and to prevent inundation flooding of large nursing home.	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Project is within the Village of East Aurora.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
6	Flood Control: Enlarge and reinforce culvert on Benning Road	Flooding	Not Identified	DPW/Highway	No progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Benning Road is not in Town of Aurora
7	School Vulnerability: Conduct an all-hazards vulnerability study of the eight primary-secondary schools in accordance with the Federal Readiness and Emergency Management in Schools (REMS)	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Include in 2022 HMP
						Level of Protection	-	2. 2022-Aurora T-001
						Damages Avoided; Evidence of Success	-	3.
8	School Vulnerability: Prepare mitigation recommendations for all schools	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
9	Potable Water Infrastructure Protection Plan: Conduct a specific all-hazards vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	No progress	Cost	-	1. Include in 2022 HMP
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3.
10	Potable Water Infrastructure Protection Plan: Prepare mitigation recommendations from vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
11	Potable Water Infrastructure Protection Plan: Obtain funding for mitigation actions	Water Supply Contamination	Not Identified	DPW/Highway	Ongoing Capability	Cost	-	1. Include in 2022 HMP
						Level of Protection	-	2.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Damages Avoided; Evidence of Success	-	3.
12	Special Needs Population: Utilizing three area CERT/Auxiliary teams analyze the population of the Township to determine all those who will require special services during a major emergency	All Hazards	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
13	Special Needs Populations: Prepare a modern database of the special needs population for input to the Township's GIS	All Hazards	Not Identified	Emergency Management	Choose an item.	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not relevant to town.
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Not Identified	OEM	Complete	Cost	Low	1. Discontinue
						Level of Protection	Unsure	2.
						Damages Avoided; Evidence of Success	Compliance	3. Complete - Local Law based on FEMA regulations adopted by Town Board
15	Designate/install a specific person to be your municipality's Floodplain Administrator.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	Unsure	3. Complete
16	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing Capability

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
17	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue 2. 3. Complete. Local Law adopted by Town Board
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Compliance	
18	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
19	Very low financial or political incentive to take action given the current fiscal climate	Not Identified	Local Fiscal Climate	Code Enforcement Officer	No progress	Cost	-	1. Discontinue 2. 3. No longer a priority
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Aurora has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- No additional actions identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Aurora participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.8-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood	X	X			X	X			X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X								X
Severe Winter Storm		X								X
Utility Failure		X				X				X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.8-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Aurora would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.8-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Aurora T-001	School Vulnerability	3,4	Flood	**Problem**: The Federal Readiness and Emergency Management in Schools (REMS) has guidance on schools to conduct necessary mitigation measures to determine readiness around hazards which is not something the town is participating in at this time. **Solution**: The eight primary schools will conduct a vulnerability assessment to determine the needs and improvement needed to mitigate future hazards and prepare for any natural and man-caused disaster. The study shall propose executable mitigation actions for the school to conduct over the coming years to increase readiness, resiliency, and safety for all school students and staff. The town will then implement the proposed actions.	Yes	No	5 years	School District/ DPW	$50,000	All	FEMA, HMGP and School Budget	High	LPR	PR
2022-Aurora T-002	Potable Water Infrastructure Protection Plan	1,2	Drought, Utility Failure	**Problem**: The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply. **Solution**: The town will conduct a study on specific areas that could have a potable water facility and based on the recommendations of the study, install the potable water facility/ tank in the designated public spaces.	No	No	3 years	Town Board, DPW	High	Stable water supply	HMGP, Municipal Budget	High	SIP	PP

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.8-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Aurora T-003	Install backup power supply at emergency facility	1,2	All Hazards	**Problem**: The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters. **Solution**: The facility will conduct an assessment of the existing sites to determine the generator type needed and install 2 generators, one at each site. These generators should have enough capacity to match the demand needed for power of the maximum number of trailers that can fit on the site.	No	No	2 years	OEM, DPW	$500,000	Emergency preparedness	FEMA HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Aurora T-004	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations: *Potential FEMA HMA Funding Sources:* *Timeline:*

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*
FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.8-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Aurora T-001	Federal Readiness and Emergency Management in Schools (REMS)	1	1	1	1	1	1	0	0	1	1	0	1	1	1	11	High
2022-Aurora T-002	Potable Water Infrastructure Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-Aurora T-003	Backup power	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Aurora T-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.8.9 Action Worksheets

The following action worksheets have been developed by the Town of Aurora to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Potable Water Infrastructure Protection Plan		
Project Number:	2022-Aurora T-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Drought, Utility Failure		
Description of the Problem:	The town has historically had issues around water shortage during a hazard event and as a result has had to rely on other municipalities for emergency water supply. With increasing climate change related extreme weather and drought related events, the town would need to first determine the areas that need potable water supply.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a study on specific areas that could have a potable water facility and based on the recommendations of the study, install the potable water facility/ tank in the designated public spaces.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Stable water supply
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, Municipal Budget
Responsible Organization:	Town Board, DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Capital planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Build Emergency Water Supply Tank	Low	Problem continues but emergency supply available – less ideal
	Feasibility study and implementation	High	Will provide best option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Potable Water Infrastructure Study	
Project Number:	2022-Aurora T-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	The project is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	
Legal	1	
Fiscal	0	Need funding for implementation
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	Town Board
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Install backup power supply at emergency facility		
Project Number:	2022-Aurora T-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town does not have adequate backup power for the Buffalo and Emery Road temporary housing locations. While some areas of both facilities do have access to electricity, some areas do not and thus are not fully equipped to handle necessary emergency shelter needs during disasters.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: The facility shall conduct an assessment of the existing sites to determine the generator type needed and install 2 generators, one at each site. These generators should have enough capacity to match the demand needed for power of the maximum number of trailers that can fit on the site.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continuous backup power
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$500,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FEMA HMGP, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Highway Department/ Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar	High	power supply unreliable
	generator	High	Most reliable source
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Install backup power supply at emergency facility	
Project Number:	2022-Aurora T-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective in the long run
Technical	1	The project is technically feasible
Political	1	There is no political opposition
Legal	1	No legal issues
Fiscal	-1	Need funding
Environmental	1	No environmental issues
Social	1	No social issues
Administrative	1	No administrative issues
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	Town Board
Other Community Objectives	1	Safety and economic continuity.
Total	12	
Priority (High/Med/Low)	High	

Attachment: 47-Section-9.8-Aurora-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.9 Village of Blasdell

This section presents the jurisdictional annex for the Village of Blasdell. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Blasdell's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.9.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Blasdell's hazard mitigation plan primary and alternate points of contact. The Village of Blasdell followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Village Administrator's office, and Emergency Management department. The Village Administrator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.9-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Janet L. Plarr, Village Administrator Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-822-1921 Email: voboffice@aol.com	Name/Title: Joseph Fox Sr., Emergency Manager Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-238-4593 Email: jwfox44sr@yahoo.com
NFIP Floodplain Administrator	
Name/Title: Janet L. Plarr, Village Administrator Address: 121 Miriam Avenue, Blasdell, NY 14219 Phone Number: 716-822-1921 Email: voboffice@aol.com	
Additional Contributors	
Name/Title: Roger Gibson, Town of Hamburg Code Enforcement Method of Participation: Provided Data and Information	

9.9.2 Municipal Profile

The Village of Blasdell is in the northern part of the Town of Hamburg and is surrounded on three sides by that town. The City of Lackawanna forms the village's northern boundary. The village calls itself the "Gateway to the Southtowns" of Erie County. The Village of Blasdell is one square mile in size. US Route 62 and NYS Route 179 run through the village.

The Erie Railroad was extended through the village in the 1870's. Herman Blasdell was the first Station Master for the depot. As there was no name for the area yet and very few residents, the name Blasdell became permanent.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

In the early 1890's, village land was divided into streets and lots. The village incorporated in 1898. In 1900, the village established a water system with fire hydrants and, after a disastrous fire in 1903, a Volunteer Fire Department was created. Additional companies were later formed (Village of Blasdell, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Blasdell was 2,553. The estimated 2019 population was 2,645, a 3.6 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.3 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.9.3 Jurisdictional Capability Assessment and Integration

The Village of Blasdell performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.9.3). The Village of Blasdell's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Blasdell. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.9-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Blasdell Village Code	Local	Village Board
Comments: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	Village of Blasdell	Local	Village Board
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan"11 or "in accordance with a comprehensive plan."12					

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan" requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level					
Subdivision Ordinance	No	-	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	No	Stormwater Plan	Local	Village of Blasdell
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Planning Board	Local	Town of Hamburg
Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a). The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc. • The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. • Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations.					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Flood plan	Local	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. • It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Master Plan	Local	Village of Blasdell Administration
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	Yes	Yes	Village of Blasdell Capital Improvement Plan	Local	Village Administrator
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Floodplain plan	Local	Village Engineer
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	Floodplain plan	Local	Village of Blasdell
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Response Plan	Local	Emergency Manager
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Blasdell to oversee and track development.

Table 9.9-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	No space for future developments
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Blasdell and their current responsibilities which contribute to hazard mitigation.

Table 9.9-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Town of Hamburg
Zoning Board of Adjustments	Yes	Village of Blasdell
Planning Department	Yes	Town of Hamburg
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Town of Hamburg
Public Works/Highway Department	Yes	Village of Blasdell
Construction/Building/Code Enforcement Department	Yes	Town of Hamburg
Emergency Management/Public Safety Department	Yes	Blasdell fire dept
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Red alert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	VOB public works

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mutual aid agreements	Yes	Erie County mutual aid plan
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Village Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Village Engineer
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Village Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Village Engineer
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Village Administrator
Surveyor(s)	No	-
Emergency Manager	Yes	Joseph Fox, Emergency Manager
Grant writer(s)	Yes	Village Administrator
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Blasdell.

Table 9.9-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Blasdell.

Table 9.9-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	No	Contracted out
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Website and news articles
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Red alert
Warning systems for hazard events	Yes	Red alert
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Blasdell.

Table 9.9-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.9-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.9.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Janet L. Plarr, Village Administrator & Roger Gibson, Town of Hamburg Code Enforcement

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Blasdell.

Table 9.9-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Blasdell	1	25	$150,556	9	0

Source: *FEMA, 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

Identified areas prone to flooding within the village include an area near the NY-179 Exit ramp and Jeffery Boulevard, as well as properties adjacent to Blasdell Creek. While the village does not maintain a list of property

owners interested in flood mitigation. The flood hazard maps adequately address the flood risk within the village. There have been zero properties mitigated for flood risk within the village. The Village Engineer and Village Administrator make Substantial Damage determinations for properties.

NFIP Compliance

The Village Administrator currently is responsible for floodplain management within the village and is a certified floodplain manager (CFM). The Town of Hamburg Building Department aids the Village with NFIP administration services due to a lack of staff within the village to conduct an effective NFIP program. The village consults with local engineers to determine if proposed developments on existing structures would qualify as a substantial improvement to the structure. There are no compliance issues within the village, and the floodplain management program meets minimum requirements. The Village Flood Damage Prevention Ordinance can be found in Chapter 122 of the Code of the Village of Blasdell, most recently updated in 2019.

9.9.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Blasdell has identified the following routes and procedures to evacuate residents prior to and during an event:

- County Road Lake Ave which traverses the village from East to West.
- US Route 62 which traverses the village from North to South.

Sheltering

The Village of Blasdell has identified the following designated emergency shelters within the village.

Table 9.9-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with the county to identify Emergency Sheltering Locations. See Mitigation Action #003							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Blasdell has identified the following sites suitable for placing temporary housing units.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.9-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Blasdell Firemen's Park	165 Lake Ave Blasdell, NY	20	Baseball Field	Yes	Yes

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Blasdell has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.9-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify Permanent Housing Locations. See Mitigation Action #004					

9.9.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.9-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.9-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**2**	-
Multi-Family	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-
Other (commercial, mixed-use, etc.)	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-
Total Permits Issued	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**2**	-

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

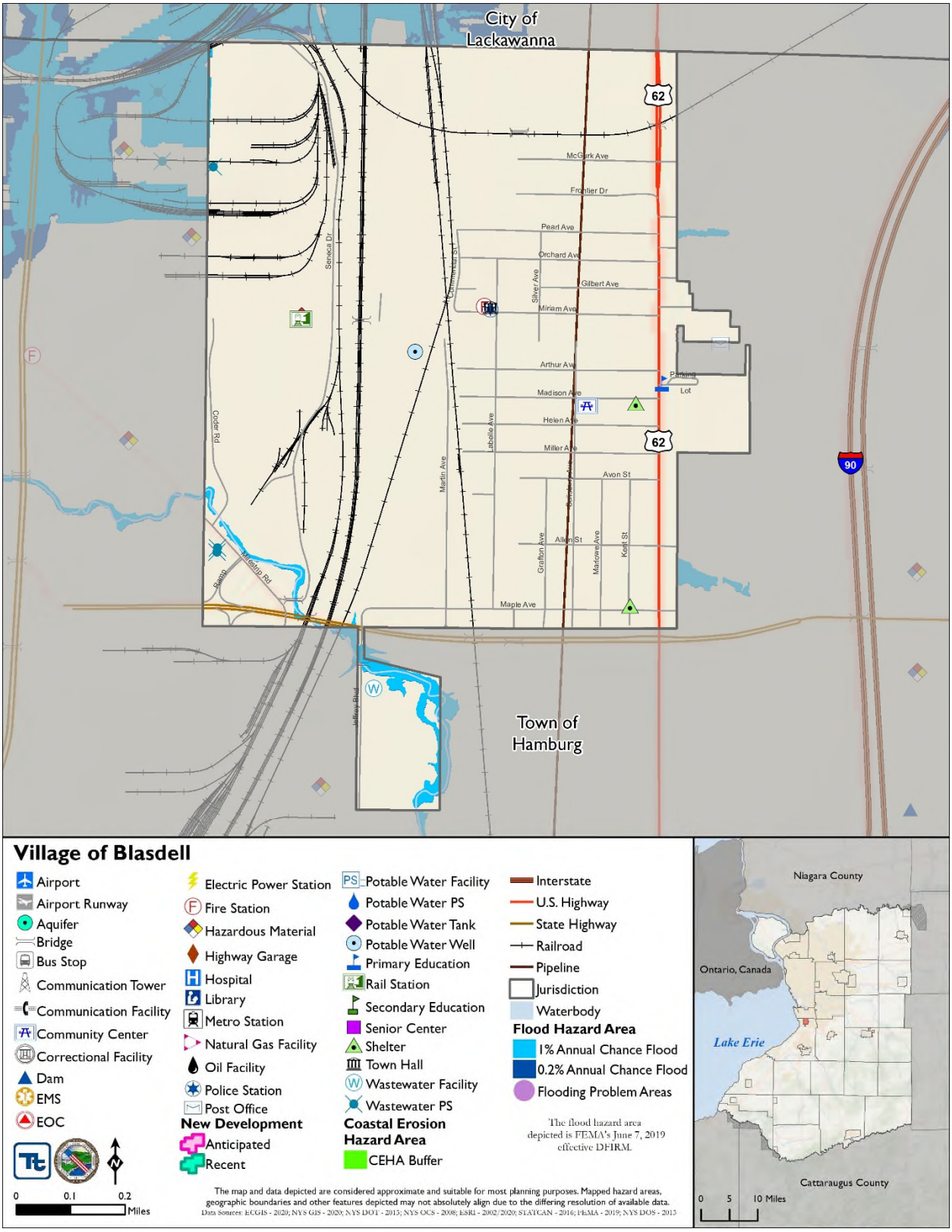
9.9.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Blasdell's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Blasdell has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

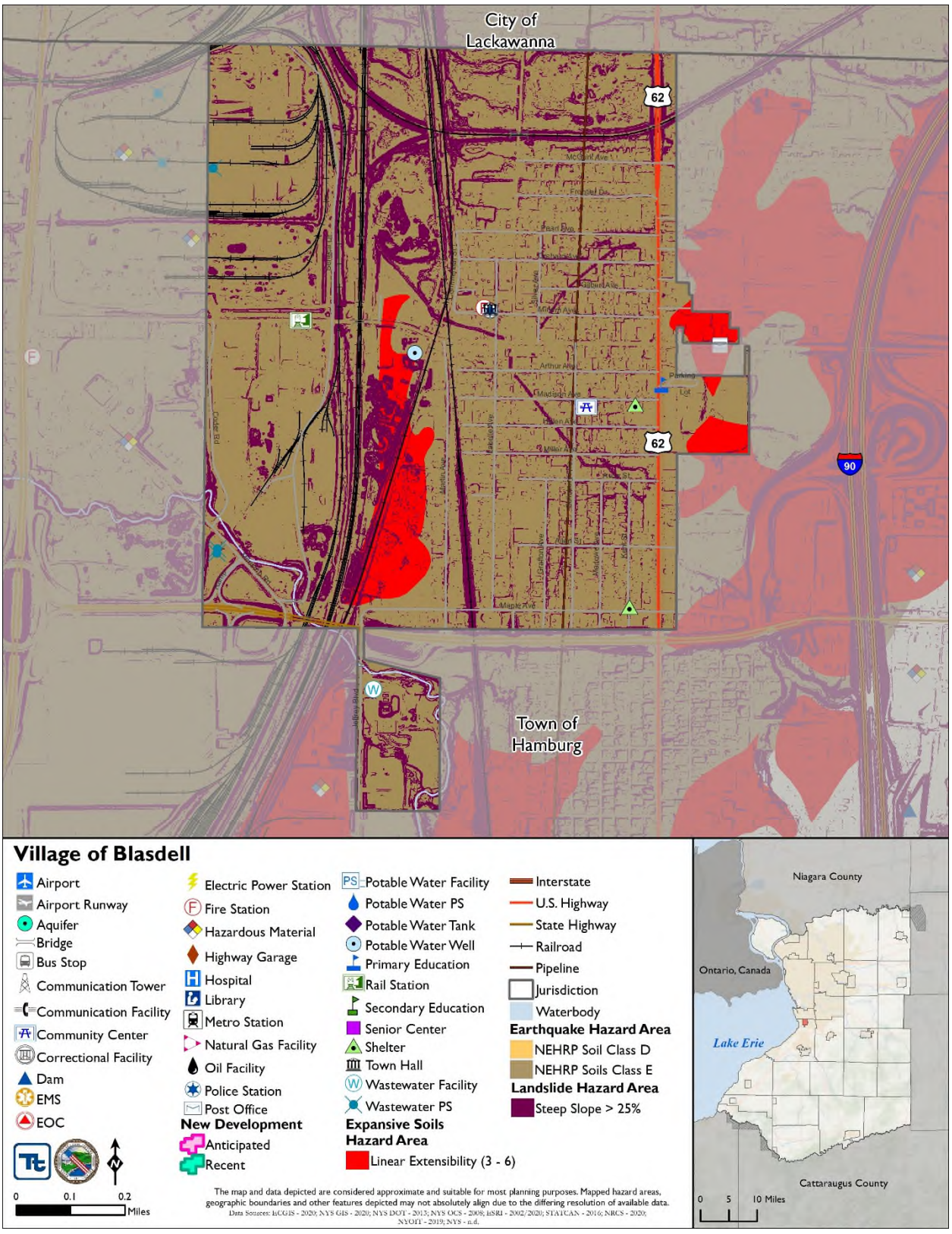
Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.9-1. Village of Blasdell Hazard Area Extent and Location Map 1



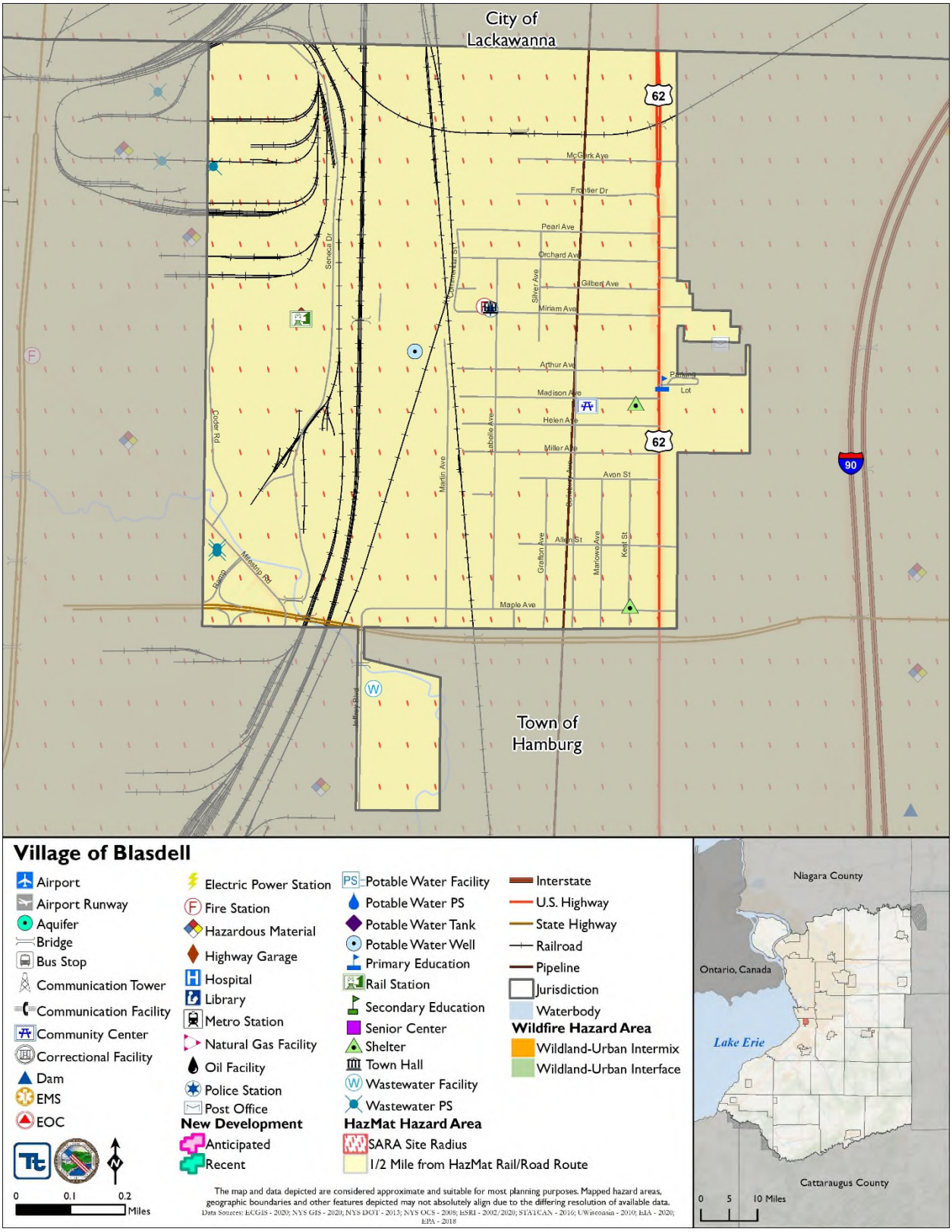
Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.9-2. Village of Blasdell Hazard Area Extent and Location Map 2



Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.9-3. Village of Blasdell Hazard Area Extent and Location Map 3



Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Blasdell's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.9-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.9-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 6, 2015	Lake-Effect Snow	No	Lake Effect Snow developed across Erie County, resulting in the temporary closing of the New York State Thruway.	Eleven (11) inches of snow were reported in Blasdell and an estimated $20,000 in property damages were reported throughout the County.
January 4-7, 2017	Lake-Effect Snow	No	A long duration lake-effect snow event produced three to four feet of snow, causing road closures and hazardous conditions along the I-90 Thruway. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or mere and school busses were unable to bring students home.	Four to five inches of snow per hour fell in Blasdell, bringing traffic to a standstill. Plows were unable to keep up with clearing the snow and people abandoned their cars on the New York Thruway and local roads. Total snowfall report in Blasdell amounted to 28 inches
March 1, 2017	High Wind	No	Strong winds as high as 64 mph were reported throughout the area.	Falling trees damages homes or automobiles in Blasdell.
May 1, 2017	Thunderstorm Wind	No	A strong cold front brought a line of thunderstorms which produced damaging winds that downed trees and wires across western New York.	Thunderstorm winds downed a large tree on Gilbert Street in Blasdell, resulting in an estimated $15,000 in property damages.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightening throughout the duration of the event.	Fifteen (15) inches of snow were reported in Blasdell.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Thirteen (13) inches of snow were reported in Blasdell.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 27-November 1, 2019	Lakeshore Flooding and High Winds DR-4472-NY	Yes	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	Rainfall totals reached 1.88 inches in Blasdell.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Blasdell's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Blasdell. The Village of Blasdell has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- Earthquakes are very unlikely to happen in the village, posing a low risk to the community, therefore the risk was reduced to low.
- Due to the development and availability of new vaccines for the COVID-19 Pandemic, the risk for this hazard is medium.
- Severe Storms and Severe Winter Storms only happen once in a while, resulting in a Medium risk for the village.
- Utilities are well-maintained in the village; therefore utility interruption is a low risk for the village.

Table 9.9-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Low	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.9-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of Blasdell's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Blasdell has identified the following vulnerabilities within their community:

- There has been an increase in heavy wind (extreme wind) events in the village.
- Lake-Effect Snowstorms continue to be a major concern for the village.
- Flood-prone areas within the village include an area near the NY-179 Exit ramp and Jeffery Boulevard intersection, as well as properties adjacent to Blasdell Creek.

9.9.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.9-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Widening of Rush Creek to help alleviate overflow of banks that flood a storage building	Flood	Public Works	Flooding in area around Rush Creek	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP 2. 2022-V. Blasdell-001 3.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Village BOT	Not Identified	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. The Village meets minimum requirements for floodplain management.
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Village BOT	Not Identified	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3.The Village Administrator is a Certified Flood Plain Manager (CFM) and serves as the Village NFIP FPA.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Village BOT	Not Identified	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	Include in 2022 HMP
	Join the Community Rating System (CRS).	Flood	Village BOT	Not Identified	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3.The Village is not participating in the CRS program
	All code enforcement and building permits are done by the TOH	Flood	TOH	Not Identified	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Complete

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Blasdell has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Blasdell participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.9-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X				X					X
Cyber Attack	X				X					X
Earthquake	X				X					X
Expansive Soils	X				X					X
Extreme Temperature	X				X					X
Flood	X		X		X		X	X		X
Hazardous Materials	X				X					X
Landslide	X				X					X
Pandemic	X				X					X
Severe Storm	X		X		X			X		X
Severe Winter Storm	X		X		X			X		X
Utility Failure	X				X					X
Wildfire	X				X					X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.9-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Blasdell would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.9-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.9-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Blasdell-001	Rush Creek Widening	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: The village experiences flooding in area around Rush Creek **Solution**: The Public Works Department will develop a plan for widening Rush Creek to help alleviate overflow of banks that flood a storage building and cause property damages during storm events and floods. As a second phase. The village will implement the plan and ensure that all state and environmental permitting requirements are met.	No	Yes	Within 5 years	Public Works	High	High	FEMA BRIC	High	NSP	NR
2022-V. Blasdell-002	Updates to Floodplain Management Plan	1, 2, 3	Flood	**Problem**: FEMA is updating their DFIRM flood maps to more accurately reflect conditions within the village. **Solution**: The Village Board of Trustees and planning/zoning department will review the 2021 updated DFIRM maps and make adjustments to the floodplain management ordinances/NFIP regulations as necessary. Updates to building/code enforcement related to the new DFIRM will also be completed as necessary.	No	No	Within 5 years	Board of Trustees, Planning/ Zoning Department	Low	High	Municipal Budget	Medium	LPR	PR
2022-V. Blasdell-003	Emergency Sheltering	1, 2, 3	All Hazards	**Problem**: The village does not have any designated Emergency Sheltering locations. **Solution**: The village will work with Erie County Emergency Services to identify and designate locations within the village, or nearby that are accessible to residents and can serve as sheltering locations and heating/cooling/charging centers	No	No	Short	Village Board of Trustees; Erie County Emergency Services; Red Cross	Medium	High	Municipal Budget, Red Cross, NYSDHSES	High	LPR	PR, ES

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.9-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				during hazard events. The Village will ensure that these locations have access to emergency backup power and are ADA-compliant.										
2022-V. Blasdell-004	Permanent Housing	1, 2, 3	All Hazards	**Problem**: The village does not have any land designated as available for relocation of homes due to flood/disaster damages. **Solution**: The village will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose.	No	No	Short	Village Board of Trustees; Erie County Emergency Services	Low	Medium	Municipal Budget, County Support	Medium	LPR	PR, PP
2022-V. Blasdell-005	Repetitive Loss Outreach	1, 2, 3	Flood	**Problem**: There are 9 Repetitive Loss Properties within the Village. **Solution**: The Village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	Short	Village of Blasdell FPA, homeowners	Low to conduct Outreach	High	HMGP, BRIC, FMA	High	LPR, SIP	PI, PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.9-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Blasdell-001	Rush Creek Widening	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	10	High
2022-V. Blasdell-002	Updates to Floodplain Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-003	Emergency Sheltering	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-004	Permanent Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Blasdell-005	Repetitive Loss Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.9.9 Action Worksheets

The following action worksheets have been developed by the Village of Blasdell to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Rush Creek Widening		
Project Number:	2022-V. Blasdell-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Village experiences flooding in area around Rush Creek.		
Action or Project Intended for Implementation			
Description of the Solution:	The Public Works Department will develop a plan for widening Rush Creek to help alleviate overflow of banks that flood a storage building and cause property damages during storm events and floods. As a second phase. The village will implement the plan and ensure that all state and environmental permitting requirements are met.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, reduces flooding
Useful Life:	25 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	NSP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Municipal Budget, FEMA HMGP
Responsible Organization:	Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Install storm drains	N/A	Would displace water onto roadway
	Install sump pump	N/A	Not feasible due to location of Creek

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Rush Creek Widening	
Project Number:	2022-V. Blasdell-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Eliminates flooding concerns
Property Protection	1	Reduces flooding at properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	Permitting will be required
Fiscal	-1	Will seek funding
Environmental	0	Will consult with DEC
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Updates to Floodplain Management Plan		
Project Number:	2022-V. Blasdell-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	FEMA is updating their DFIRM flood maps to more accurately reflect conditions within the Village.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Board of Trustees and planning/zoning department will review the 2021 updated DFIRM maps and make adjustments to the floodplain management ordinances/NFIP regulations as necessary. Updates to building/code enforcement related to the new DFIRM will also be completed as necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures accurately reported flood risk
Useful Life:	5 years	**Goals Met:**	1, 2, 3
Estimated Cost:	Low	**Mitigation Action Type:**	LPR
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Municipal Budget
Responsible Organization:	Board of Trustees	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Rewrite entire FDPO	N/A	Updates can be made to existing plan
	Update FDPO before DFIRM	N/A	Not cost effective to have to update twice based on changes to DFIRM

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Updates to Floodplain Management Plan	
Project Number:	2022-V. Blasdell-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures flood mapping aligns with village plans/ordinances
Property Protection	1	Gives village better understanding of flood risk
Cost-Effectiveness	1	
Technical	1	Board of Trustees
Political	1	
Legal	1	
Fiscal	0	Little to no costs outside of staff time
Environmental	1	
Social	1	
Administrative	1	Board of Trustees
Multi-Hazard	0	Flood
Timeline	1	ASAP
Agency Champion	1	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 48-Section-9.9-Blasdell-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.10 Town of Boston

This section presents the jurisdictional annex for the Town of Boston. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Boston's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.10.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Boston's hazard mitigation plan primary and alternate points of contact. The Town of Boston followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Code Enforcement and Supervisor's Office. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.10-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gene Wieckowski, Emergency Manager Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-440-1875	Name/Title: Jason Keding, Supervisor Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-941-6518 Email: supervisorsoffice@townofboston.com
NFIP Floodplain Administrator	
Name/Title: William Ferguson, Code Enforcement Officer Address: 8500 Boston State Road, Boston, NY 14025 Phone Number: 716-440-1875	

9.10.2 Municipal Profile

Incorporated in 1817, Boston is one of the oldest towns in Erie County. The town's area was created from the original large town of Eden. (Town of Boston 2021) The town contains three hamlets that originated in the early 1800s; North Boston, Patchin and Boston. The town is bordered by the Town of Orchard Park and the Town of Hamburg to the north, the Town of Eden to the west, the Towns of North Collins and Concord to the south and the town of Colden to the east. Eighteen Mile Creek runs through the town from north to south on its way to draining into Lake Erie.

The first Native Americans to occupy the Town of Boston area were the Erie Indians. By the time pioneer settlers came to the Boston area, the succeeding Seneca Indians had been confined to the Buffalo, Cattaraugus and other

reservations. The Holland Land Company organized sale of lands in Boston which triggered white settlement. The economy of Boston has changed significantly over the years. The town was agricultural for several generations. As the land was cleared and put under cultivation, hill farms were adapted to milk production, potatoes and cabbage, while the richer land of the valley was suitable for more diverse crops.

Boston's first industry was a distillery established in 1818. The town's bell factory was for some time the largest in the United States. In 1903, construction began on the Susquehanna Railroad through Boston Valley. The route through Boston was a scenic route and was often fully occupied with passengers in addition to freight. The railroad proved beneficial to both industry and agriculture but failed in just ten years. The Southern Expressway was completed in the 1970's and was later incorporated into US Route 219, a limited access freeway. These extensions spurred additional suburban development in the town. Eighteen Mile Creek runs through the town (Town of Boston Comprehensive Plan 2002).

According to the U.S. Census, the 2010 population for the Town of Boston was 8,023. The estimated 2019 population was 8,042, a 0.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.3 percent of the population is 5 years of age or younger and 21.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.10.3 Jurisdictional Capability Assessment and Integration

The Town of Boston performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.10.3). The Town of Boston's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Boston. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.10-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Local Law No. 3-1987	Local	Town CEO
Comment: *The town building code was developed with the following goals and objectives: A. It is the intent of this Article regulating planned unit developments (PUD's) to provide performance criteria in the context of flexible use and design regulations so that small-to-large-scale residential neighborhoods may be developed, within designated districts, incorporating a variety of residential types and nonresidential uses and containing both individual building sites and common property which are planned and developed as a unit. Such a planned unit is to be designed and organized so as to be capable of satisfactory use and operation as a separate entity without necessarily needing the participation of other building sites or other common property in order to function as a neighborhood. B. This Article specifically encourages innovation in residential development so that the growing demands for housing at all economic levels may be met by greater variety in type, design and siting of dwellings and by the conservation and more efficient use of land in such developments. This Article recognizes that while the standard zoning function (use and bulk) and the subdivision function (platting and design) are appropriate for the regulation of land use in areas or neighborhoods that are already substantially developed, these controls represent a type of pre-regulation, regulatory rigidity and uniformity which may be inimical to the techniques of land development concept. Further, this Article recognizes that a rigid set of space requirements, along with bulk and use specifications, would frustrate the application of the planned unit development concept. Thus, where PUD techniques are deemed appropriate through the rezoning of land to a planned unit development by the Town Board, the set of use and dimensional specifications otherwise set forth in this chapter are herein replaced by an approved process in which an approved plan with proper rezoning becomes the basis for continuing land use controls during the development period.*				
Zoning Code	Yes	No	Chapter 123 (Zoning); Local Law #6 from 1990	Local	Town CEO
Comment: The municipal zoning ordinance has been developed with the following guidelines to encourage sustainable and resilient development. 1) A PUD must have a development pattern which preserves trees, outstanding natural topography and geologic features and prevents soil erosion. 2) A site plan must include a map or maps of present site conditions that includes topography at contour intervals of five feet or less, streams or watercourses, together with their classification if any, under the State Stream Protection Law, and soil information as mapped by the United States Soil Conservation Service or the equivalent, with soil legends and interpretations showing susceptibility to erosion, flooding or ponding and soil suitability for the proposed uses. 4) Site plan review to include adequacy of structures, roadways and landscaping in areas with moderate-to-high susceptibility to flooding and ponding and/or erosion. 5) Site plan submission to include: Preliminary engineering plans, including street improvements, storm drainage system, public utility extensions, water supply, sanitary sewer facilities, outdoor lighting and location of existing and proposed fire hydrants, as approved by the Fire Chief or Town Engineer.				
Subdivision Ordinance	Yes	No	Chapter 104 (Subdivision of Land); Local Law No. 7-1990	Local	Planning Board
Comment: The subdivision ordinance has been developed with consideration to the following attributes. 1) Preliminary plat, showing contours, proposed road layout, proposed public improvements (pavement, drainage, storm sewers, sanitary sewers, water service, etc.) 2) Where drainage is to be a natural watercourse, lake, swamp, sink or roadside or drainage ditch, the elevation of water in such watercourse or ditch at the recognized flood stage shall be shown on preliminary plat. 3) Where storm sewers or ditches may be required to discharge across an adjacent property in order to drain into a natural watercourse or watershed in which the subdivision lies, the subdivider shall secure an easement from the adjacent property owners to assure uninterrupted discharge of drainage water from the subdivision. Such easement shall be of a dimension required by the Planning Board. 4) Lands subject to flooding shall not be platted or residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard.				
Stormwater Management Ordinance	Yes	Yes	Local Law 12	Local	Engineering
Comment: The stormwater management ordinance has been developed with the following guidelines. 1) It shall be unlawful to discharge into any storm drain any sewage, industrial wastes or other polluted waters, except water from swimming pools. 2) No building sewer lateral shall be laid parallel to or within three feet of any bearing wall, which might thereby be weakened. The depth shall be sufficient to afford protection from frost. 3) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.				
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is*					

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".					
Growth Management	No	Yes	-	-	-
Comment:					
Site Plan Review	Yes	No	Local Law No. 8-1990	Local	Planning Board
Comment: Final site plan includes: The intended drainage plan to include low areas that are to be filled and drained, inverts of proposed pipes, ditches and/or swales, retention and/or detention facilities as necessary, including all design and profile data; drainage flow calculations, expected roof and sump drainage and easements for proposed or existing drainage, where necessary. 2) Final site plan includes: Snow storage area 3) Where adequate surface drainage is not possible by grading alone, a supplementary drainage system approved by the Town of Boston shall be required. On-site management of surface drainage shall be planned so that there shall be no greater runoff during and following construction than prior to commencement of construction. Lawn and yard areas shall be adequately drained to permit normal use and maintenance.					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 60 (Flood Damage Prevention); Local Law No. 60 2019-3	Local	Town CEO
Comment: *It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.* *C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages.* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.* *F. Qualify for and maintain participation in the National Flood Insurance Program.* *The Code Enforcement Officer is appointed local administrator to administer and implement this chapter. Duties of the administrator include: permit application review; using flood data; obtaining and maintaining information; notifications; interpretating FIRM boundaries; stop-work orders; inspections; and certificate of compliance. Any construction or substantial improvements in the flood hazard areas must be elevated to two feet or higher above the base flood elevation.*					
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	Local Law No. 60 2019-3	Local	Town OEM
Comment: *Activities that are subject to the requirements of this section are those types of activities that cause or contribute to a violation of the Town of Boston's MS4 SPDES permit.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Other	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Boston Comprehensive Plan: A Vision for the Year 2020	Local	Town Planning
Comment: Town should minimize negative impacts on Eighteen Mile Creek and seek funding to improve banks of the creek for the public to use, this includes vegetation management (removal of dead logs/branches or planting for erosion control), restrict new development from sensitive areas such as floodplains or wetlands.					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Being developed as of 2021	Local	Engineering
Comment: *Will incorporate elements of flood mitigation and stormwater management.*					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town Emergency Management Plan, Updated 2016	-	Town OEM
Comment: *No Information Available at this time as it is being updated as the HMP is undergoing its update.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Boston to oversee and track development.

Table 9.10-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement/ Building Department

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	None

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Boston and their current responsibilities which contribute to hazard mitigation.

Table 9.10-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Town Planning Board – volunteer board that is responsible for all site plan reviews and SEQRA. The board also advises on various property safety issues.
Zoning Board of Adjustments	Yes	Zoning Board - There are five regular members and two alternate members, who step in to meet the quorum in the absence of a regular member. All members are allowed to question the applicant, however only the regular members vote on the motion to grant or deny the variance request.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Conservation Board - The CAC advises the Town Board on conservation issues which will increase the quality of life in the Town of Boston.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – the department is responsible for maintaining all municipally owned roads and other public works related issues.
Construction/Building/Code Enforcement Department	Yes	Building Inspector – the responsibility of the office is to issues building permits and conduct construction and building inspections.
Emergency Management/Public Safety Department	Yes	Emergency Squad – The Boston Emergency Squad is a Volunteer Ambulance Corporation serving the town of Boston and providing mutual aid services to the surrounding communities since January 4th 1967. The dedicated volunteers of the Boston Emergency Squad are committed to providing excellent ambulance and first aid service primarily within the Town of Boston
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Fire, Highway
Other	No	-
Technical/Staffing Capability-		
Planners or engineers with knowledge of land development and land management practices	No	-

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Various departments
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	No	-
Emergency Manager	Yes	Town Emergency Manager
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Boston.

Table 9.10-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No (utility)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Boston.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.10-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook: https://www.facebook.com/BostonTownHallNY
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Reverse 911
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Boston.

Table 9.10-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
NYSDEC Climate Smart Community	Yes	Designated	2020
Storm Ready Certification	No	-	-
Firewise Communities classification	No		
Other	No		

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.10-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.10.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

William Ferguson, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Boston.

Table 9.10-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Boston	11	19	$180,739	9	0

Source: July and September, 2021 NFIP Data.
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town of Boston does not maintain lists of properties that have been damaged by flooding or of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

As of 2021, the Code Enforcement Office is in charge of municipal floodplain management. Due to limited resources, the town does not have a certified floodplain manager on staff nor any other technical capabilities, as they are contracted out by the town as needed. The town has not had to determine any substantial improvements as the town is in full compliance of the NFIP program. The most recent CAV date is April 17, 2014. The local municipal flood damage prevention number is Local Law No. 2019-3 and meets the requirements of the NFIP

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

program. The town does not have any other plans or ordinances that support the program and the town is not interested in the CRS program.

9.10.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Boston has identified the following routes and procedures to evacuate residents prior to and during an event.

- County Route 227
- Buffalo – Pittsburg Highway – Route 219
- Route 439
- Boston State Road

The routes would be determined by the County, as each hazard could change the potential destination for evacuation.

Sheltering

The Town of Boston has identified the following designated emergency shelters within the town.

Table 9.10-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	8500 Boston State Rd, Boston, NY	100	Yes	Yes	No	None	Need power generator, and showers. Not adequate space – addressed in project 001

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Boston has identified the following sites suitable for placing temporary housing units.

Table 9.10-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
County Fairgrounds	5600 McKinley Pkwy, Hamburg, NY	266 acres	Open Space	All utilities available	None

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Boston has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.10-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Open field	8555 Boston State Road	Unknown	Open field	None	None

9.10.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.10-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.10-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	30	0	23	0	7	0	24	0	14	0	15	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	1	0	0	0	0	0	1	0	0	0	0	0
Total Permits Issued	**31**	**0**	**23**	**0**	**7**	**0**	**25**	**0**	**14**	**0**	**15**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.10.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section

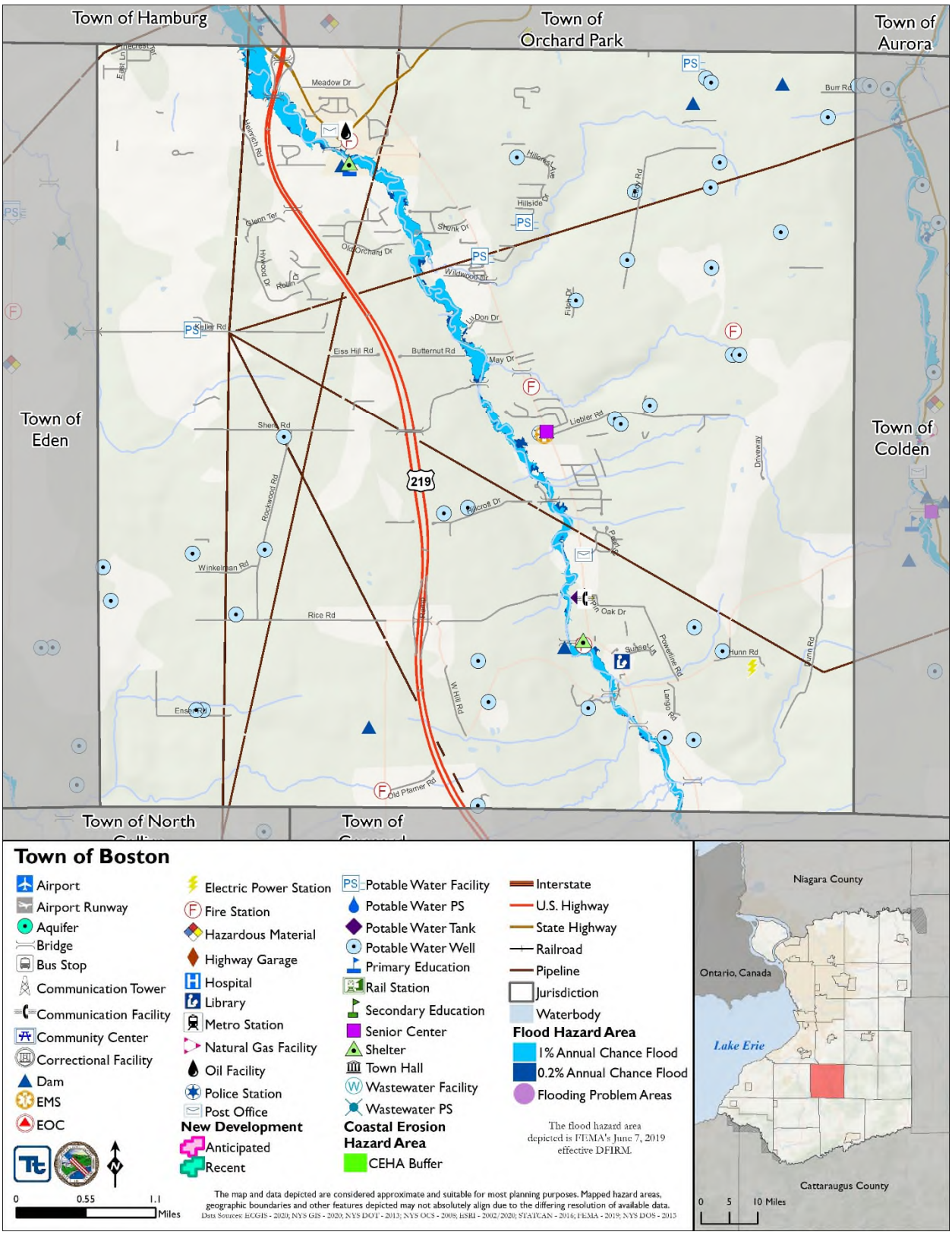
Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4 (Hazard Ranking) for a detailed summary for the Town of Boston's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Boston has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

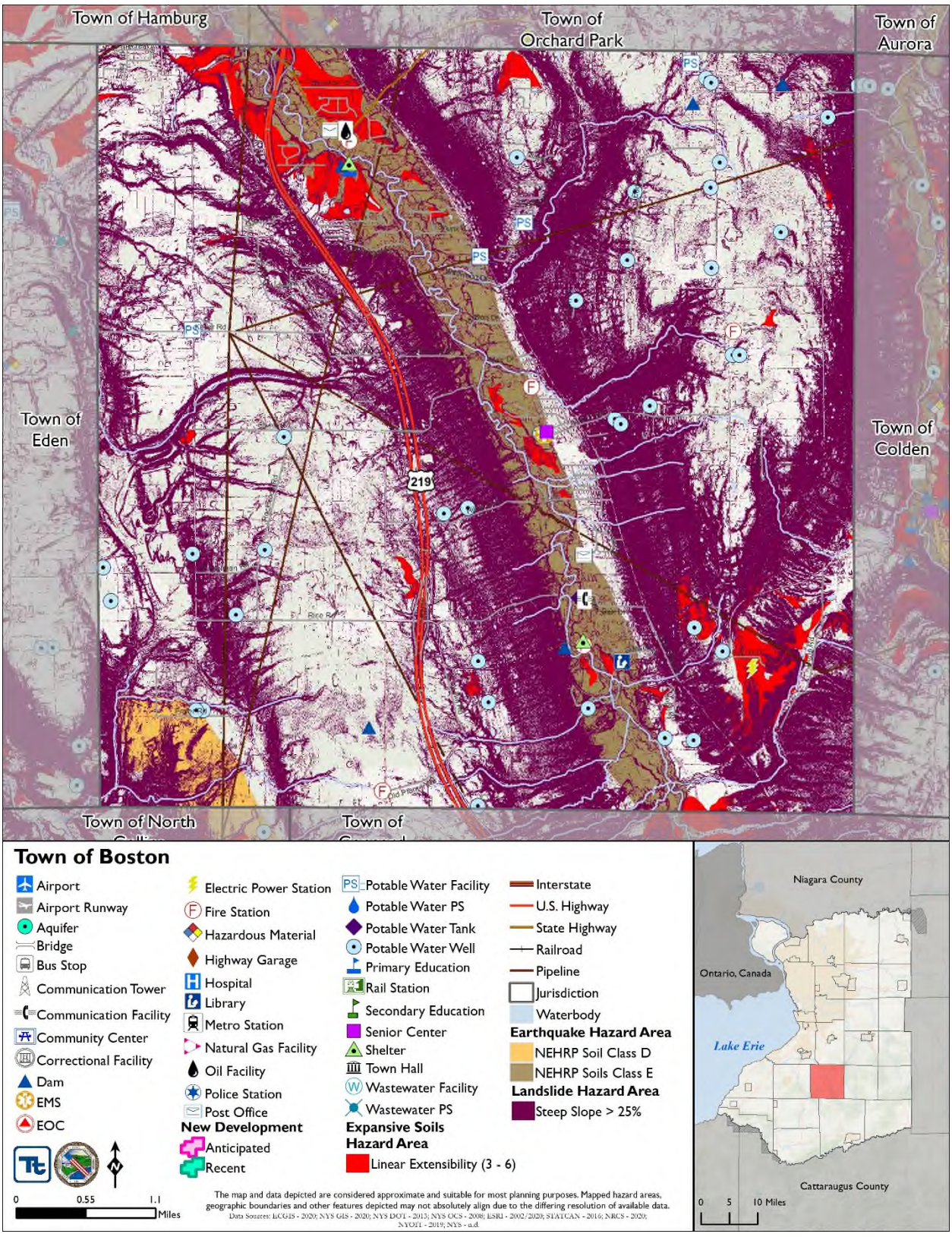
Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.10-1. Town of Boston Hazard Area Extent and Location Map 1



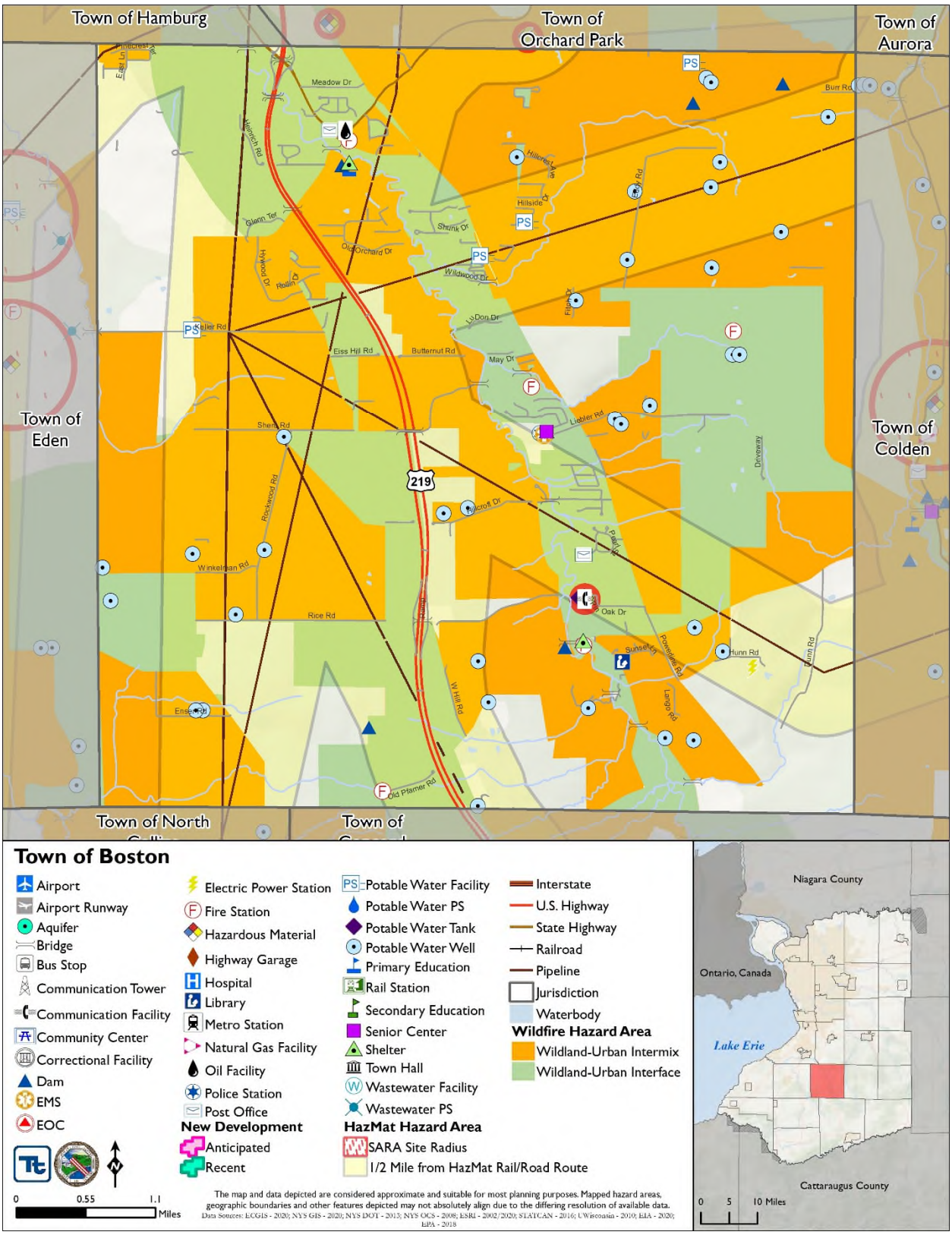
Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.10-2. Town of Boston Hazard Area Extent and Location Map 2



Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.10-3. Town of Boston Hazard Area Extent and Location Map 3



Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Boston's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.10-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.10-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No major loss – downed trees
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the town did not report damages
2020-21	COVID -19	No	Various losses not quantifiable

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Boston's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Boston. The Town of Boston has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- There has been no change in coastal, wave action, wildfire, and earthquake related hazards.
- Earthquakes do not occur in the town and therefore has been re-ranked from high to low.
- Pandemics affect areas beyond the town, and given the rural nature of the municipality, the hazard will remain medium.
- There however has been an increase in extreme temperatures, winter storms, extreme wind, flood, ice jams, landslides, and tornados.

Table 9.10-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.10-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	**0.2% Event**	
No facilities identified				

Source: 2021 GIS

Identified Issues

After review of the Town of Boston's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Boston has identified the following vulnerabilities within their community:

- 18 Mile Creek that flows through town causes significant flooding.
- Significant runoff from east and west hills
- No all municipal buildings have backup power.
- The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health.
- Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. Therefore, it is crucial to have adequate backup power for the facility.
- The town is developing a stormwater management plan for the town. This plan is in coordination with the County SWCD and is intended to identify specific areas that are vulnerable to flooding and require infrastructural investment.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- Flooding along 18-Mile Creek

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.10.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.10-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Bank stabilization of 18-mile creek	Flooding	Constant erosion and changing of creek course lends to localized flooding causing damage to property and road infrastructure	Town Highway	Complete	Cost	High	1. Discontinue 2. 3. Complete
						Level of Protection	High	
						Damages Avoided; Evidence of Success	Flood	
	Improved drainage in specific subdivisions and target tributaries to 18-mile creek	Flooding	Personal property damage	Town Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flooding	Not Identified	Town Clerk/ Building Inspection	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Low	
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided;	-	

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Emergency Management/ Town Clerk	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flooding	Not Identified	Emergency Management/ Town Clerk	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Join the Community Rating System (CRS).	Flooding	Not Identified	Emergency Management/ Town Clerk	No Progress	Cost	-	1. Discontinue 2. 3. Community Not Interested
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Boston has not identified any previous mitigation actions.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Boston participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.10-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	X
Cyber Attack		X							X	X
Earthquake		X							X	X
Expansive Soils		X							X	X
Extreme Temperature		X							X	X
Flood		X	X			X		X	X	X
Hazardous Materials		X							X	X
Landslide		X							X	X
Pandemic		X							X	X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X							X	X
Wildfire		X							X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Error! Reference source not found. summarizes the comprehensive range of specific mitigation initiatives the Town of Boston would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.10-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Boston-001	Emergency Shelter/ Community Center Development	1,2,3	All	**Problem**: The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health. **Solution**: The town will build a community center with shelter capabilities that will also be used as an emergency operations center. A generator will also be installed to provided power in the event of an outage. The facility would be built on 8555 Boston State Road which is owned by the town.	Yes	No	2 years	Town Board	$1 million	Adequate shelter space	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget	High	SIP	ES
2022-Town of Boston-002	Backup Power at Town Hall	1,2	All	**Problem**: Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. In addition, the electrical panel boxes need to be upgraded. The panel box currently poses a fire hazard and therefore qualifies as hazard mitigation. Therefore, it is crucial to have adequate backup power for the facility. **Solution**: The town will install a permanent generator at the current town hall. The town will first upgrade panel boxes for electricity and then install generator. Once upgraded, the	Yes	No	1 year	Town Highway	$500,000	Backup power	HMGP, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program	High	SIP	SP

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 1589

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				town will install the generator and appropriate fuel sources.										
2022-Town of Boston-003	Stormwater Actionable Items	1,2	Flood	**Problem**: The town is developing a stormwater management plan for the town. This plan is in coordination with the County SWCD and is intended to identify specific areas that are vulnerable to flooding and require infrastructural investment. **Solution**: As a result of completing a stormwater management plan, several projects were identified that should be implemented in the town to increase capabilities and reduce impacts from stormwater flooding. The town will apply for grant funding to complete projects ranging from streambank restoration to culvert rightsizing and road/ bridge redevelopment.	No	No	5 years	Town Board, Planning, County SWCD	$1 million	Flood Mitigation	HMGP, FMA, BRIC, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement Project (WQIP) Program	High	NSP, SIP	NR, SP
2022-Town of Boston-004	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA	High	SIP	PP

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.10-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Boston Town-001	Emergency Shelter/ Community Center Development	1	1	1	1	1	0	-1	1	1	1	1	1	1	1	11	High
2022-Boston Town-002	Backup Power at Town Hall	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Boston Town-003	Stormwater Actionable Items	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Boston-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	0	0	1	0	1	0	0	9	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.10.9 Action Worksheets

The following action worksheets have been developed by the Town of Boston to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Emergency Shelter/ Community Center Development		
Project Number:	2022-Town of Boston--001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town hall which is currently designated as the main evacuation shelter does not have adequate backup power nor enough space to safely house all residents during a hazard event, especially during a pandemic when social distancing is critical for public health.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will build a community center with shelter capabilities that will also be used as an emergency operations center. A generator will also be installed to provided power in the event of an outage. The facility would be built on 8555 Boston State Road which is owned by the town.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Development of new emergency facility
Useful Life:	35 years	**Goals Met:**	1, 2, 3
Estimated Cost:	$1 million	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget
Responsible Organization:	Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation and preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Designate City of Buffalo shelters as town shelters	Low	Too far away
	Develop emergency shelter	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Emergency Shelter/ Community Center Development	
Project Number:	2022-Town of Boston--001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project saves lives
Property Protection	1	This project can protect property
Cost-Effectiveness	1	This is cost effective in the long run
Technical	1	There are no technical issues identified
Political	1	There are no political issues identified
Legal	0	There can be some unclear legal issues
Fiscal	-1	There are inadequate financial resources
Environmental	1	There are no environmental issues with this project
Social	1	This has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses all hazards of concern
Timeline	1	This timeline is feasible
Agency Champion	1	The town board
Other Community Objectives	1	This contributes to the community's goal to become a safer place
Total	11	
Priority (High/Med/Low)	High	

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Backup Power at Town Hall		
Project Number:	2022-Town of Boston-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Town hall does not have adequate backup power on site to power the entire facility. The town hall is currently the main municipal building where all municipal operations take place. In addition, the electrical panel boxes need to be upgraded. The panel box currently poses a fire hazard and therefore qualifies as hazard mitigation. Therefore, it is crucial to have adequate backup power for the facility.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will install a permanent generator at the current town hall. The town will first upgrade panel boxes for electricity and then install generator. Once upgraded, the town will install the generator and appropriate fuel sources.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$500,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP, BRIC, Community Facilities Direct Loan & Grant Program, Climate Smart Communities Grant Program
Responsible Organization:	Town Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Backup Power at Town Hall	
Project Number:	2022-Town of Boston--002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 49-Section-9.10-Boston-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.11 Town of Brant

This section presents the jurisdictional annex for the Town of Brant. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Brant's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.11.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Brant's hazard mitigation plan primary and alternate points of contact. The Town of Brant followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Grants, Planning, and Code Enforcement. The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.11-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark J. DeCarlo, Supervisor Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-549-0301 x 3 Email: supervisor@brantny.com	Name/Title: Connie Miner, Grants Consultant Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-549-0301 Email: minerconni@verizon.net
NFIP Floodplain Administrator	
Name/Title: Gary A. Breaker, Code Enforcement Officer Address: 1272 Brant North Collins Rd, Brant, NY 14027 Phone Number: 716-392-7241	
Additional Contributors	
Name/Title: Joseph Ostrowski, Chairman, Planning Board Method of Participation: Completed Capability Assessment	
Name/Title: Gary A. Breaker, Code Enforcement Officer Method of Participation: Provided data and information	

9.11.2 Municipal Profile

Brant is located in the southwestern part of Erie County and is known as one of the county's "Southtowns". The Town of Brant is a mostly rural municipality located approximately 25 miles southwest of downtown Buffalo. The Village of Farnham is located wholly within the town and is on the town's west side. The town is bounded on the north by the Town of Evans, to the east by the Town of North Collins, and to the south is the Cattaraugus

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indian Reservation. The town contains a small stretch of Lake Erie shoreline and Evangola State Park is in the town's northwest corner.

The first white settler arrived in the area around 1816. The town incorporated in 1839, being formed from portions of Towns of Evans and Concord. Col. Joseph Brant, the Mohawk chief, inspired the town's naming. (Wikipedia) The town has an area of 24.7 square miles. A significant part of the land base is in an Agricultural District and produces field crops such as sweet corn, cabbage and snap beans; fruits such as grapes and strawberries; and two plant nurseries (Town of Brant Comprehensive Plan, 2003).

According to the U.S. Census, the 2010 population for the Town of Brant was 1,683. The estimated 2019 population was 1,541, an 8.4 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 2.5 percent of the population is 5 years of age or younger and 22.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.11.3 Jurisdictional Capability Assessment and Integration

The Town of Brant performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.11.3). The Town of Brant's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Brant. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.11-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Town Code Ch. 69, 2010	Local	Code Enforcement Officer
Comments: Except as otherwise specifically provided by law, ordinance, rule or regulation or except as herein otherwise provided, the Code Enforcement Officer shall administer and enforce all of the provisions of the New York State Uniform Fire Prevention and Building Code and					

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
other laws, ordinances, rules and regulations applicable to plans, specifications or permits for the construction, alteration and repair of buildings and structures and the installation and use of materials and equipment therein and to the location, use and occupancy thereof.					
Zoning Code	Yes	Yes	Town Code Ch.161, 2019	Local	Code Enforcement Officer
Comment: These regulations are made in accordance with a Comprehensive Plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.					
Subdivision Ordinance	Yes	Yes	Town Code Ch.137, 1976	Local	Code Enforcement Officer
Comment: It is declared to be the policy of the Planning Board to consider land subdivision plats as part of a plan for the orderly, efficient and economical development of the town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Comprehensive Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.					
Stormwater Management Ordinance	Yes	Yes	Town Code Ch. 87	Local	Code Enforcement Officer
Comment: The Code Enforcement Officer shall review all building permit applications for new construction or substantial improvements to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a location that has a flood hazard, any proposed new construction or substantial improvement, including prefabricated and mobile homes, must be designed, or modified, and anchored to prevent flotation, collapse or lateral movement of the structure; use construction materials and utility equipment that are resistant to flood damage; and use construction methods and practices that will minimize flood damage.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	1992, Sec 35	Local	Code Enforcement Officer
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. • It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	2003 Revised 2017	Local	Town Board
Comment: The goals are as follows: • Promote a strong collaborative regional approach to future development • Direct controlled population growth to appropriate areas • Ensure there are safe, affordable, and attractive housing choices of all kinds • Preserve and enhance the rural character • Ensure the community services are adequate such as schools and emergency services, and appropriate recreational opportunities and cultural facilities • Ensure that resources devoted to transportation, public transportation and utilities development protect and enhance the quality of life • Expand the economic base and promote the development of economic opportunities					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Brant to oversee and track development.

Table 9.11-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Brant and their current responsibilities which contribute to hazard mitigation.

Table 9.11-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	Yes	No Comment
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	No Comment

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	No Comment
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Supervisor
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Brant.

Table 9.11-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Brant.

Table 9.11-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	No Comment
Personnel skilled or trained in website development	Yes	No Comment
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	No Comment
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Brant.

Table 9.11-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.11-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.11.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gary A. Breaker, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Brant.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.11-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Brant	1	99	$287,387	40	0

Source:
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Floodprone areas within the town include the Lake Erie Short Line and Two Creeks, but no residential properties are located in these areas. The town does not maintain a list of property owners interested in flood mitigation, and there are no Risk MAP projects underway. The town makes substantial damage determinations by conducting onsite inspections. The flood hazard maps adequately address flood risk within the town.

NFIP Compliance

The Buildings Department and Code Enforcement Officer are responsible for floodplain management. There are no Certified Floodplain Managers within the town, but all floodplain courses are attended, and no additional assistance is needed. There are no outstanding compliance issues with the NFIP.

9.11.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Brant has identified the following routes and procedures to evacuate residents prior to and during an event:

- Cain Road
- Milestrip Road
- Route 323
- Route 249
- Route 5
- Route 20

Sheltering

The Town of Brant has identified the following designated emergency shelters within the town.

Table 9.11-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The town will work with the county to identify and designate an emergency shelter. See Mitigation Action 2022-T. Brant-#001.							

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Brant has identified the following sites suitable for placing temporary housing units.

Table 9.11-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-T. Brant-#002.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Brant has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.11-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-T. Brant-#002.					

9.11.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.11-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.11-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	-	0	-	0	-	0	-	0	-	0	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Property or Development Name	**Type of Development**		**# of Units / Structures**		**Location (address and/or**		**Known Hazard Zone(s)***		**Description / Status of Development**			

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
			block and lot)			
Recent Major Development and Infrastructure from 2015 to Present						
None Identified						
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

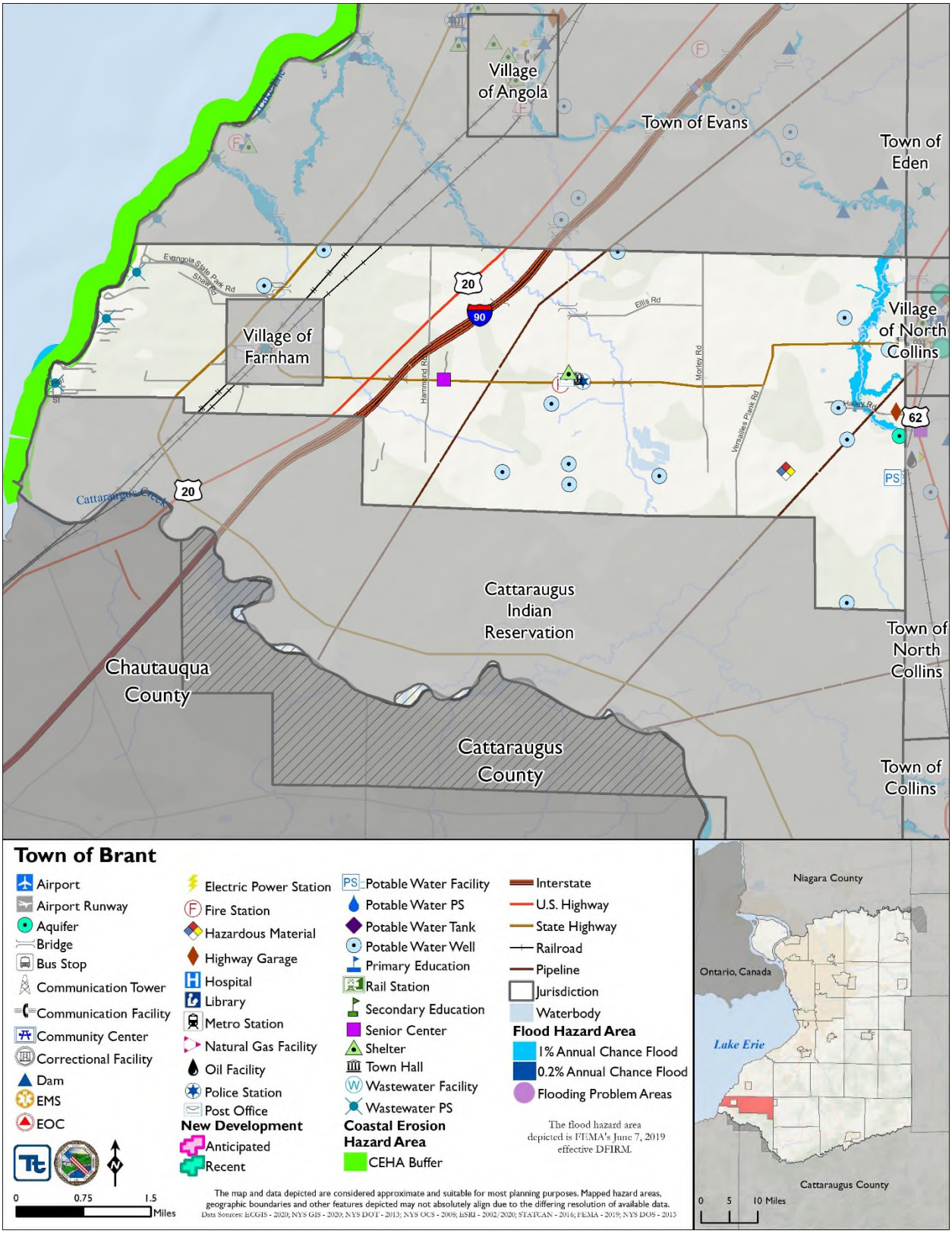
9.11.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Brant's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Brant has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

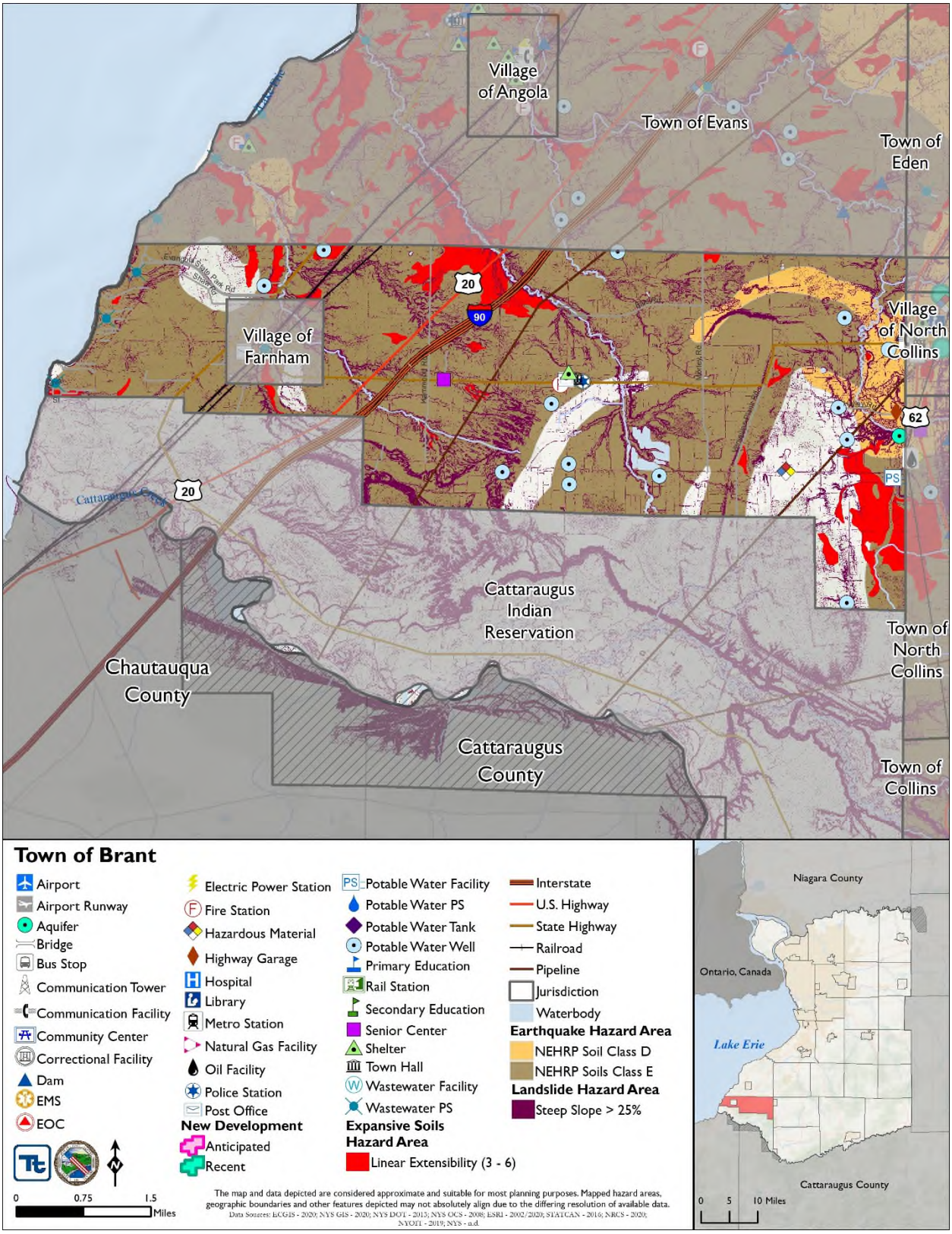
Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.11-1. Town of Brant Hazard Area Extent and Location Map 1



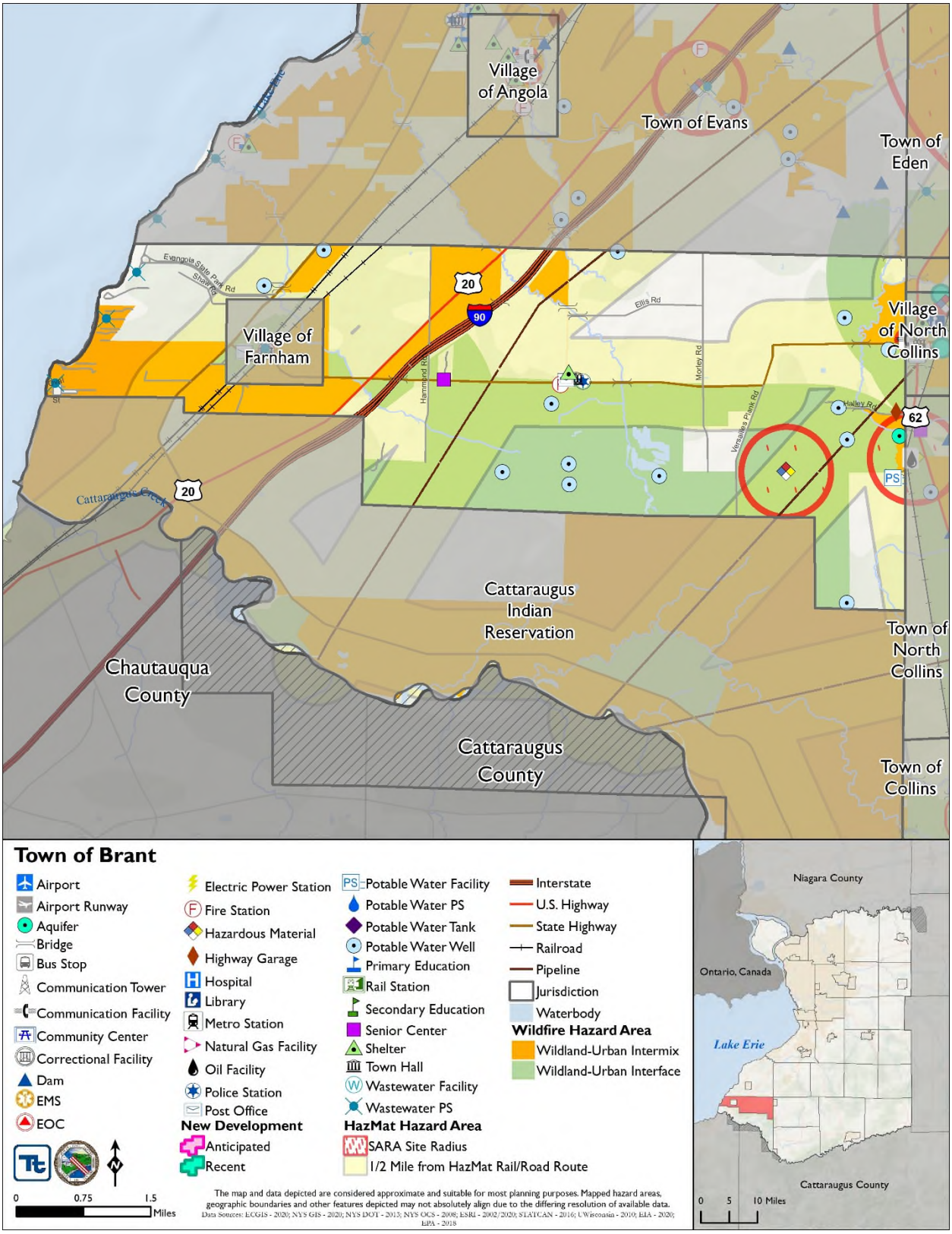
Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.11-2. Town of Brant Hazard Area Extent and Location Map 2



Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.11-3. Town of Brant Hazard Area Extent and Location Map 3



Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Brant's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.11-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.11-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, no municipal damages were reported.
October 28-29, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, no municipal damages were reported.
November 12, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
November 18, 2015	High Wind	No	Although the county was impacted, no municipal damages were reported.
January 11, 2017	High Wind	No	Although the county was impacted, no municipal damages were reported.
March 8, 2017	High Wind	No	Although the county was impacted, no municipal damages were reported.
March 13, 2017	Winter Storm	No	Although the county was impacted, no municipal damages were reported.
July 20, 2017	Tornado	No	Although the county was impacted, no municipal damages were reported.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, no municipal damages were reported.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, no municipal damages were reported.
January 2, 2018	Blizzard	No	Although the county was impacted, no municipal damages were reported.
October 6, 2018	Lightning	No	Although the county was impacted, no municipal damages were reported.
February 24, 2019	High Wind	No	Although the county was impacted, no municipal damages were reported.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, no municipal damages were reported.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, no municipal damages were reported.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, no municipal damages were reported.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Brant's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Brant. The Town of Brant has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.11-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.11-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: Effective DFIRM

Identified Issues

After review of the Town of Brant's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Brant has identified the following vulnerabilities within their community:

- The town does not have any designated Emergency Shelter locations.
- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms.
- The town does not have a disaster plan.
- The Lake Erie Shore Line along Brant is specifically vulnerable to erosion.
- Lotus Bay and Wide Beach have just one point of entry which is also the exit.

9.11.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.11-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Clean existing abandoned ditches on certain properties for flood damage reduction purposes. * Easements required.	Flooding	Not Identified	Highway Dept/ Attorney	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2020 HMP 2. 3.
-	Set up town-wide disaster plan to educate public on what to do (step by step).	All Hazards	Not Identified	Disaster Coordinator	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing capability
-	Town-wide food shelter storage.	All Hazards	Not Identified	Disaster Coordinator	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Complete
-	Working with and in collaboration with the Seneca Nation.	All Hazards	Not Identified	Town Board	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing Capability
-	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing Capability
-	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Code Enforcement Officer/	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of - Success	- - -	1. Discontinue 2. 3. Ongoing Capability
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing Capability
-		Flood	Not Identified		Ongoing Capability	Cost Level of Protection	- -	1. Discontinue 2.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)			Code Enforcement Officer		Damages Avoided; Evidence of Success	-	3. Ongoing Capability
-	Join the Community Rating System (CRS).	Flood	Not Identified	Code Enforcement Officer	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing Capability

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Brant has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Brant participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.11-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X		X	X			X	X		X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X		X	X		X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X	X		X		X	X		X	X
Severe Winter Storm	X	X		X		X	X		X	X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.11-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Brant would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.11-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.11-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Brant-001	Emergency Shelter	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Emergency Shelter Locations. **Solution**: The town will work with the county to identify and designate an Emergency Shelter with ADA compliance and sufficient capacity and backup power.	No	No	Short	Town of Brant	Low	High, establishes shelter	Municipal Budget	High	LPR	ES
2022-T. Brant-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	No	No	Short	Town of Brant	Low-Medium	High, establishes alternative housing locations for displaced residents	Municipal Budget, CDBG	High	LPR	ES
2022-T. Brant-003	Drainage System Maintenance	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms. **Solution**: The town will develop a maintenance program to clean existing abandoned ditches on certain	No	No	Ongoing once established	Town of Brant Highway	Medium	High, reduces flooding outside of the SFHA	Municipal Budget, HMGP	High	LPR, SIP	PI, PP, SP

Table 9.11-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				properties for flood damage reduction purposes										
2022-T. Brant-004	Disaster Plan	1, 2, 3	All Hazards	**Problem**: The town does not have a disaster plan. **Solution**: The Town of Brant will create and adopt a step-by-step disaster plan to educate the public on steps to take during all hazard events profiled in the HMP.	No	No	Short	Town Board	Low	High	Municipal Budget, BRIC	High	LPR, EAP	PI
2022-T. Brant-005	Lake Erie Erosion	1, 2	Coastal erosion	**Problem:** The Lake Erie Shore Line along Brant is specifically vulnerable to erosion. **Solution:** The town will monitor the shoreline for increased erosion and will conduct vulnerability and feasibility analyses to determine the impacts of the erosion and potential solutions, placing an emphasis on green/natural solutions. Once complete, the town will conduct a benefit-cost analysis and select the best project, and seek funding to implement the solutions.	No	Yes	Short	Town Board, Engineering, DPW	High	High	BRIC, Municipal Budget	High	NSP	NR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.11-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Brant-001	Emergency Shelter	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Brant-002	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Brant-003	Drainage System Maintenance	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Brant-004	Disaster Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	High
2022-T. Brant-005	Lake Erie Erosion	1	1	1	1	1	0	-1	0	1	1	1	1	1	1	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.11.9 Action Worksheets

The following action worksheets have been developed by the Town of Brant to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Drainage System Maintenance		
Project Number:	2022-T. Brant-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Drainage ditches throughout the town are impacted by debris and reduce water flow and exacerbate flooding during storms.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will develop a maintenance program to clean existing abandoned ditches on certain properties for flood damage reduction purposes.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, reduces flooding outside of the SFHA
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Medium	**Mitigation Action Type:**	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Ongoing once established
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Municipal Budget, HMGP
Responsible Organization:	Town of Brant Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	$500,000	Costly and may not solve problem
	Relocate drainage systems	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Drainage System Maintenance	
Project Number:	2022-T. Brant-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flooding
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding
Environmental	1	No environmental concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Disaster Plan		
Project Number:	2022-T. Brant-004		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The town does not have a disaster plan.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Brant will create and adopt a step-by-step disaster plan to educate the public on steps to take during all hazard events profiled in the HMP.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High
Useful Life:	10 years	**Goals Met:**	1, 2, 3
Estimated Cost:	Low	**Mitigation Action Type:**	Local Plans and Regulation, Education and Awareness Program
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Short
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Municipal Budget, BRIC
Responsible Organization:	Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Develop plans for each hazard	N/A	Costly, easier to have combined plan
	Disseminate information as hazard is happening/expected	N/A	Reactive, may not reach enough residents

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Disaster Plan	
Project Number:	2022-T. Brant-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures residents are aware/prepared
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town Board
Political	1	Plan has support
Legal	1	
Fiscal	1	
Environmental	1	No Concerns
Social	1	Residents Support
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	Short
Agency Champion	1	
Other Community Objectives	1	
Total	14	
Priority (High/Med/Low)	High	

Attachment: 50-Section-9.11-Brant-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.12 City of Buffalo

This section presents the jurisdictional annex for the City of Buffalo. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Buffalo's risk and vulnerability; the different capabilities utilized in the city; and an action plan that will be implemented to achieve a more resilient community.

9.12.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Buffalo's hazard mitigation plan primary and alternate points of contact. The City of Buffalo followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including: Buffalo Fire Department Division Chief and Commissioner Department of Public Works. The Fire Department Division Chief represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.12-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael Tuberdyke, Buffalo Fire Department Division Chief Phone Number: (716) 444-5210 Email: mjtuberdyke@bfdny.org	Name/Title: Michael Finn, Commissioner Department of Public Works Phone Number: (716) 536-9795 Email: mfinn@city-buffalo.com
NFIP Floodplain Administrator	
Name/Title: Michael Finn, Commissioner Department of Public Works Phone Number: (716) 536-9795 Email: mfinn@city-buffalo.com	
Additional Contributors	
Name/Title: Don Poleto, Senior Operations Engineer Method of Participation: Attended Steering Committee Meetings, attended Municipal Support Meeting, provided data and information, supported update of mitigation strategy	

9.12.2 Municipal Profile

Buffalo is the second largest city in New York state and is the county seat. Buffalo is an important gateway for commerce and travel across the Canadian border. The city is bordered by the Towns of Tonawanda and Amherst to the north, the towns of Cheektowaga and West Seneca and the Village of Sloan to the east, Lake Erie to the west and the City of Lackawanna to the south. The city took its name from the River that runs through its southside and into Lake Erie. The city has an area of 53 square miles and has a relatively flat topography.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Buffalo's original inhabitants were Iroquois peoples. After the Revolutionary War, native peoples throughout the county were dispossessed of their lands. The first white landowner in Buffalo was Captain William Johnston. Buffalo's rise to economic power came through its waterways in the form of transshipment, and manufacturing. The city grew quickly after the opening of the Erie Canal in 1825; the Port of Buffalo was the original western terminus of the Erie Canal. Buffalo is known as the Queen City, a term coined by Erie County's native sone, Millard Fillmore. In 1804, Joseph Ellicott laid out a radial grid street plan that continues to define the city. Frederick Law Olmsted designed several parks within the city, including celebrated Delaware Park.

The city experienced a population boom during the mid-1800s and doubled in size between 1845 and 1855. Grain and commercial goods shipment led to repeated expansion of the harbor. Access to abundant hydropower spurred Buffalo to electrify early and became known as the "City of Lights" The city eventually also became a major rail center serving the entire nation. The City contains many significant architectural works developed during its heyday. In the latter part of the 20th century. Multiple factors impacted Buffalo's economy in the latter half of the 20th Century. The opening of the Saint Lawrence Seaway, plus deindustrialization and suburbanization led to decline of the city's main industries. Eight New York State highways, one three-digit Interstate Highway and one US Highway traverse the city. The Peace Bridge is one of North America's important commercial ports with four thousand trucks crossing it daily (Comprehensive Plan 2006).

According to the U.S. Census, the 2010 population for the City of Buffalo was 261,310. The estimated 2019 population was 256,480, a 1.8 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.6 percent of the population is 5 years of age or younger and 12.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.12.3 Jurisdictional Capability Assessment and Integration

The City of Buffalo performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.12.3). The City of Buffalo's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Buffalo. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.12-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 103, Building Construction and Demolition; Fire Prevention, 1974	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: The City of Buffalo administers the New York State family of codes, a collection of publications coauthored by the International Code Council and the New York State Department of State, legislated by the state, and implemented on July 3, 2002.					
Zoning Code	Yes	No	Chapter 496, Unified Development Ordinance 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: This Ordinance is adopted in accordance with a comprehensive plan to promote the interest and welfare of the people through standards that address the orderly and compatible use of land, the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and type of blocks, thoroughfares, and open spaces.					
Subdivision Ordinance	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.5, Subdivision Approvals 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: Subdivision allows for the orderly division or consolidation of lots, the alteration of lot boundaries, and the dedication of land for public rights-of-way, parks, and other public purposes. The Commissioner of Permit and Inspection Services must take action on an exempt alteration of lots. The City Planning Board must take action on requests for approval of a minor subdivision or major subdivision.					
Stormwater Management Ordinance	Yes	No	Chapter 326, Plumbing, Article IV, Stormwater Retention System	Local	Chief Plumbing Inspector and the Sewer Authority
Comment: All new parking lots or other new paved and drained areas where the collected stormwater load would surpass that of the sewer system into which it would discharge shall have a complete stormwater retention system designed by an architect or engineer and approved by the Chief Plumbing Inspector and the Sewer Authority, as part of their construction.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment:					
Growth Management	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.5, Subdivision Approvals 12/27/2016	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: The subdivision ordinance will ensure the accurate and easy description of land, orderly growth and development, efficient land use, and proper use of natural resources.					
Site Plan Review	Yes	No	Chapter 496, Unified Development Ordinance, Article 11.3, Zoning Approvals	Local	Division of Zoning and Land Use Planning, City Clerk
Comment: Major site plan review is required prior to a building permit being issued for any development project which meets or exceeds the below thresholds: 1. New construction of a principal building of at least 5,000 square feet in gross floor area, except in a case that involves the construction of only a single unit dwelling or a double unit dwelling. 2. A 5,000 square foot or more increase in gross floor area to an existing principal building. 3. New construction of, or additions to, principal buildings to be conducted in phases so that the total gross floor area of all phases combined is at least 5,000 square feet. 4. New construction of a principal building of the civic building type in a neighborhood zone. 5. New construction of a principal building on a parcel that is within, directly across a public right-of-way from, or within 150 feet of, a Historic Olmsted Park or Parkway. 6. Any new construction of a multiple-unit dwelling in an N-2R or N-3R zone. 7. Substantial renovation of any principal building that is at least 50,000 square feet in gross floor area and that involves a change of use, other than in the D-S, D-C, D-IL, D-IH, or C-R zones. 8. New construction or reconstruction of a parking lot of at least 50 spaces. 9. New construction of a loading area containing at least three loading berths. 10. The demolition of a principal building in an N-1D, N-1C, N-1S, N-2C, N-2E, N-3C, N-3E per Section 3.2.1.K.					

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Environmental Protection Ordinance	Yes	No	Chapter 168, Environmental Review, 3/6/1998	Local	Buffalo Environmental Management Commission
Comment: This chapter is enacted pursuant to Article 8 of the New York Environmental Conservation Law and 6 NYCRR 617, State Environmental Quality Review (SEQR) regulations. The basic purpose of this chapter is to incorporate the consideration of environmental factors into the existing planning, review and decision making processes of the city at the earliest possible time. To accomplish this goal, this chapter requires that all agencies determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment and, if it is determined that the action may have a significant adverse impact, prepare or request an environmental impact statement.					
Flood Damage Prevention Ordinance	Yes	Yes	The Charter, Article 31, Flood Damage Prevention, 9/3/2008	Local	Commissioner of Public Works, Parks and Streets
Comment: It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (1) regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; (4) control filling, grading, dredging and other development which may increase erosion or flood damages; (5) regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and; (6) qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	The Queen City in the 21st Century: Buffalo's Comprehensive Plan, 2/7/2006	Local	Buffalo Office of Strategic Planning
Comment: The Buffalo Comprehensive Plan was created to guide Buffalo to achieve a shared community vision of the future for the city. It is the intent of the plan to build a city that is a prosperous, green regional center providing livable communities for all its citizens.					
Capital Improvement Plan	Yes	No	Within the Comprehensive Plan	Local	Buffalo Office of Strategic Planning

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The Comprehensive Plan proposes a special Buffalo Development Program which combines the Capital Improvement Program constructed out of already available funds with an additional $35 million per year from other sources. Over the ten-year course of the program an additional $350 million would be invested.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Niagara River Watershed Management Plan, 2013 Regional Niagara River Lake Erie Watershed Management Plan, 2017	Local, County	Buffalo Niagara Riverkeeper, Erie County
Comment: Riverkeeper approached the watershed planning process through a two-phased approach, with the first focusing on completing an initial assessment of the watershed, by performing an ecological inventory, desktop GIS analysis, municipal code review, and ranking sub-watersheds within the Niagara River Watershed based on water quality, habitat and land use metrics. The second phase consisted of developing implementation plans for five priority sub-watersheds based on field data collected over two years.					
Stormwater Plan	Yes	No	Stormwater Management Plan, October 2015	City	Buffalo Sewer Authority
Comment: The SWMP Plan is based on the most current NYSDEC SPDES General Permit (GP-0-15-003) issued under the Federal Stormwater Phase II rule (issued in 1999) which requires MS4 owners and operators, in U.S. Census defined urbanized or other designated areas, to develop a SWMP Plan. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures, include: 1. Public Education and Outreach 2. Public Involvement / Participation 3. Illicit Discharge Detection and Elimination 4. Construction Site Runoff Control 5. Post-Construction Stormwater Management 6. Pollution Prevention / Good Housekeeping for Municipal Operations					
Open Space Plan	Yes	No	Land Use Plan September 2016	City	Office of Strategic Planning
Comment: The Buffalo Green Code is a place-based economic development strategy designed to implement the city's Comprehensive Plan. It includes the first citywide land use plan since 1977, and the first zoning rewrite since 1953. It incorporates the city's Homestead Urban Renewal Plan, Local Waterfront Revitalization Plan, and Brownfield Opportunity Area Plans into a common vision that will guide Buffalo's physical development over the next 20 years.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	No	Local Waterfront Revitalization Program September 2020	City	Office of Strategic Planning
Comment: The City of Buffalo Local Waterfront Revitalization Area expands the original New York State Coastal Area boundary to better mimic the Niagara River Greenway Focus Area boundary and to ensure that the LWRA includes: • The full reach of Scajaquada Creek (above ground only) and Hoyt Lake, Buffalo River, Cazenovia Creek and South Park Lake within the City of Buffalo; • The full reach of the Great Lakes Seaway Trail National Scenic Byway in Buffalo, particularly the full extent along Niagara Street, as it serves as the City's primary local waterfront corridor; • The City's five waterfront Olmsted Parks including Riverside, the southern half of Delaware Park, Front Park, Cazenovia Park and South Park; and The Canalside and Cobblestone areas.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Transportation Plan	Yes	No	2040 Metropolitan Transpiration Plan Update, May 2014	Regional	Greater Buffalo-Niagara Regional Transportation Council
Comment: The Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) is a partnership of local and state governments working together to make decisions about transportation planning in the Buffalo-Niagara region. GBNRTC members include: City of Buffalo; City of Niagara Falls; Erie County; Niagara County; Niagara Frontier Transportation Authority (NFTA); New York State Department of Transportation (NYSDOT); and New York State Thruway Authority (NYSTA). The Empire State Development Corporation, the Transportation Council of the Buffalo-Niagara Partnership, and the Seneca Nation of Indians serve formally as Regional Strategic Stakeholders. Working together, GBNRTC members carry out a continuing, cooperative, and comprehensive planning process to develop transportation plans and programs for the Buffalo-Niagara region. As the Metropolitan Planning Organization (MPO), the GBNRTC is responsible for developing a long-range metropolitan transportation plan (MTP) for the region that reflects both regional needs and local concerns. The MTP serves a number of purposes. It provides a vision of the region's future growth and development; identifies regional transportation needs for future transportation improvements and services; and provides guidance and direction for infrastructure investments in the region. The plan sets the foundation and priorities for the distribution of federal transportation funds and serves as the framework for the development of the Transportation Improvement Program (TIP), the capital program of all federally funded transportation projects in the region.					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Development and Permitting Capability

The table below summarizes the capabilities of the City of Buffalo to oversee and track development.

Table 9.12-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Department of Permit & Inspection Services
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	All permits must meet City and State Ordinances
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Not Indicated	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Buffalo and their current responsibilities which contribute to hazard mitigation.

Table 9.12-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board makes determinations on Major Site Plans and Subdivisions. The Planning Board also advises the Common Council on Rezoning Requests, Special Use Permits, Planned Unit Developments, and Adaptive Reuse Permits.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals reviews all applications seeking relief from what is required by the Unified Development Ordinance.
Planning Department	Yes	The Mayor's Office of Strategic Planning, a division within the city's Executive Department, coordinates economic development activities throughout the City of Buffalo. The Mayor's Office of Strategic Planning is subdivided into four divisions: Development, Real Estate, Planning & Zoning, and Environmental Affairs. The Division of Development works directly with the business community and real estate developers. The Division of Real Estate handles real estate transactions related to city-owned property, including the sale of real property owned by the City of Buffalo, including vacant lots, residential structures, and capital assets such as decommissioned schools and fire houses. The Division of Planning & Zoning oversees the administration of the city's development regulatory boards (Planning Board, Zoning Board of Appeals, and Historic Preservation Board) and engages the community in planning initiatives. The Division of Environmental Affairs handles matters related to state and federal environmental review, implementation of state and federal environmental land use laws, and oversees the Environmental Management Commission.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental division is responsible for the review and coordination of actions subject to the State and Federal regulations, the assessment and remediation of the city's brownfields, providing support staff to the Buffalo Environmental Management Commission, and advising city departments on environmental issues and affairs.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Division of Development in the Mayor's Office of Strategic Planning strives to make doing business in Buffalo as seamless as possible.
Public Works/Highway Department	Yes	The City of Buffalo Department of Public Works (DPW) plays a major role in connecting the Buffalo Community. Whether it is clearing snow from your street, inspecting bridges, collecting trash, or mowing the sports fields our children play on, we are in our neighborhoods every day working to improve quality of life for residents, businesses and visitors in the city. It is the mission of the department to maintain, enhance and beautify city streets, public facilities, infrastructure, waterways, and parks. The DPW is constantly working to keep all the elements of the city functioning properly. The Buildings Division of the DPW is responsible for: • Building Planning and Design - Responsible for the design, planning, and construction oversight for all major capital improvements and repairs at over 200 city-owned facilities. These facilities include cultural and sports assets, major municipal buildings, police facilities, fire houses, all city service garages, all libraries within the city limits, all city-owned community centers, and all park buildings, shelters, ice rinks and pools. • Building Maintenance - Oversees all building maintenance on over 200 city owned facilities.
Construction/Building/Code Enforcement Department		The Department of Permit and Inspection Services oversees all development and uses on private property in the City of Buffalo, ranging from a new patio in a residential backyard to the construction of a new multi-story office building. Our mission is to guide residents and property owners through the license and/or permit process. We review and inspect these projects to ensure safety and compliance with the New York State Building and Fire Code, the Buffalo Green Code, and all other appropriate codes or ordinances.
Emergency Management/Public Safety Department	Yes	The Buffalo Fire Department is responsible for Emergency Management Services.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	BuffAlert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	• The Engineering Department is responsible for construction and paving of all City streets; traffic signals and signage; maintains over 32,000 street lights citywide; maintains 44 bridges, oversees harbor functions; monitors ice formations on bodies of water in winter • The Buildings Department oversees all construction of City-owned facilities and handles major repairs; oversees all maintenance on hundreds of City-owned buildings • The Streets Department: Plows and cleans 1,600 lane miles of City roadways, and handles bulk trash pickup • The Sanitation Department is responsible for collecting and disposing of 70,000 trash pick-ups weekly • The Recycling Department works with a contractor to collect recyclables on a weekly basis to reduce our reliance on landfills, prevent pollution, increase air quality and save tax dollars • The Water Department handles all water engineering, daily operations, water-related customer service and maintenance on 800 miles of sub-surface piping

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		• The Department of Parks and Recreation is responsible for all park operations including maintaining around 190 City properties including athletic fields, bike trails, traffic circles, green spaces and managing over 64,000 street trees. This division also manages programming at 7 City recreation centers, pools, splash pads and skating rinks.
Mutual aid agreements	No	Not Indicated
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Division of Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Division of Engineering
Planners or engineers with an understanding of natural hazards	Yes	Division of Engineering
Staff with expertise or training in benefit/cost analysis	Yes	Administration, Finance, Policy & Urban Affairs
Professionals trained in conducting damage assessments	No	Division of Engineering, Department of Permit and Inspection Services
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Office of Strategic Planning
Scientist familiar with natural hazards	No	Not Indicated
NFIP Floodplain Administrator (FPA)	Yes	Commissioner, Department of Public Works
Surveyor(s)	No	Not Indicated
Emergency Manager	Yes	Fire Commissioner
Grant writer(s)	No	Not Indicated
Resilience Officer	No	Not Indicated
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Buffalo.

Table 9.12-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Buffalo.

Table 9.12-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Mayor's Office of Communications
Personnel skilled or trained in website development	Yes	Mayor's Office of Communications
Hazard mitigation information available on your website	Yes	Buffalony.gov
Social media for hazard mitigation education and outreach	Yes	Facebook, Twitter, and Instagram available
Citizen boards or commissions that address issues related to hazard mitigation	Yes	The Citizens Planning Council is a group of appointed citizens that makes capital budget recommendations to the Mayor's Office based upon capital budget requests from City departments, not-for-profit institutions, and the community. The Preservation Board reviews all exterior changes to landmark properties and properties located within City of Buffalo Preservation Districts as per Chapter 337 of City of Buffalo Code. The Preservation Board uses the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings as its guidelines.
Other programs already in place that could be used to communicate hazard-related information	Yes	BuffAlert Newsletter
Warning systems for hazard events	Yes	CodeRED
Natural disaster/safety programs in place for schools	Yes	Fire Safety, Tornado Safety
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Buffalo.

Table 9.12-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	Bronze	9/26/2019
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.12-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.12.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Finn, Commissioner Department of Public Works

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Buffalo.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.12-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Buffalo	94	403	$927,901	33	45

Source: *FEMA 2020a, FEMA 2020b*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

Areas in the City of Buffalo along Lake Erie are particularly susceptible to coastal flooding as a result of storm-induced rises and seiches. The Buffalo River is a notable floodplain in Erie County that flows through the southern portion of the city. Over 4.5% of the land area in the City of Buffalo (1,187 acres) is located within the SFHA (100-year floodplain).

NFIP Compliance

The City of Buffalo's more recent Community Assistance Contact (CAC) was on April 8, 2005 and the most recent Community Assistance Visit (CAV) was on April 26, 2017. There are currently no outstanding compliance issues.

9.12.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Buffalo has identified the following routes and procedures to evacuate residents prior to and during an event.

- I-190
- I-90
- Pittsburgh-Buffalo Hwy (US-219)
- South Park Ave (US-62)
- NY-400
- NY-33
- NY-5

Sheltering

The City of Buffalo has identified the following designated emergency shelters within the city.

Table 9.12-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The city will work with the county to identify and designate sheltering locations. See Mitigation Action 2022-C. Buffalo-#014							

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Buffalo has identified the following sites suitable for placing temporary housing units.

Table 9.12-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The city will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-C. Buffalo-#014					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The City of Buffalo has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.12-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The city will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-C. Buffalo-#014					

9.12.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.12-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.12-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	18	3	9	1	16	3	40	0	18	3	26	0
Multi-Family	3	0	5	0	6	1	9	0	11	0	2	0
Other (commercial, mixed-use, etc.)	19	1	10	2	15	0	15	0	17	1	9	0
Total Permits Issued	**40**	**4**	**24**	**3**	**37**	**4**	**64**	**0**	**46**	**4**	**37**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location	Known Hazard Zone(s)*	Description / Status of Development

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

			(address and/or block and lot)		
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.12.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Buffalo's risk assessment results and data used to determine the hazard ranking discussed later in this section.

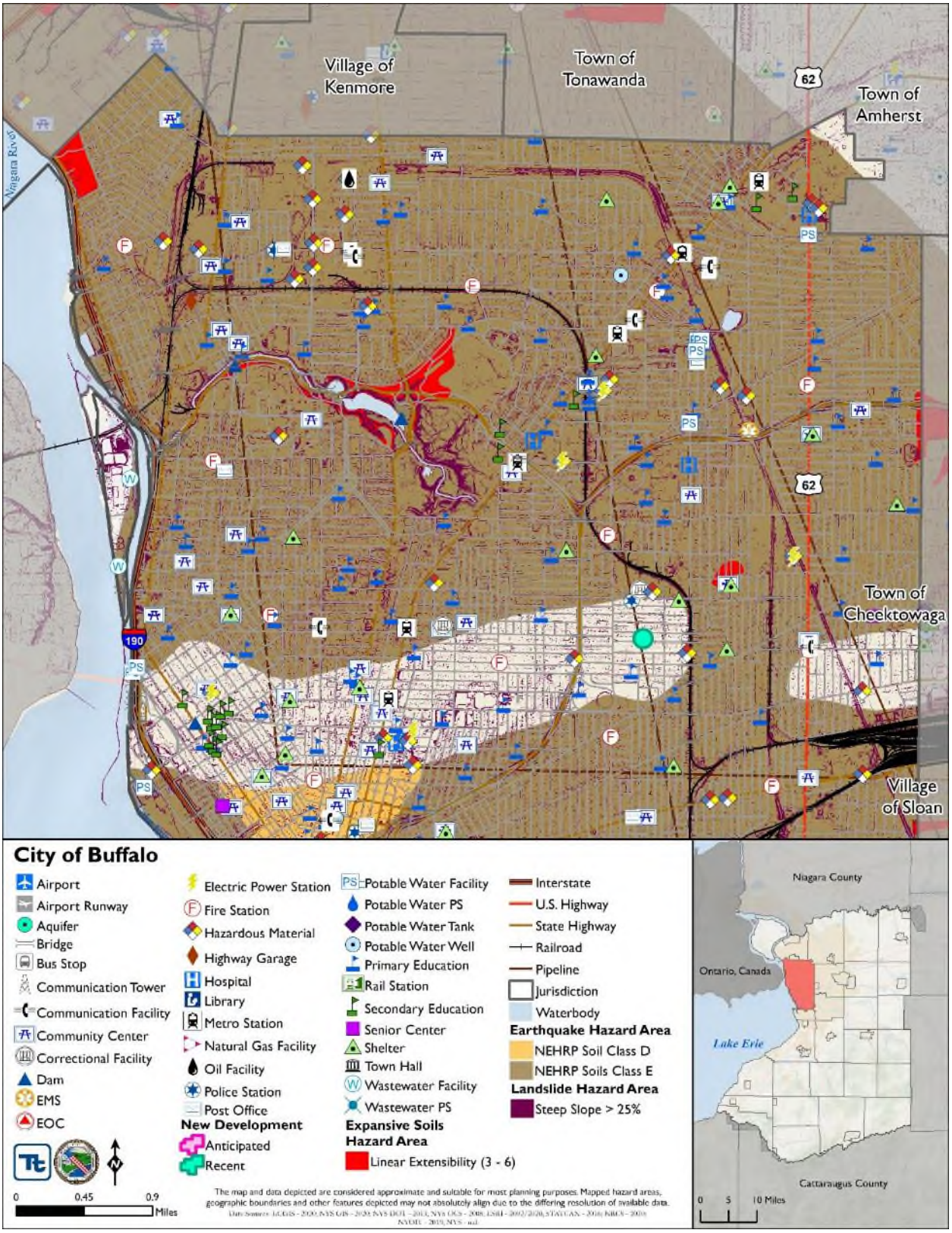
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Buffalo has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-1. Northern Section of City of Buffalo Hazard Area Extent and Location Map 1

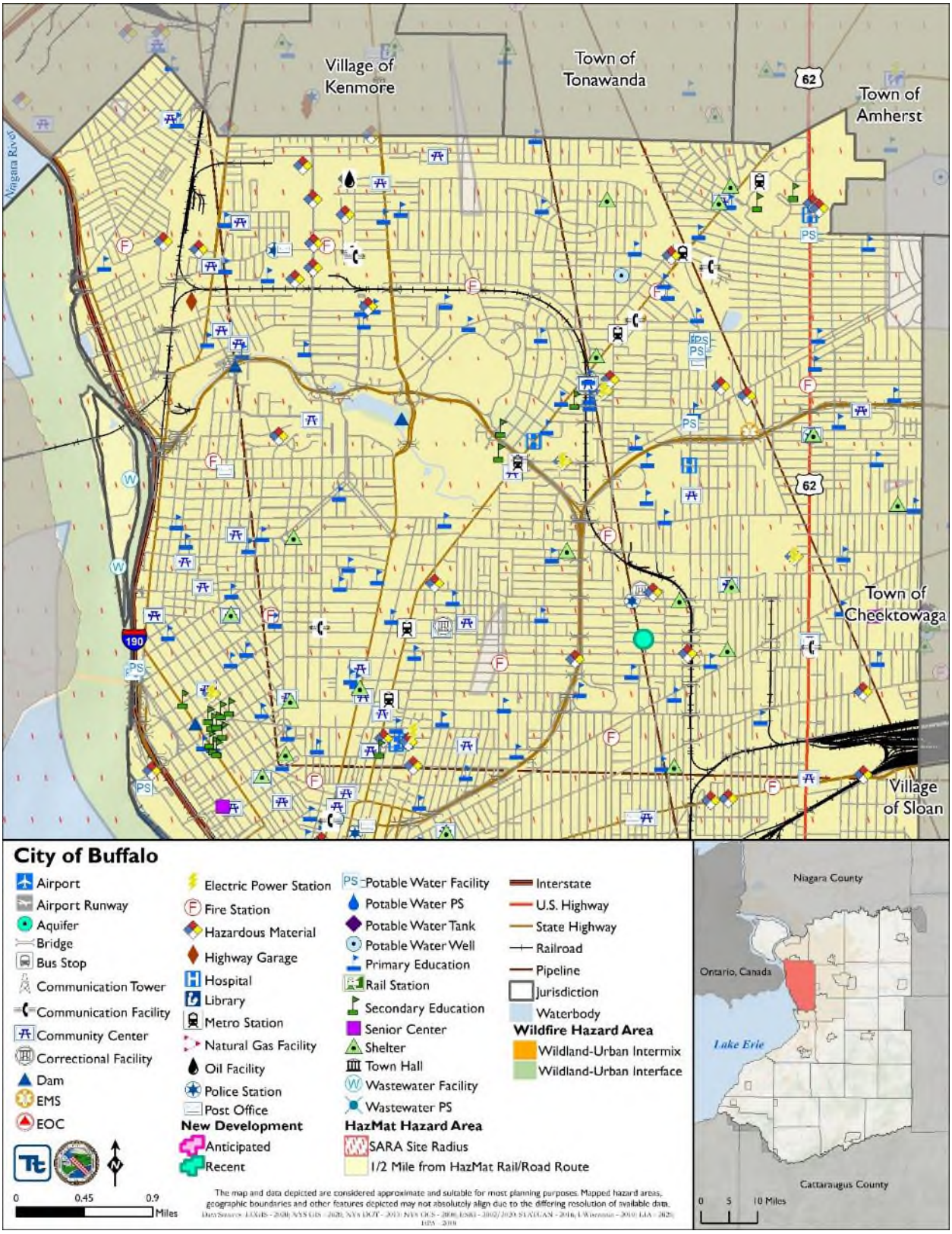
Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-2. Northern Section of City of Buffalo Hazard Area Extent and Location Map 2



Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-3. Northern Section of City of Buffalo Hazard Area Extent and Location Map 3

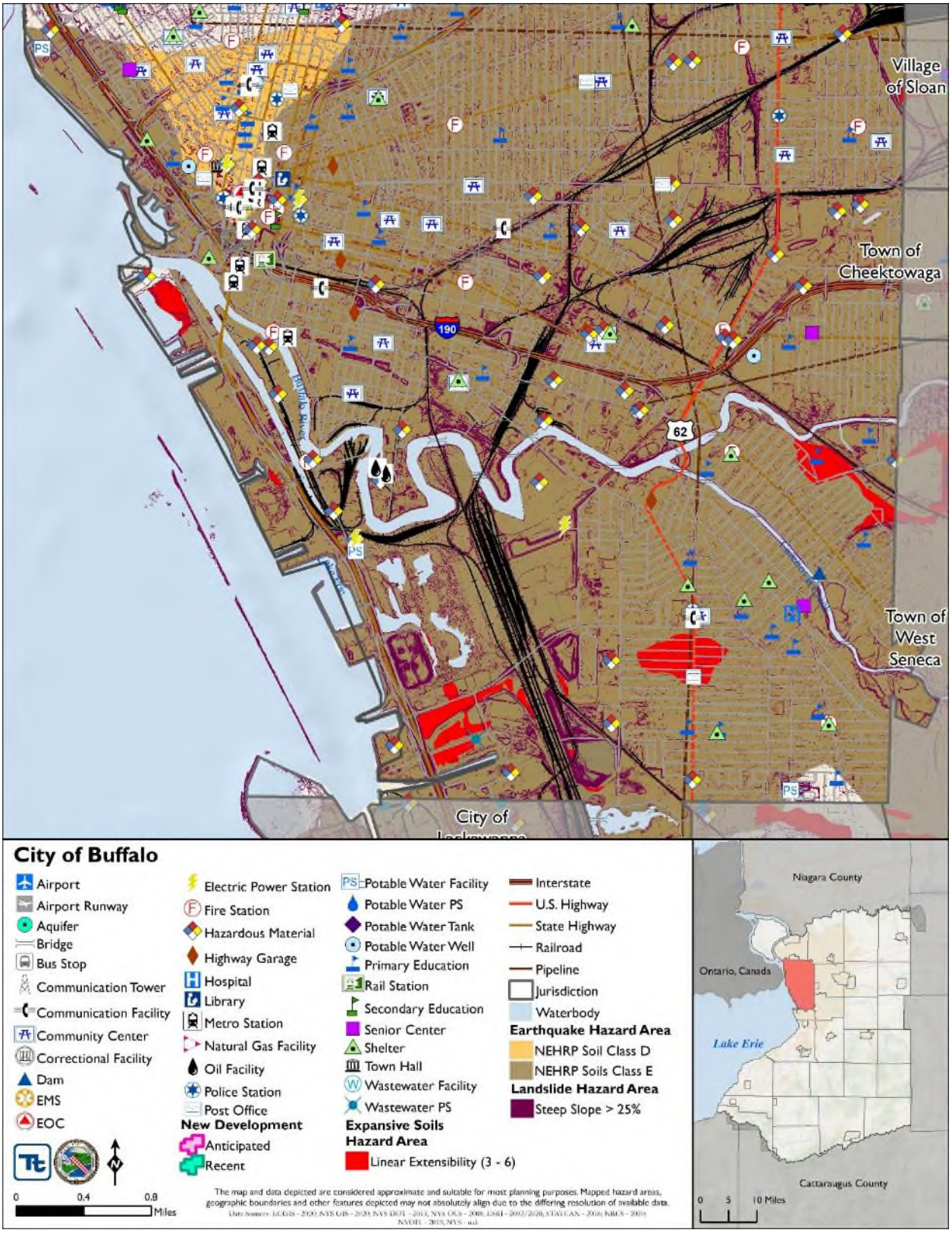


Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-4. Southern Section of City of Buffalo Hazard Area Extent and Location Map 1

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-5. Southern Section of City of Buffalo Hazard Area Extent and Location Map 2



Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.12-6. Southern Section of City of Buffalo Hazard Area Extent and Location Map 3

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Buffalo's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.12-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.12-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	A portion of the New York State Thruway was closed.
August 11-15, 2015	Flash Flood	No	Some of the main roads closed included: Maple Road, Niagara Falls Blvd, and Sheridan Drive. Secondary roads, too numerous to mention, were also flooded. In East Amherst, streets were flooded and people had to be rescued from vehicles trapped in flood waters.
October 28-29, 2015	High Wind	No	Reports of trees down scattered about the City of Buffalo.
November 6, 2015	Thunderstorm Wind	No	The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car. Damage was estimated at $200,000.
November 12, 2015	High Wind	No	Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets.
November 18, 2015	High Wind	No	Although the county was impacted, the city did not report damages
January 11, 2017	High Wind	No	Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.
March 8, 2017	High Wind	No	Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the winds.
March 13, 2017	Winter Storm	No	Most schools and some businesses closed on Tuesday. Snowfall records were set at 19.5 inches in Buffalo.
July 20, 2017	Tornado	No	Although the county was impacted, the city did not report damages
August 4, 2017	Thunderstorm Wind	No	In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the city did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the city did not report damages
January 2, 2018	Blizzard	No	Although the county was impacted, the city did not report damages
October 6, 2018	Lightning	No	Although the county was impacted, the city did not report damages
February 24, 2019	High Wind	No	Thousands were reported without power.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach.
November 27, 2019	Lakeshore Flooding	No	This caused a lesser long-lived seiche on Lake Erie than the previous event. It peaked at 9.56 ft above low water datum with the level above Lake Erie's flood stage for about four hours. This again flooded Canalside in downtown Buffalo, flooded Route 5, and did additional damage to breakwaters in Dunkirk in Buffalo.
January 12, 2020	Lakeshore Flooding	No	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.
January 18, 2020	Lakeshore Flooding	No	As the cold front passed that brought colder air in, a seiche on Lake Erie again brought lakeshore flooding to Chautauqua and Erie counties, doing further damage to the Dunkirk Pier, Buffalo break wall, and closing Route 5 in Hamburg. There were two distinct pulses of higher water on the east end of the lake, as well. The first corresponded with lake levels of 8.18 feet above low water datum, and the second of 7.3 feet above low water datum.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the City of Buffalo's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Buffalo. The City of Buffalo has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

During the review of the hazard/vulnerability risk ranking, the city did not suggest modifications for the following hazard rankings.

Table 9.12-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.12-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Delaware Park Lake Dam	Dam	X	X	2022-C. Buffalo-001
Scajaquada Creek Dam	Dam	X	X	2022-C. Buffalo-002
Buffalo Fire Investigation	Fire Station	X	X	2022-C. Buffalo-003
General Mills Cereal Properties, LLC	Hazardous Material		X	2022-C. Buffalo-004
National Fuel Gas Distribution - Minera	Hazardous Material	X	X	2022-C. Buffalo-005
USCG Sector Buffalo	Hazardous Material	X	X	2022-C. Buffalo-006
Buffalo Fire Engine 25	Shelter		X	2022-C. Buffalo-007

Source: Effective DFIRM

Identified Issues

After review of the City of Buffalo's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Buffalo has identified the following vulnerabilities within their community:

- Various critical facilities are located within the floodplain
- Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, oil facilities, post offices, private schools, and colleges, in the city are in the earthquake hazard area.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- All of the critical facilities in the City of Buffalo may be at risk of being exposed to hazardous materials incidents.
- Several private facilities are located on steep slopes and at risk of landslides.
- The South Side Buffalo Post Office may be at risk of experiencing damages caused by expansive soils.
- There are 33 Repetitive Loss Properties within the city.
- Ice jams during high water events cause flooding and destabilization of the Cazenovia Creek and Buffalo River banks.
- The city does not have identified emergency shelters, temporary or permanent housing locations, or heating/cooling centers.
- FEMA FIRMs are updated on an ongoing basis and may change the flood risk to the city.
- The city would like to increase public awareness, preparedness, and information sharing about disasters.

9.12.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.12-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Enhance local Snow Removal Plan by controlling employee leave time; extending shifts to 12-16 hours; establishing a Command Center/War Room; providing additional notification/information of impending and current events via Public Notification System; establishing off-street parking agreements with local businesses to facilitate plowing of streets; purchasing eight new wing plows; renewing GPS contract to assist in tracking and deploying assets	Exposure; transportation; continuity of operations for health facilities; businesses and gov't	Not Identified	Dept. of Public Works	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Project is complete and improvements are in place. Buffalo has been successful in the past several storms. The mutual aid provided by NYSDOT has been the best of all improvements made. That allows city forces to focus on secondary and residential routes and achieve overall completion faster.
	Currently seeking funding for expansion of slope walls/bank protection along the Caznovia Creek and Buffalo River; dredging of key areas outside of Federal navigational limits; increased ice breaking/cutting; enforcement of all local/State and Federal rules and regulations involving floodplain development	Flooding, Ice Jams	Effects of flooding caused by ice jams during high water events	Dept. of Public Works	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2020 HMP 2. Continue to seek funding for slope wall construction and dredging upstream of the Federal navigation channel. Actions taken since 2015 include consistently breaking ice in the navigation channel with the Cotter fire boat, breaking ice at bridges with long arm excavator and cutting triangles in upstream sheet ice to weaken the field ahead of forecasted ice flow. 3.
	Promote Citizen Awareness/ Preparedness by holding CERT classes; disseminating disaster preparedness and EMS information to the Board of Block Clubs; Buffalo Public Schools; Community Centers; faith based organizations; kiosks at festivals/PRs; etc.	All Hazards	Not Identified	Dept. of Fire	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2020 HMP 2. Current programs are in place for dissemination of information to the citizens of Buffalo. May revise the project description to reflect current options for information sharing. 3.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Formally establish, via MOUs, heating/cooling centers throughout the City	Weather Temperature Extremes	Vulnerable populations having lack of access	Dept. of Fire	In Progress	Cost	-	1. Include in 2020 HMP 2. Formally establish heating/cooling relocation and reunification centers via MOA's 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	DPW, Law, Common Council	Complete	Cost	-	1. Discontinue 2. 3. Article 31 of the City Charter has been added to address Flood Damage Prevention
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flood	Not Identified	DPW	Complete	Cost	-	1. Discontinue 2. 3. The Commissioner of Public Works, Parks and Streets is designated as the Floodplain Administrator.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flood	Not Identified	Inspections	Ongoing Capability	Cost	-	1. Discontinue 2. 3. The Commissioner of Public Works, Parks and Streets is designated as the Floodplain Administrator.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	DPW, Law, Common Council, Insp.	Ongoing Capability	Cost	-	1. Include in 2020 HMP 2. The most recent adopted FIRMs have been added to the City's Ordinance. This item should remain as it is a perpetual on-going effort. 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	DPW, Law, Common Council, Insp.	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing Capability of the city
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Join the Community Rating System (CRS).	Flood	Not Identified	DPW, Law, Common	Ongoing Capability	Cost	-	1.Discontinue 2. 3. Ongoing Capability of the city
						Level of Protection	-	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Council, Insp.		Damages Avoided; Evidence of Success	-	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Buffalo has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Caznovia Creek and Buffalo River – The city consistently breaks up ice in the navigation channel with the Cotter fire boat, breaks ice at bridges with along arm excavator and cuts triangles in upstream sheet ice to weaken the field ahead of forecasted ice flow.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Buffalo participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.12-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X			X			X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X			X		X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X	X		X			X		X	X
Severe Winter Storm	X	X		X			X		X	X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.12-19 summarizes the comprehensive-range of specific mitigation initiatives the City of Buffalo would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.12-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-C. Buffalo-001	Work with the Delaware Park Lake Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Delaware Park Lake Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-002	Work with the Scajaquada Creek Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Scajaquada Creek Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-003	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Buffalo Fire Investigation is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Buffalo Fire Investigation to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 1657

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				•Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the city will carry out the option.										
2022-C. Bufalo-004	Assess the flood risk at the General Mills Cereal Properties, LLC	1, 2, 3	Flood	**Problem**: The General Mills Cereal Properties, LLC is in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022-C. Buffalo-005	Work with the National Fuel Distribution - Minera owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The National Fuel Distribution - Minera is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-006	Work with the USCG Sector Buffalo owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The USCG Sector Buffalo is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022-C. Buffalo-007	Assess the flood risk at the facility	1, 2, 3	Flood	**Problem**: The Buffalo Fire Engine 25 is in the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by	Ensures continuity of	City Budget	High	EAP	PI

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 1658

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Buffalo Fire Engine 25			**Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.					engineering study	operations of the facility				
2022-C. Buffalo-008	Work with the private building owners in the city to determine earthquake risk	1, 2, 3	Earthquake	**Problem**: Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, oil facilities, post offices, private schools, and colleges, in the city are in the earthquake hazard area. **Solution**: The city will encourage private property owners to Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.	Yes	None	Within 6 months for outreach	City of Buffalo	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	City Budget	High	EAP	PI
2022-C. Buffalo-009	Protect the critical facilities on the City of Buffalo from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	**Problem:** All of the critical facilities in the City of Buffalo may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	City of Buffalo	<$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	LPR	ES
2022-C. Buffalo-010	Work with private facility owners to protect the	1, 2, 3	Landslide	**Problem:** Several private facilities are located on steep slopes and at risk of landslides.	Yes	None	Within 6 months for outreach	City of Buffalo	<$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	EAP	PI

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 1659

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	facilities from landslides			**Solution:** with the City will encourage private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.										
2022-C. Buffalo-011	Work with the South Side Buffalo Post Office facility owner to protect the facility from the risk of expansive soils	1, 2, 3	Expansive Soils	**Problem:** The South Side Buffalo Post Office may be at risk of experiencing damages caused by expansive soils. **Solution:** w the city will encourage the facility owner to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.	Yes	None	Within 6 months for outreach	City of Buffalo	<$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the post office from expansive soils	City Budget	High	EAP	PI
2022-C. Buffalo-012	Repetitive Loss Mitigation	1, 2, 3	Flood	**Problem:** There are 33 Repetitive Loss Properties within the city. **Solution:** The city will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the city will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	None	Within 6 months for outreach	FPA	Low	High	City Budget	High	EAP	PI

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-C. Buffalo-013	Cazenovia Creek and Buffalo River Bank Protections	1, 2	Flood, Winter Storm, Severe Storm	**Problem:** Ice jams during high water events cause flooding and destabilization of the riverbanks. **Solution:** The city will continue to seek funding for slope wall construction and dredging upstream of the federal navigation channel, including increased ice breaking/cutting; and enforcement of all local/state and federal rules and regulations involving floodplain development.	No	None	2 years	Engineering, DPW	Medium, $50,000 (includes estimated costs for fireboat cotter and crew for 3 days, engineering crew for 2 days, police overtime for 2 days, extended reach excavator)	High	FEMA HMA, HMGP, BRIC	High	SIP	SP
2022-C. Buffalo-014	Citizen Awareness and Preparedness Education	1, 2, 3	All Hazards	**Problem:** The city would like to increase public awareness, preparedness, and information sharing about disasters. **Solution:** The city will boost dissemination of information to the citizens of Buffalo by holding CERT classes; disseminating disaster preparedness and EMS information to the Board of Block Clubs; Buffalo Public Schools; Community Centers; faith based organizations; kiosks at festivals/PRs; etc.	No	None	Ongoing	Dept. of Fire	Low	High	City Budget	High	EAP	PI
2022-C. Buffalo-015	Shelters and Temporary Housing	1, 2, 3	All Hazards	**Problem:** The city does not have identified emergency shelters, temporary or permanent housing locations, or heating/cooling centers.	Yes	None	6 months	Dept. of Fire	Low	High	City Budget	High	LPR	ES

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.12-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The city will formally establish heating/cooling relocation and reunification centers via MOA's, as well as identifying and designating locations for overnight sheltering, temporary, and permanent housing.										
2022-C. Buffalo-016	Floodplain Management Ordinance	1, 2	Flood	**Problem:** FEMA FIRMs are updated on an ongoing basis and may change the flood risk to the city. **Solution:** The most recent adopted FIRMs have been added to the city's ordinance. The city will update/revise floodplain management ordinances to be consistent with potential future new FIRMs is a perpetual on-going effort.	No	None	Ongoing	DPW, Law, Common Council, Insp.	Low	High	City Budget	High	LPR	PR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

OEM *Office of Emergency Management*

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.12-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-C. Buffalo-001	Work with the Delaware Park Lake Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-002	Work with the Scajaquada Creek Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-003	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	1	1	1	1	0	1	-1	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-004	Assess the flood risk at the General Mills Cereal Properties, LLC	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-005	Work with the National Fuel Distribution - Minera owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-006	Work with the USCG Sector Buffalo owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-007	Assess the flood risk at the facility Buffalo Fire Engine 25	1	1	1	1	0	1	-1	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-008	Work with the private building owners in the	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.12-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	city to determine earthquake risk																
2022-C. Buffalo-009	Protect the critical facilities on the City of Buffalo from HazMat incidents	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-010	Work with private facility owners to protect the facilities from landslides	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-011	Work with the South Side Buffalo Post Office facility owner to protect the facility from the risk of expansive soils	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High
2022-C. Buffalo-012	Repetitive Loss Mitigation	1	1	1	1	0	0	0	1	1	1	0	1	1	1	10	High
2022-C. Buffalo-013	Cazenovia Creek and Buffalo River Bank Protections	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-C. Buffalo-014	Citizen Awareness and Preparedness Education	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2022-C. Buffalo-015	Shelters and Temporary Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-C. Buffalo-016	Floodplain Management Ordinance	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 1665

9.12.9 Action Worksheets

The following action worksheets have been developed by the City of Buffalo to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event		
Project Number:	2022-C. Buffalo-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Buffalo Fire Investigation is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Buffalo Fire Investigation to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the city will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the facility
Useful Life:	40 years	**Goals Met:**	1, 2
Estimated Cost:	TBD by feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate building	$500,000	Not feasible
	Elevate roads	$500,000	Elevated roadways would not protect the facility from flood damages

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Buffalo Fire Investigation to the 0.2% annual chance flood event	
Project Number:	2022-C. Buffalo-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures continuity of operations of EMS/Fire
Property Protection	1	Protects critical facility
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	-1	May need funding after feasibility assessment
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	Fire Department
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Cazenovia Creek and Buffalo River Bank Protections		
Project Number:	2022-C. Buffalo-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Winter Storm, Severe Storm		
Description of the Problem:	Ice jams during high water events cause flooding and destabilization of the riverbanks.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will continue to seek funding for slope wall construction and dredging upstream of the federal navigation channel, including increased ice breaking/cutting; and enforcement of all local/ftate and Federal rules and regulations involving floodplain development.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	Medium-High	**Mitigation Action Type:**	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	As soon as funding is available
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	FEMA HMA, HMGP, BRIC
Responsible Organization:	Engineering, DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Redirect streambanks	N/A	Not environmentally sound
	Fill in river	N/A	Not environmentally sound

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Cazenovia Creek and Buffalo River Bank Protections	
Project Number:	2022-C. Buffalo-013	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures water flow
Property Protection	1	Reduces flooding/ice jams
Cost-Effectiveness	1	
Technical	1	Engineering/DPW can assist
Political	1	Priority for city
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Winter Storm, Severe Storm
Timeline	1	Within 5 years, ongoing
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 51-Section-9.12-Buffalo-C-121721 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.13 Town of Cheektowaga

This section presents the jurisdictional annex for the Town of Cheektowaga. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Cheektowaga's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.13.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Cheektowaga's hazard mitigation plan primary and alternate points of contact. The Town of Cheektowaga followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Services, Planning, and Engineering. The Emergency Services Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.13-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mike Mazurowski, Emergency Services Manager Phone Number: (716) 893-0869 Email: mmazurowski@tocny.org	Name/Title: Patrick Bowen, Town Engineer/Engineering Department Phone Number: (716) 897-7288 Email: PBowen@tocny.org
NFIP Floodplain Administrator	
Name/Title: Patrick Bowen, Floodplain Administrator, Engineering Department Phone Number: (716) 897-7288 Email: PBowen@tocny.org	
Additional Contributors	
Name/Title: Jesse Jesonowski, Junior Planner Method of Participation: Provided data and information	

9.13.2 Municipal Profile

The Town of Cheektowaga is in the north-central part of Erie county, and is an inner ring suburb of Buffalo. It is the second most populated suburb in Erie County, after the Town of Amherst. Cheektowaga contains the incorporated Villages of Sloan and Depew. The town is bordered by the Town of Lancaster on the east, the Town of West Seneca on the south, the City of Buffalo on the west, and the Town of Amherst to the north. The Scajaquada Creek, Cayuga Creek and Ellicott Creek run through the town (Wikipedia 2020).

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The town was hunting and fishing grounds for different groups of Native Americans. After white settlement, Cheektowaga become a thriving rural town with several taverns, sawmills, and cloth mills. In 1839, Cheektowaga was formed from the original Town of Amherst. Agricultural was very productive. By the time the Civil War started, several railroad lines bisected the town and spurred industrial development. The Buffalo Airport's development was very important to the town. The construction of the New York State Thruway, with three of its main interchanges within Cheektowaga also triggered rapid residential, industrial and commercial development (Town of Cheektowaga 2020).

Originally a rural farming area, the town was extensively developed for suburban housing during the post-World War II subdivision boom of the 1950s (Town of Cheektowaga 2020). In 1989 the Walden Galleria Mall opened a 1.2 million square foot regional shopping center. The Kensington Expressway was rebuilt in 1990 to service the Buffalo Airport and the eastern suburbs. Over time the town has become steadily more urban in composition (Town of Cheektowaga Comprehensive Plan 1992).

According to the U.S. Census, the 2010 population for the Town of Cheektowaga was 74,649. The estimated 2019 population was 73,129, a two percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.1 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.13.3 Jurisdictional Capability Assessment and Integration

The Town of Cheektowaga performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.13.3). The Town of Cheektowaga's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Cheektowaga. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.13-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	No	Yes	-	-	-
Comment: None					
Zoning Code	No	No	-	-	-
Comment: None					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	No	Ch. 209 Stormwater Management and Erosion & Sediment Control, Adopted 12-3-2007 by L.L. No. 8-2007. Amendments noted where applicable.	Local	Engineering Department
Comment: Required under the town's Stormwater SPDES Permit.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Ch. 125 Adopted 5-28-2019 by L.L. No. 2-2019.[1] Amendments noted where applicable.	Local	Town Engineer
Comment: Required for participation in the National Flood Insurance Program. Meets State requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)	Municipal Separate Storm Sewer System (MS4)
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	Yes	Yes	Adopted by the Town Board of the Town of Cheektowaga 10-21-1985 as Ch. 19 of the 1985 Code	Local	Cheektowaga Emergency Services
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: None					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Ch. 125 Adopted 5-28-2019 by L.L. No. 2-2019.[1] Amendments noted where applicable.	Local	Town Engineer, Building Department
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DPW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	Adopted 5-05-2008 by Town Bd. Resolution 2008-264	Local	Town Engineer
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	No	No			
Comment: None					
Community Wildfire Protection Plan	No	No			
Comment: None					
Forest Management Plan	Yes	No	Urban Forestry Management Plan	Local	Building Department
Comment: Urban Forestry Management Plan was developed through grant funding from the NYSDEC					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency Management Plan	Local	Cheektowaga Emergency Services
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Cheektowaga to oversee and track development.

Table 9.13-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain Development Permit is required for any development or renovations within the 100 Year Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Cheektowaga and their current responsibilities which contribute to hazard mitigation.

Table 9.13-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Town Planning Board is a five member citizen advisory body to the Town Board. Their mission is promulgated within Chapter 26 of the Town Code. Items considered by the Planning Board are initiated by filing a Development Review Application with the Code Enforcement Officer.
Zoning Board of Adjustments	Yes	The Town regulates all uses of land, heights of buildings, building locations and the density or bulk of buildings through its Zoning Law. The Town of Cheektowaga adopted its first zoning ordinance in 1942, which was subsequently replaced by a second zoning ordinance in 1969 with the adoption of its first comprehensive plan. In 1992 the Town adopted its current zoning law and its second comprehensive plan. The current Zoning Law, which has been periodically amended to date, can be found under Chapter 260 of the Town of Cheektowaga Town Code.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	Environmental Advisory Committee serves an advisory role only
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	The Highway department provides many services, including: repair of pot holes, tree planting, branch pickup, drainage/repair of storm sewers, street sweeping, street paving, tree trimming/removal, leaf pick-up, and snow/ice removal.
Construction/Building/Code Enforcement Department	Yes	The Town of Cheektowaga Building Inspection Department is the first stop for all proposed developments or construction within the Town. In addition to reviewing plans, issuing building permits and conducting inspections, the office provides the following services or functions: Planning/Zoning Administration State Environmental Quality Review (SEQR) Coordination Plumbing Inspections
Emergency Management/Public Safety Department	Yes	The Town of Cheektowaga Office of Emergency Services was created in 1981. The main responsibility of our office is to conduct a hazard analysis of the Town and then develop a plan and resources to handle a hazard or emergency. We are also responsible for keeping the training records of all town employees regarding the National Incident Management System (NIMS). In 2006, with the help of our Police Department, we formed the Town of Cheektowaga Community Emergency Response Team (CERT) We now have 72 members on our team.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department (see Above)
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Engineer
Surveyor(s)	No	
Emergency Manager	Yes	Town has an Emergency Manager and Emergency Coordinator
Grant writer(s)	Yes	Town contract with grant writer

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Cheektowaga.

Table 9.13-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, following legislative process
User fees for water, sewer, gas or electric service	Yes (Sanitary & Storm Sewers)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes – Drainage District Fee
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Cheektowaga.

Table 9.13-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	PIO from Town Supervisor's Office and Police Department
Personnel skilled or trained in website development	Yes	Town website maintained by Town Supervisor's Office
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	NY-Alert
Natural disaster/safety programs in place for schools	Yes	Fire safety programs conducted by local Fire Departments.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Cheektowaga.

Table 9.13-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	See Local Fire Departments.	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	Yes	Certificate of Achievement	June 11,2019
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.13-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.13.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Patrick Bowen, Floodplain Administrator, Engineering Department

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Cheektowaga.

Table 9.13-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Cheektowaga	76	211	$1,197,869	47	29

Source: FEMA 2019
Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
RL Repetitive Loss; *SRL* Severe Repetitive Loss

Flood Vulnerability Summary

The Town has identified the West end of West Toulon-Cherbourg-N. Seine area and Dubonnet Dr. as being flood prone areas, including street flooding, and basement flooding. Street flooding in both areas were recently mitigated with recent drainage improvements. The town does not maintain a list of property owners interested in flood mitigation, and there are currently no RiskMAP projects underway. There have been no recent flood events that have needed substantial damage determinations. Current FEMA flood hazard maps accurately address flood risk to the town.

NFIP Compliance

The Engineering Department is responsible for floodplain administration, however there are no certified floodplain managers on staff. The town has indicated that additional courses on how to manage development in the floodplain would beneficial. The Engineering department provides the following services for residents: Permit review, flood insurance inquiries, inspections, review of Letter of Map Revisions, review of all development projects for potential impact on the floodplain. The Town Flood Damage Prevention Ordinance was originally adopted 10-15-2001 by L.L. No. 6-2001, and amended 5-28-2019 by L.L. No. 2-2019. The FDPO meets minimum requirements.

The Town of Cheektowaga's most recent Community Assistance Visit (CAV) was on April 17, 2014. There are currently no outstanding compliance issues.

9.13.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Cheektowaga has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation shelters and the routes to them will be identified and promulgated to residents using the local media and NY-Alert.

Sheltering

The Town of Cheektowaga has identified the following designated emergency shelters within the town.

Table 9.13-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Cheektowaga Senior Center	3349 Broadway	200	See Animal Control Plan	Partial	Yes	Emergency	Feeding
Alexander Bldg.	275 Alexander Avenue	1075	See Animal Control Plan	No	No	Emergency	None
Southline Fire Station	1049 French Road	150	See Animal Control Plan	Yes	Yes	Emergency	Feeding
Dartwood Community Center	222 Autumwood Drive	72	See Animal Control Plan	Partial	No	Emergency	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Cheektowaga has identified the following sites suitable for placing temporary housing units.

Table 9.13-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-T. Cheektowaga-#011.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Cheektowaga has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.13-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-T. Cheektowaga-#011.					

9.13.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.13-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.13-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	14	0	13	0	6	0	6	0	11	0	7	0
Multi-Family	1	0	NA	0	11	0	1	0	NA	0	3	0
Other (commercial, mixed-use, etc.)	10	0	8	0	3	0	7	0	7	0	8	0
Total Permits Issued	**25**	**0**	**21**	**0**	**20**	**0**	**14**	**0**	**18**	**0**	**18**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
SafStor	Commercial	1	390 Cayuga Road	½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
101 French Road warehouse	Commercial		101 French Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area	N/A
102 French Road warehouse	Commercial		102 French Road	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
135 Buell Road	Commercial	1 warehouse project	135 Buell Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Wendy's	Commercial	1 building	2520 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Chick-Fill-A	Commercial	1	1753 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area	N/A
Warehouse	Commercial	1	2821 Broadway	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Express Mart	Commercial	1	2621 Genesee Street	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Retail Plaza	Commercial		Transit and Madeira Drive	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Chic-Fil-a	Commercial	2	Corner of Transit and Lossons Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Office building	Commercial	1	2980 William Street	1-percent Annual Chance Flood Event Hazard Area, 0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Metal Clad Building	Commercial	120,000 sf building	999 Aero Drive	0.2-percent Annual Chance Flood Event Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Fast Food Restaurant	Commercial	1	3601 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Medical facility	Commercial	1	3154 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Mixed Use Building	Commercial	1	4814 Transit Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Mixed Use Building	Commercial	2	5050 Transit Road	Wildfire-Urban Intermix Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Texas Road House	Commercial	1	3755 Union Road	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Keller Chevrolet	Commercial	1	3600 Genesee Street	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
Rusiniak's Collission	Commercial	1	2210 Old Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Mighty Taco	Commercial	1	2021 Walden Avenue	½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area	N/A
Tim Horton's CafÃ© and Bake Shop	Commercial	1	440 Pine Ridge	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area	N/A
McDonald's	Commercial	1	2567 Union Road	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines	N/A
Self Storage Structures	Commercial		550 Cayuga Road	½ Mile Buffer from Hazmat Roads, Hazmat Facility Hazard Area, Expansive Soils Hazard Area	N/A
Truck Terminal	Commercial		3365 Broadway	NEHRP Class D and E Soil Hazard Area, ½ Mile Buffer from Hazmat Roads, ½ Mile Buffer from Hazmat Rails, Hazmat Facility Hazard Area, ½ Mile Buffer from Hazmat Pipelines, Expansive Soils Hazard Area	N/A
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Identified					

SFHA *Special Flood Hazard Area (1% flood event)*

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

** Only location-specific hazard zones or vulnerabilities identified.*

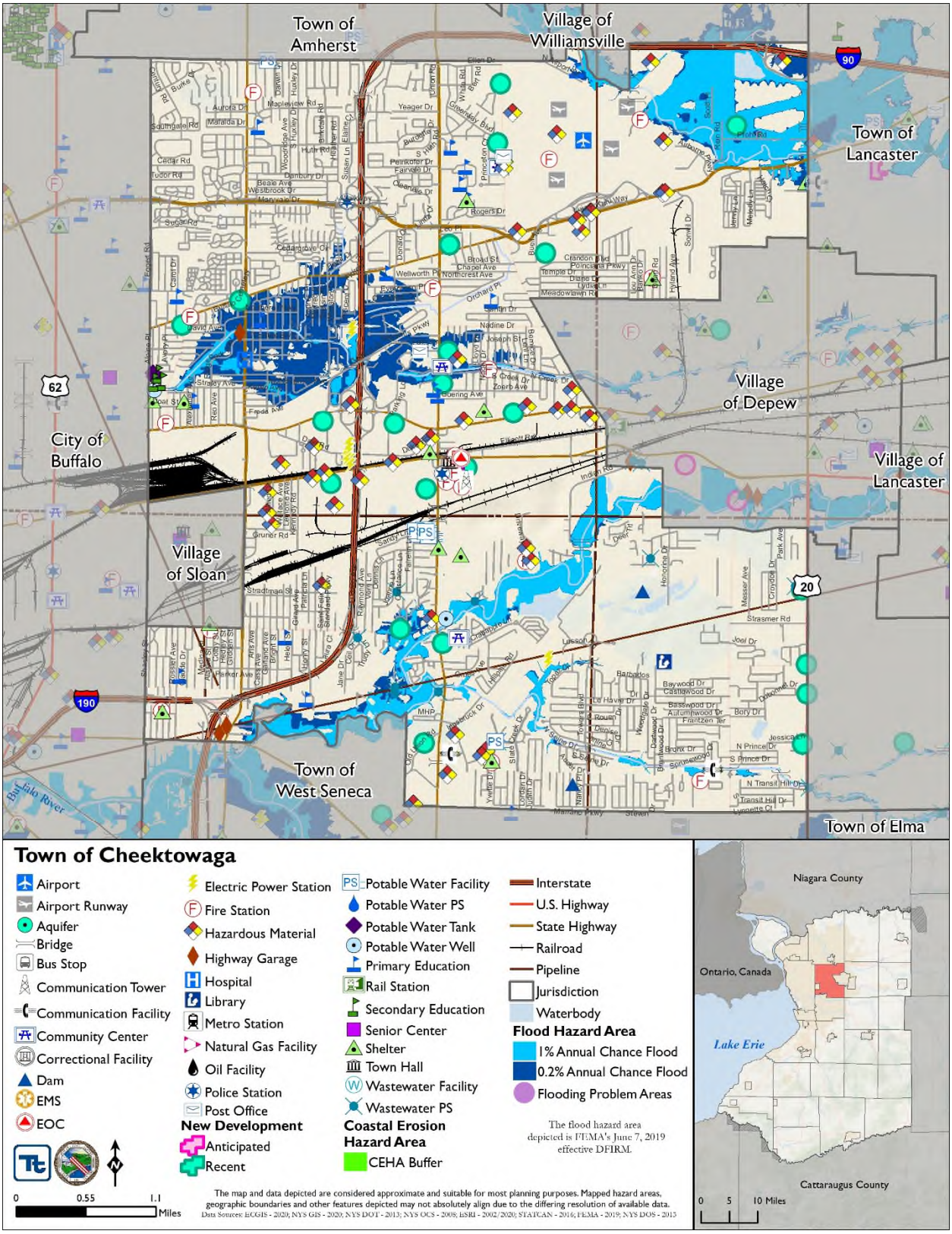
9.13.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Cheektowaga's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Cheektowaga has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

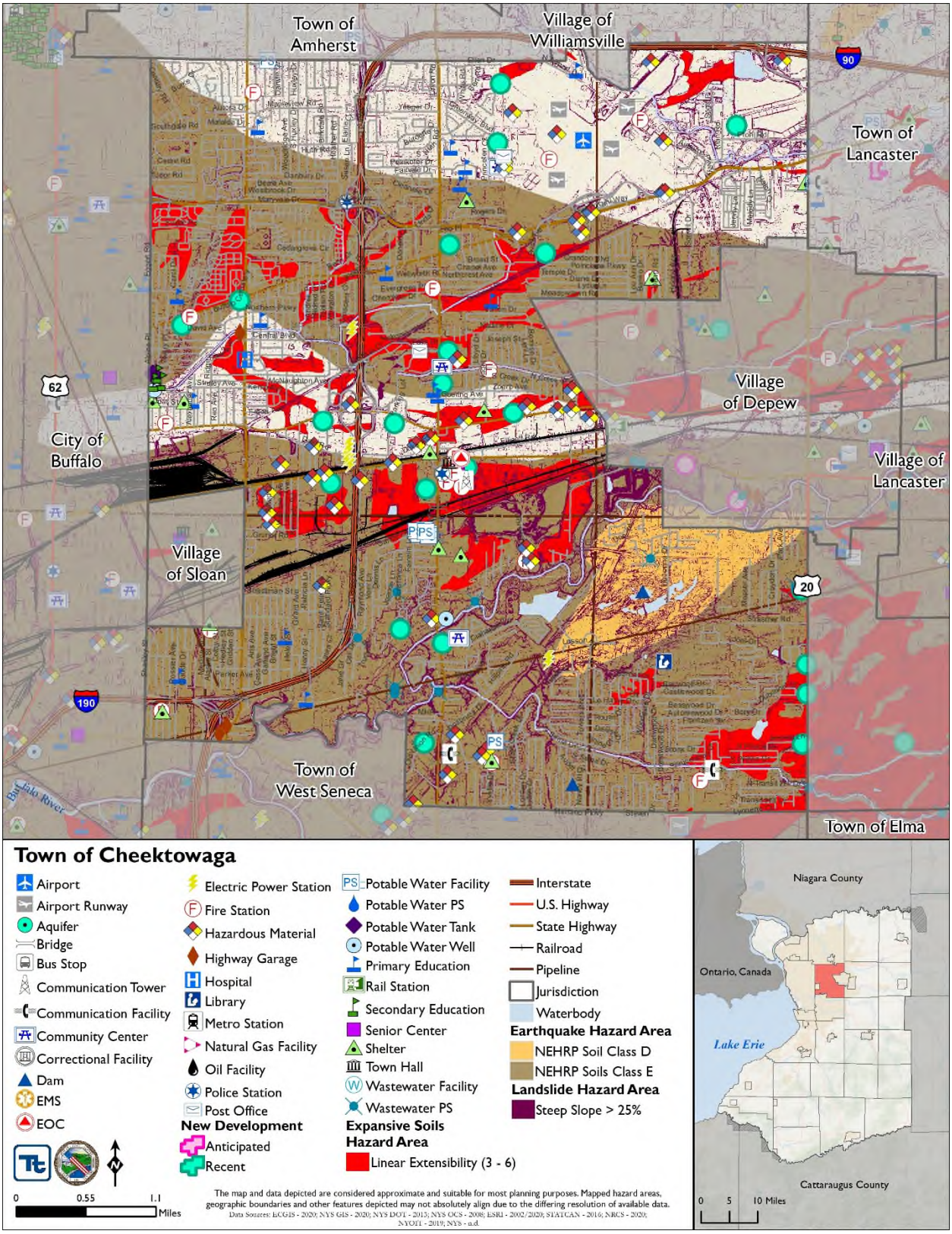
Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.13-1. Town of Cheektowaga Hazard Area Extent and Location Map 1



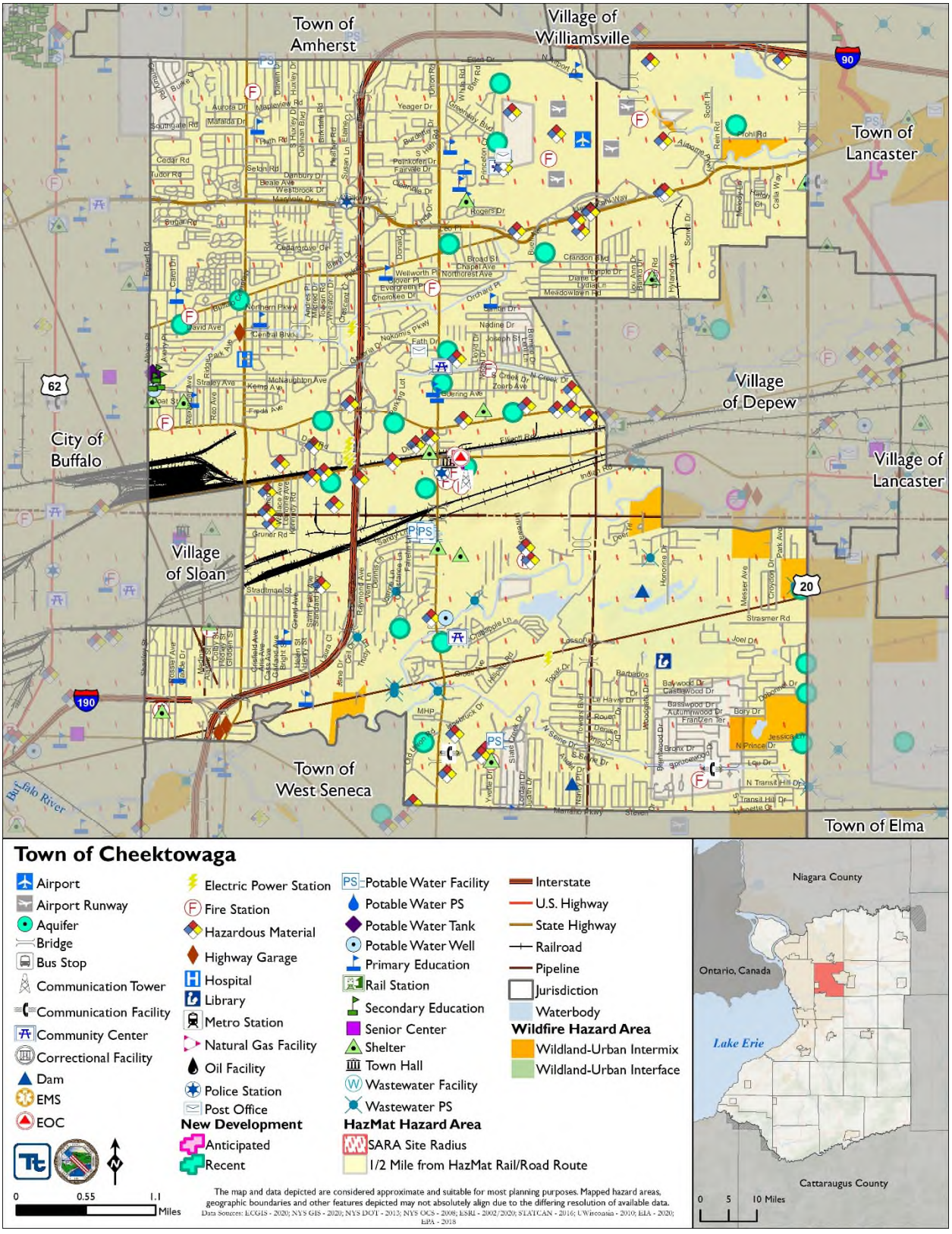
Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.13-2. Town of Cheektowaga Hazard Area Extent and Location Map 2



Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.13-3. Town of Cheektowaga Hazard Area Extent and Location Map 3



Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Cheektowaga's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.13-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.13-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
August 11-15, 2015	Flash Flood	No	Flash Flood	Minor Basement Flooding
October 27-November 1, 2019	Lakeshore Flooding, DR-4472 NY	Yes	Lakeshore Flooding	Although the county was impacted, the town did not report damages.
October 31-November 1, 2019	High Wind, DR-4472 NY	Yes	High Wind	Although the county was impacted, the town did not report damages.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Cheektowaga's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Cheektowaga. The Town of Cheektowaga has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

During the review of the hazard/vulnerability risk ranking, the town agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.13-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.13-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Forks Fire District #3	Fire Station	X	X	2022-T. Cheektowaga-001
Sam's Club #6673	Hazardous Material	-	X	2022-T. Cheektowaga-002
Highway (Parks) Garage ID: 102.22-8-14	Highway Garage	-	X	2022-T. Cheektowaga-002
Sisters of Charity - St Joseph Campus	Hospital	-	X	2022-T. Cheektowaga-002
Cheektowaga Post Office	Post Office	-	X	2022-T. Cheektowaga-002
Buffalo Hearing and Speech Center	Primary Education	-	X	2022-T. Cheektowaga-002
Cheektowaga High School	Primary Education	-	X	2022-T. Cheektowaga-002
Cheektowaga Middle School	Primary Education	-	X	2022-T. Cheektowaga-002

Source: FEMA DFIRM

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the Town of Cheektowaga's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Cheektowaga has identified the following vulnerabilities within their community:

- NYS Route 277 (Union Road) between Broadway and Vern Lane has consistent flooding during slightly above average rainfall. This is a major North-South route in the County and causes significant traffic flow problems.
- William Street between Ceil Drive and Tamarak Court. Has consistent flooding during slightly above average rainfall. This is a major intersection with the NYS Thruway (Route 90) and causes significant traffic problems for motorists attempting to enter and exit the NYS Thruway.
- Walden Avenue and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption.
- The Town of Cheektowaga is in need of several electric generators as replacements/upgrades, and original installation to improve operational ability of town facilities during power outages and for Continuity of Operations Planning (COOP).
- Genesee & Toelsen Road Is a flood prone area.

9.13.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.13-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
	Operation, maintenance and improvement to Scajaquada Creek and Cayuga creek flood control projects	Flooding	Issues with maintaining capacity and prevent erosion	Engineering and Highway	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
	Multi-year storm sewer installation program	Flooding	Need improvement for poorly drained residential subdivisions	Engineering and Highway	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
	Infiltration and inflow a basement program for sanitary sewer district	Basement Flooding	Need to eliminate sources of inflow into sewer	Engineering and Sewer Maint. Dept.	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
	Administration of local flood damage prevention regulations	Flooding	Regulate development through enforcing local laws	Engineering and Building Inspection Dept	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing Capability

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Packet Pg. 1693

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Cheektowaga has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Cheektowaga participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.13-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X		X			X			X
Expansive Soils		X		X			X			X
Extreme Temperature		X								X
Flood		X		X		X	X		X	X
Hazardous Materials		X		X			X			X
Landslide		X		X			X			X
Pandemic		X								X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.13-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Cheektowaga would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.13-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Cheektowaga-001	Protect the Forks Fire Station to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The Forks Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Forks Fire Station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T. Cheektowaga-002	Flood Outreach to critical facilities	1, 2, 3	Flood	**Problem:** Many privately owned critical facilities within the town are located within the 0.2% floodplain (500-year event). **Solution:** The town will conduct outreach to the facility owners about their location within the floodplain and provide information about potential damages to structures as the result of a flood event. If damages are experienced, the town will support facility owners in their pursual of mitigation funding for structural flood protections as necessary.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- T. Cheektowaga -003	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	**Problem**: Several communications facilities, community centers, dams, electric power stations, hazardous material facilities, post offices, private schools, and colleges, in the town are in the earthquake hazard area. **Solution**: The town will conduct outreach to facility owners and support assessment the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage.	Town Budget	High	EAP	PI
2022- T. Cheektowaga -004	Protect the critical facilities in the Town of Cheektowaga from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	**Problem:** All of the critical facilities in the Town of Cheektowaga may be at risk of being exposed to hazardous materials incidents**.** **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	LPR	PI
2022- T. Cheektowaga -005	Protect the following facilities from landslides: Flattail Lake Dam and National Car	1, 2, 3	Landslide	**Problem:** The Flattail Lake Dam and National Car Rental - Buffalo Airport are located on steep slopes and maybe at risk of landslides. **Solution:** Work with the facility owners to determine if landslide risk exists and to	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential	Town Budget	High	EAP	PI

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Rental - Buffalo Airport			assess the structure and determine necessary mitigation measures to protect it from landslides.						landslide damage				
2022- T. Cheektowaga -006	Work with private facility owners to protect their facilities from the risk of expansive soils	1, 2, 3	Expansive Soils	**Problem:** Several private facilities may be at risk of experiencing damages caused by expansive soils. **Solution:** Work with the facility owners to determine if risk exists and to assess the structures and determine necessary mitigation measures to protect the facilities from expansive soils.	Yes	None	Within 6 months for outreach	Town of Cheektowaga	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022- T. Cheektowaga -007	NYS Route 277 Flood mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem:** NYS Route 277 (Union Rd.) between Broadway and Vern Lane has consistent flooding during slightly above average rainfall. This is a major North-South route in the County and causes significant traffic flow problems. **Solution:** Due to low elevation in the area, the town is proposing a pump station with backup generator to be installed to remove water and improve water flow, eliminating the need for road closures during storms and flood events.	No	No	Short	NYSDOT, support by Town of Cheektowaga	High	Reduces flooding and road closures	FMA	High	SIP	SP
2022- T. Cheektowaga -008	William Street Flood Mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem:** William Street between Ceil Drive and Tamarak Court has consistent flooding during slightly above average rainfall. This is a major intersection with the	No	No	Short	NYSDOT, support by Town of Cheektowaga	High	Reduces flooding and road closures	FMA	High	SIP	SP

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				NYS Thruway (Route 90) and causes significant traffic problems for motorists attempting to enter and exit the NYS Thruway. **Solution:** To reduce road closures, the town will work with NYSDOT to reduce flooding and redirect stormwater away from the NYS Thruway and town roads.										
2022- T. Cheektowaga -009	Walden Rd Generator for traffic signals	1, 2	Utility Failure, All Hazards	**Problem:** Walden Avenue and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption. **Solution:** The town will seek funding for an automatic, permanent backup generator to use at the intersection to ensure that power disruptions to not impede the flow of traffic and cause additional cascading impacts. The town will ensure that the generator is properly house and secured at the intersection and is protected from additional hazards (raised from flooding, etc.).	No	No	1 year	Town of Cheektowaga	Medium, estimated $50,000	High	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- T. Cheektowaga -010	Generator for IT Department/ Town Hall	1, 2	Utility Failure, All Hazards	**Problem:** The Town of Cheektowaga is in need of several electric generators as replacements/upgrades, and original installation to improve operational ability of town facilities during power outages and for Continuity of Operations Planning (COOP). **Solution:** The town will seek funding to install a permanent automatic generator for the IT department and municipal building, to ensure continuity of operations and reduce impacts of a power outage or utility failure and prevent cyber attacks if the systems go down. The town will install the generator in an appropriate location to prevent damages from hazards (flooding, storms, etc.).	No	No	1 year	Town of Cheektowaga	Medium, estimated $50,000	High	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022- T. Cheektowaga -011	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem:** The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution:** The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain	No	No	Short	Town of Cheektowaga	Low-Medium	High	Municipal Budget	High	LPR	ES

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										
2022- T. Cheektowaga -012	Repetitive Loss Homeowner Outreach	1, 2, 3	Flood	**Problem:** There are 24 Repetitive Loss properties within the town; and 74 NFIP policy holders living within the 1% flood boundary (100 year floodplain). **Solution:** The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	Short	Town of Cheektowaga FPA	Low	High	Municipal Budget for outreach	High	EAP	PI

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.13-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Cheektowaga-001	Protect the Forks Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Cheektowaga-002	Flood Outreach to critical facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -003	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -004	Protect the critical facilities in the Town of Cheektowaga from HazMat incidents	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -005	Protect the following facilities from landslides: Flattail Lake Dam and National Car Rental - Buffalo Airport	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -006	Work with private facility owners to protect their facilities from the risk of expansive soils:	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -007	NYS Route 277 Flood mitigation	1	1	1	1	0	0	-1	1	1	1	1	1	1	1	10	High
2022- T. Cheektowaga -008	William Street Flood Mitigation	1	1	1	1	0	0	-1	1	1	1	1	1	1	1	10	High
2022- T. Cheektowaga -009	Walden Rd Generator for traffic signals	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -010	Generator for IT Department/ Town Hall	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- T. Cheektowaga -011	Temporary and Permanent Housing	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022- T. Cheektowaga -012	Repetitive Loss Homeowner Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.13.9 Action Worksheets

The following action worksheets have been developed by the Town of Cheektowaga to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect the Forks Fire Station to the 0.2% annual chance flood event		
Project Number:	2022-T. Cheektowaga-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Forks Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Forks Fire Station to protect it to the 0.2% annual chance flood event. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the facility
Useful Life:	30 years	**Goals Met:**	1, 2, 3
Estimated Cost:	High, TDB by vulnerability assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate the facility	$1million	No available land, not cost effective
	Elevate roads	$500,000	Elevated roadways would not protect the facility from flood damages

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Forks Fire Station to the 0.2% annual chance flood event	
Project Number:	2022-T. Cheektowaga-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures function of emergency services
Property Protection	1	Reduces/eliminates flooding at a critical facility
Cost-Effectiveness	1	
Technical	1	Town engineering can conduct study
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding to implement recommendations of vulnerability analysis
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	Fire Department
Other Community Objectives	1	Emergency Services
Total	12	
Priority (High/Med/Low)	High	

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Walden Rd Generator for traffic signals		
Project Number:	2022- T. Cheektowaga -009		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Walden Ave. and Union Road intersection is in need of backup power supply for the traffic signals. This is a significant North-South and East-West route as well as the second largest intersection in New York State. Because of the large traffic volume, significant complications occur whenever there is a power failure or disruption.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town will seek funding for an automatic, permanent backup generator to use at the intersection to ensure that power disruptions to not impede the flow of traffic and cause additional cascading impacts. The town will ensure that the generator is properly house and secured at the intersection and is protected from additional hazards (raised from flooding, etc.).		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the intersection
Useful Life:	25 years	**Goals Met:**	1, 2
Estimated Cost:	Estimated $50,000	**Mitigation Action Type:**	Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town of Cheektowaga	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Walden Rd Generator for traffic signals	
Project Number:	2022- T. Cheektowaga-009	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces traffic accidents caused by loss of power at intersection
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town DPW
Political	1	Town supports
Legal	1	
Fiscal	0	Town will seek funding to implement
Environmental	1	No concerns
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 52-Section-9.13-Cheektowaga-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.14 Town of Clarence

This section presents the jurisdictional annex for the Town of Clarence. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Clarence's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.14.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Clarence's hazard mitigation plan primary and alternate points of contact. The Town of Clarence followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from town department. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.14-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Bissonette, Emergency Manager Address: One Town Place, Clarence, NY 14031 Phone Number: 716-741-8930 Email: david@davidbissonette.com	Name/Title: David Baumler, Deputy Emergency Manager Address: One Town Place, Clarence, NY 14031 Phone Number: 716-583-6840 Email: dbaumler@clarenceny.us
NFIP Floodplain Administrator	
Name/Title: Timothy Lavocat, Town Engineer Address: One Town Place, Clarence, NY 14031 Phone Number: 716-741-8952 Email: Tlavocat@clarence.ny.us	

9.14.2 Municipal Profile

The Town of Clarence is in the north portion of Erie County. The town is 53 square miles in size; and contains the hamlets of Clarence, Harris Hill, Clarence Center. Clarence was one of the county's original large towns and was founded in 1808. The town was reduced in size when other towns were formed from it. The town is bordered by the Town of Amherst to the west, the Towns of Lockport and Royalton (Niagara County) to the north, the Town of Newstead to the east and the Town of Lancaster to the south. Interstate 90 traverses the southeastern portion of the town. New York State Route 5 (Main Street) passes across the south part of the town. NY Route 78, Transit Road, marks the town's western boundary. The eastern terminus of NY Route 324 is in Clarence (Town of Clarence 2020).

The town was originally inhabited by Native Americans and was called "place full of hickory bark". The first white settler was Asa Ransom, a former colonial officer from the American Revolution, who purchased land

from the Holland Land Company in 1807 and established a tavern near Harris Hill in the southwest part of Clarence (Town of Clarence 2020). During the war of 1812, Clarence residents joined in fighting against the British army. Agriculture was for many years the chief economy of the town. The town's first industries were in potash and clay manufacture thereafter followed by sand and gravel mining operations. Following discovery of a large gypsum deposit, National Gypsum Company began operations in 1926. After the Great Depression, the town experienced a land boom. The town experienced its most rapid period of development after the end of World War II (Town of Clarence 2007).

According to the U.S. Census, the 2010 population for the Town of Clarence was 30,673. The estimated 2019 population was 32,440, a 5.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.1 percent of the population is 5 years of age or younger and 18.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.14.3 Jurisdictional Capability Assessment and Integration

The Town of Clarence performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.14.3). The Town of Clarence's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Clarence. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.14-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Flood Damage Ordinance LL-2007, Town Building Code, Chapter 67	Local	Code Enforcement/Building Department

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The Purpose of the Building Code is to provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the state Energy Conservation Construction Code (the Energy Code) in the Town of Clarence. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter. Enforcement of building code regulations reduces risk from natural hazards.					
Zoning Code	Yes	No	LL3-2005, Town Zoning Code Chapter 107, 229	Local	Building/Zoning Departments
Comment: Construction within Floodways must meet requirements. Natural features such as streams, rock outcrops, marshlands, trees, and shrubs shall be preserved and incorporated into the landscaping of the development. Site plans shall include a topographical survey that shows floodplains, wetlands, soils, existing streams and ditches with base flood elevations, existing elevations and proposed elevations clearly illustrated. 6) Parking areas shall be graded and surfaced with material that will provide adequate protection against potholes, erosion, and dust and in a manner that will not conflict with the proposed means of snow storage and/or removal.					
Subdivision Ordinance	Yes	No	LL5-2005, Chapter 193 Town Subdivision Code, Town Code	Local	Code Enforcement/Building
Comment: Purposes of the Subdivision Code include to secure safety from fire, flood, and other danger; to protect and conserve the value of land, buildings, and improvements and to minimize conflicts among the uses of land and buildings.					
Stormwater Management Ordinance	Yes	Yes	LL6-2007, Stormwater Management and Erosion and Sediment Control, Chapter 188A	Local	Engineering staff
Comment: Minimizes increases in stormwater runoff from land development activities to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Town of Clarence Comprehensive Plan, 2015	Local	Planning and Zoning
Comment: The Town’s Comprehensive Plan discourages development within flood prone area.					
Site Plan Review	Yes	No	Town Code Chapter 229-151, Site Plan Review, Zoning	Local	Planning and Zoning
Comment: Site Plan review allows for control of where and how development occurs.					
Environmental Protection Ordinance	Yes	Yes	Town Code Chapter 91, Environmental Quality Review	Local	Planning and Zoning
Comment: Environmental Protection Ordinance steers development away from some hazard exposure.					
Flood Damage Prevention Ordinance	Yes	Yes	Town Code Chapter 107, Flood Damage Prevention Ordinance	Local	Engineering
Comment: BFE+2 feet for all construction in the SFHA (residential and non-residential). It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;					

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Town Code Chapter 188 and 188A	Local	Engineering
Comment: the purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Clarence through the regulation of stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this article are: (1) To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, as amended or revised; (2) To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; (3) To prohibit illicit connections, activities and discharges to the MS4; (4) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and (5) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Clarence 2030, Town of Clarence Comprehensive Plan, Adopted 2016	Local	Town Board
Comment: The purpose of this Comprehensive Plan is to provide an overall framework for future public and private investment in our community. This investment can take many forms, including but not limited to, our community's financial, civic, and creative resources. In the Town of Clarence, it is this collective investment by our residents, businesses, civic institutions, and our local government • that will shape the physical, social, and economic character of our community.					
Capital Improvement Plan	Yes	No	Town Board	Local	Planning and Zoning
Comment: Hazard mitigation projects can be included in the municipality's CIP.					

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	No	North Clarence Flood Reduction Plan	Local	Highway/Engineering
Comment: The Stormwater Plan has the purposed to establish proactive management of stormwater flows to reduce flooding risk.					
Open Space Plan	Yes	Yes	Open space plans included in the Town's Master Plan, 2015	Local	Planning and Zoning Boards and Greenprint Committee, Recreation Advisory Committee
Comment: The Open Space Plan provides a road map for officials and the community to preserve open space.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	Yes	No	Action Plan and Market Analysis, Adopted April 2018	Local	Planning and Zoning
Comment: The Market Analysis provides direction on economic growth including recovery from natural hazard impact.					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Yes	No	Tree Management Plan, Adopted 11-19	Local	Planning and Zoning
Comment: Management of the county's private and public forests will help reduce exposure to the wildfire risk.					
Transportation Plan	Yes	No	Transit Road Corridor Management Study, 6-04 and Clarence Traffic Analysis, 2015	Local	Planning and Zoning
Comment: Transportation Study addresses transportation needs during a natural hazard event.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Agricultural and Farmland Protection Plan, Adopted 5-12	Local/county	Planning and Zoning

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated ? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The county plan addresses the management of agricultural wastes and other hazmat storage.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Clarence Comprehensive Plan, 2018	Local	Town OEM
Comment: The Comprehensive plan for the entire community considers the need to address natural hazard exposure and guides future development decisions in the municipality.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	Yes	Yes	Erie County	County	Erie County Health
Comment: The Public Health Plan will assist in addressing needs during a hazard event.					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Clarence to oversee and track development.

Table 9.14-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Zoning / Engineering
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain Development Permits
Do you have a buildable land inventory? If yes, please describe	Yes	Environmental Constraints Map

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If no, please quantitatively describe the level of buildout in the jurisdiction.		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Clarence and their current responsibilities which contribute to hazard mitigation.

Table 9.14-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. Volunteer Appointed body, seven members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals. Volunteer Appointed body, five members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk. Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Staffed Planning and Zoning Department. The Planning and Zoning Department serves the community by providing current and long-range planning activities as well as administration of all local land use laws. Current planning activities include project reviews to enforce zoning and subdivision regulations on project proposals including environmental reviews under SEQRA. Long-range planning activities include comprehensive plan updates including policy and local law implementation. Engineering Department: The purpose of the profession of engineering is defined as performing professional service such as consultation, investigation, evaluation, planning, design, and supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principles and data. The Engineering Department is responsible for technical planning, design, and construction of capital improvements for the Town of Clarence including street improvements, right of way acquisition, storm water improvements, sanitary sewer improvements, Town building maintenance and improvements and management of development permit contracts and easement releases.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Town Environmental Quality Review Board, Planning Board Members
Open Space Board/Committee	Yes	Greenprint Committee, Volunteer Appointed body, 7 members
Economic Development Commission/Committee	Yes	Town of Clarence, Erie County, Industrial Development Agency
Public Works/Highway Department	Yes	Fully staffed Highway and Parks Departments. The Department plows and de-ices 55 center lane miles of roadway. Department picks up brush on 460 lane miles of roads in Clarendon. In 2015 the town restored 5.44 miles of field ditches.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Construction/Building/Code Enforcement Department	Yes	Fully staffed Building Department. The Building Department administers and enforces regulations, pertaining to use of property and the construction of buildings. It reviews plans and conducts filed inspections for compliance with various local, state, and federal codes and standards, particularly the Town Zoning Code and the New York State Uniform Fire Prevention and Building Code (NYSUFPBC). These codes apply to planning, zoning, building, plumbing, mechanical, electrical, fire, health, and the environment. Responsibilities of the Department and Code Enforcement Officers are as follows: • Plan review for compliance with NYSFPBC, Town of Clarence Code and applicable reference standards. • Issue permits for residential and commercial projects for new construction, additions, remodeling, accessory structures, change in use of buildings, installations, or replacement of certain mechanical, fire safety and plumbing systems, back-up generators, demolition of structures, swimming pools, etc. • Conduct inspections for numerous phases of construction activity. • Issue Certificate of Occupancy or Certificate of Compliance for all permitted projects. • Administrators of the Knox-Box Program in the Town of Clarence. • Conduct inspections based on complaints from citizens. • Respond to requests from the Town Fire Departments pertaining to unsafe equipment or conditions, damage due to structure fires and illegal open burning. • Respond to structure fires for assistance to Fire Department command staff related to building design, contents, potential failure, damage estimates, origin, and cause, determining if building can be occupied, and to aid the residents and occupants displaced by the incident. • Conduct fire safety inspections of existing buildings for compliance with the NYS Fire Code and Property Maintenance Code • Explain code requirements to permit applicants. • Attend NYS Required annual training. • Enforce the Avoidable Alarm Law (Chapter 59) of the Town of Clarence Code. • Conduct inspection of special events involving large gatherings/the public.
Emergency Management/Public Safety Department	Yes	Emergency Services Department David Bissonette, Emergency Manager. Department staff coordinate emergency response
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	NY Alert
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Snag and drag operations in town waterways to remove obstructions. Highway Department cleans out field ditches.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Department and Engineering Department. Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Town Engineer staff understand the impact of hazard impacts upon highways and other infrastructure.
Professionals trained in conducting damage assessments	Yes	Building Code Enforcement Officers
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning Department, GIS skilled
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Certified Floodplain Administrator – Town Engineer
Surveyor(s)	No	-
Emergency Manager	Yes	David Bissonette, Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Clarence.

Table 9.14-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Planning and Zoning
Capital improvements project funding	Yes – Administration and Finance
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Sewer Permit Fees
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Clarence.

Table 9.14-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on preparedness, Covid-19, and Emerald Ash Borer is located on the town's website.
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Clarence.

Table 9.14-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Fire wise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.14-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.14.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Timothy Lavocat, Town Engineer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Clarence.

Table 9.14-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Clarence	108	41	$77,190	2	33

Source:
Notes: *FEMA 2020a and FEMA 2020b*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

Areas in the Town of Clarence that are prone to flooding include certain sections of North Clarence within the floodway and by riverine flooding associated with Ransom and Gott Creeks. The town maintains an active list of all Letters of Map Change (LOMA/LOMR-F) as a mitigation measure. There are not any Risk MAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The Town of Clarence does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in September 2015. The Building Department and the Engineering Department are responsible for floodplain administration. The Town Engineer is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. The town does not make Substantial Damage determinations. The town's floodplain management program meets minimum requirements and offers NFIP administration services such as Floodplain Development Permit review and Letters of Map Change guidance, and by educating the public on floodplain management practices and ordinances. The town seeks to avoid encroachments or impacts upon the floodplain and is considering joining the Community Rating System (CRS) as noted in proposed mitigation action 2022-T Clarence-003.

9.14.5 Evacuation, Sheltering, Temporary and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Clarence did not identify any evacuation routes and procedures and will coordinate with county and town agencies during hazard events.

Sheltering

The Town of Clarence has identified the following designated emergency shelters located within the town.

Table 9.14-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Thompson Road	150	No	Yes	Yes	Contact EMT	Food prep capable
Senior High School	Main Street	300-500	No	Yes	Yes	Contact EMT	Food prep capable

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Clarence has identified the following sites suitable for placing temporary housing units.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.14-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kelly Schultz, owner	Main Street	175 units	Trailer	Portable generator	On-site direction required
Eastern Hills Mall	Main/Transit Area	250 units	Trailer	Portable generator	On-site direction required

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Clarence did not identify any areas suitable for relocating homes outside of the floodplain.

Table 9.14-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town has not identified any such locations at this time. Per Proposed Action 2022-Clarence T-012					

9.14.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.14-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.14-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	96	4	112	3	110	2	104	7	112	3	98	6
Multi-Family	2	0	0	0	1	0	6	0	1	0	1	0
Other (commercial, mixed-use, etc.)	4	0	15	0	7	0	4	0	3	0	3	0
Total Permits Issued	**102**	**4**	**127**	**3**	**118**	**2**	**114**	**7**	**116**	**3**	**104**	**6**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
Legacy Woods	Residential	50	Newhouse Road	Landslide		Approved, Under Construction
Northwoods	Residential	151	Roll Road	Wind Damage		Approved, Under Construction
Harris Hill Commons	Residential	66	Greiner Road	Expansive Soils		Approved, Under Construction
Spaulding Green	Residential	380	Goodrich Road	Wind Damage		Approved, Under Construction
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
Harris Hill Commons Mixed Use	Mixed Use	80 residential units, 24,800 square feet commercial	Sheridan Drive	Expansive Soils		Under Review
Eastern Hills Mall	Lifestyle Center	3,000,000 square feet	Transit Road	Hazardous Materials		Under Review
Woodland Hills	Residential	77	Greiner Road	Expansive Soils		Under Review

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

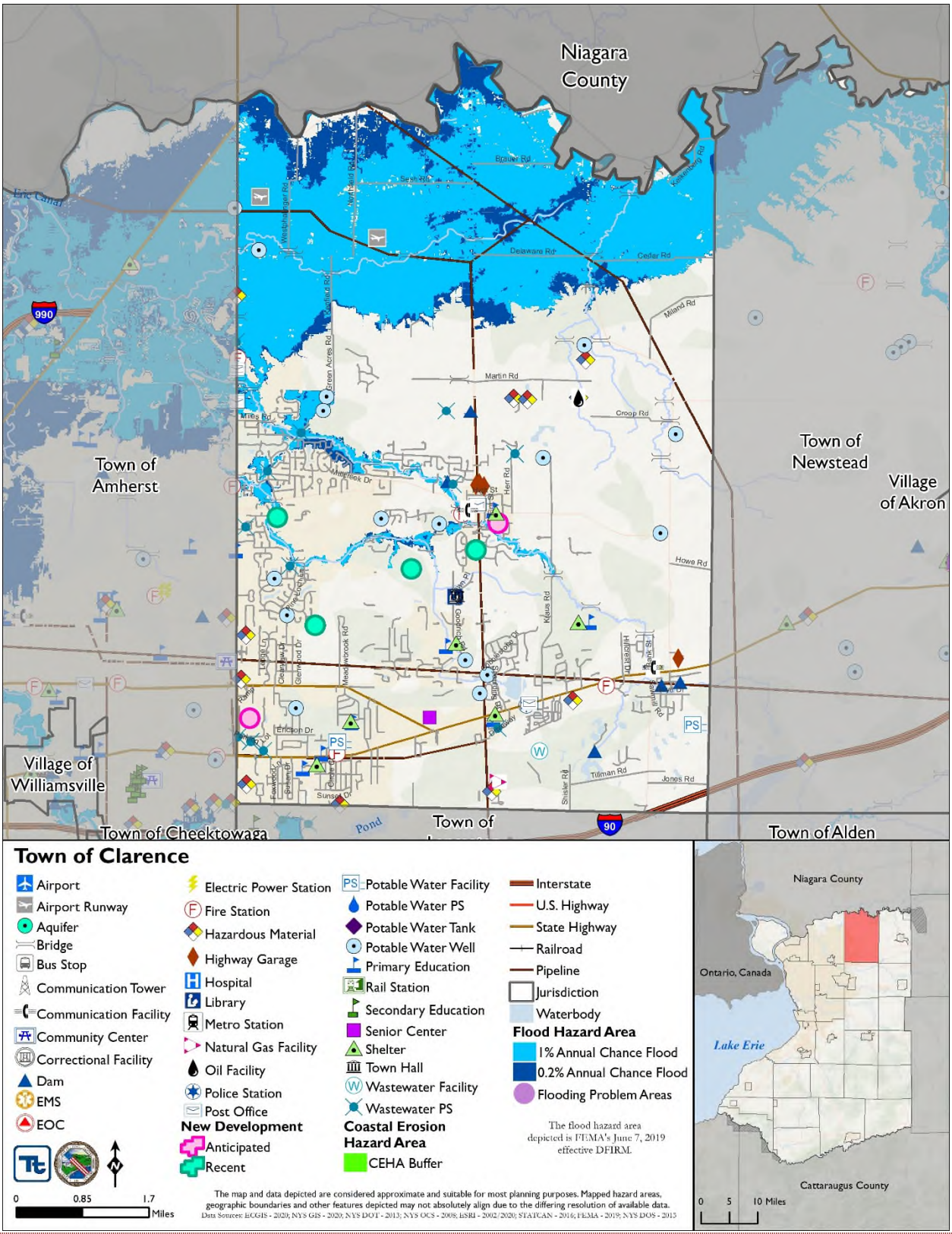
9.14.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Clarence's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are found below and based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Clarence has significant exposure. The maps also show the location of potential new development, where available.

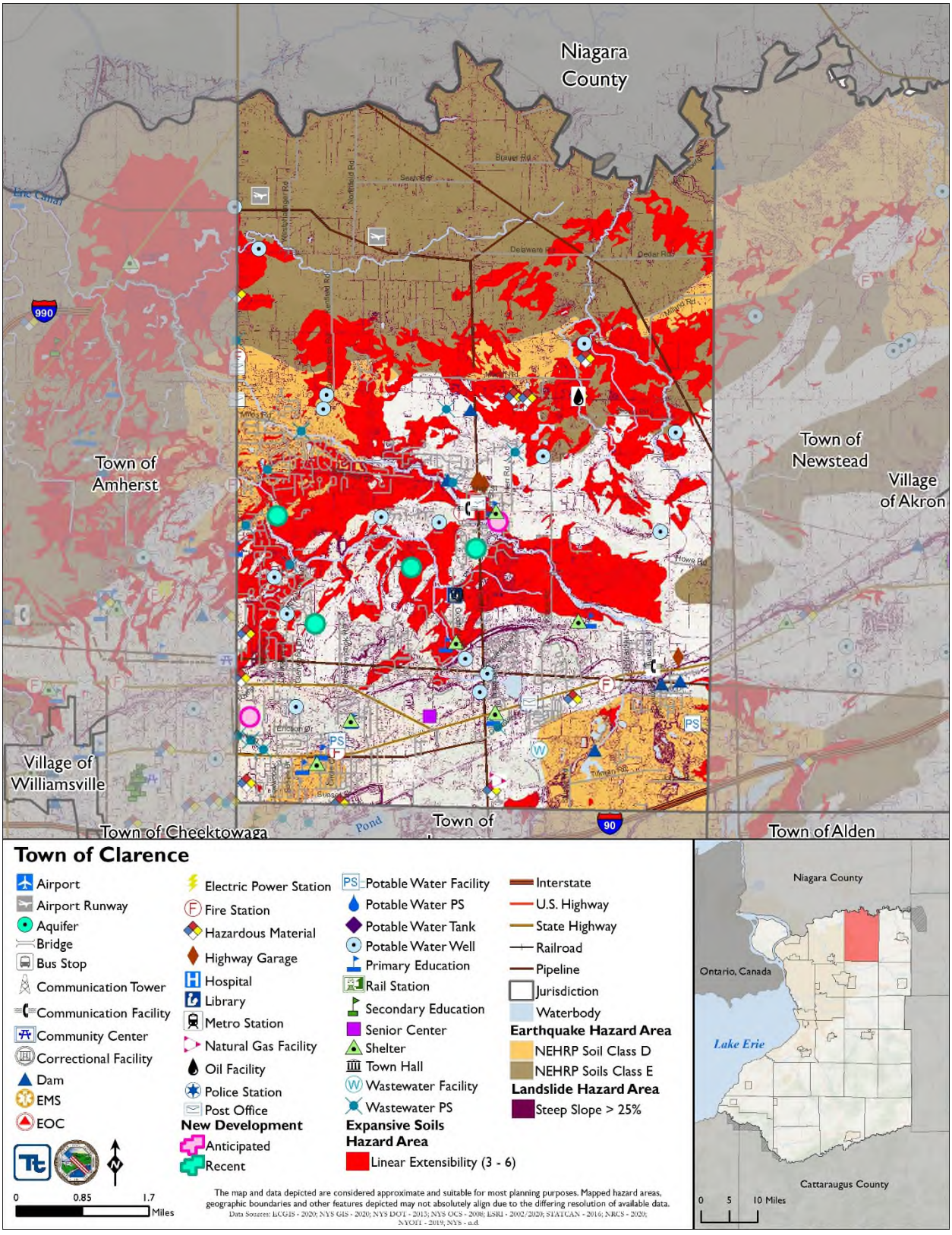
Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.14-1. Town of Clarence Hazard Area Extent and Location Map 1



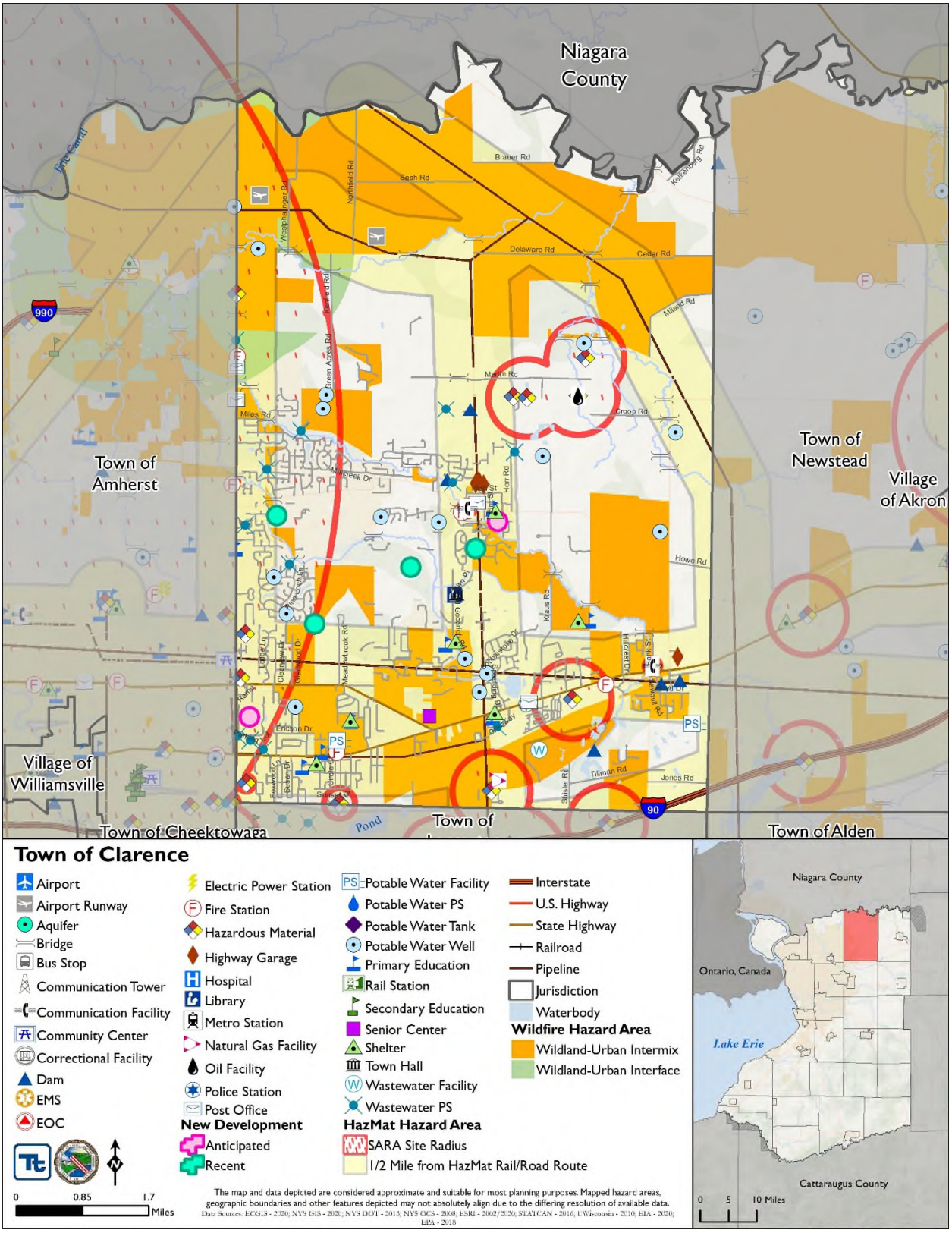
Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.14-2. Town of Clarence Hazard Area Extent and Location Map 2



Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.14-3. Town of Clarence Hazard Area Extent and Location Map 3



Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Clarence's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.14-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.14-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Highway Department overtime
August 11-15, 2015	Flash Flood	No	The town did not report any damage associated with this hazard event.
October 28-29, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
November 6, 2015	Thunderstorm Wind	No	The town did not report any damage associated with this hazard event.
November 12, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
November 18, 2015	High Wind	No	The town did not report any damage associated with this hazard event.
January 11, 2017	High Wind	No	The town did not report any damage associated with this hazard event.
March 8, 2017	High Wind	No	The town did not report any damage associated with this hazard event.
March 13, 2017	Winter Storm	No	The town did not report any damage associated with this hazard event.
July 20, 2017	Tornado	No	The town did not report any damage associated with this hazard event.
August 4, 2017	Thunderstorm Wind	No	The town did not report any damage associated with this hazard event.
December 10-15, 2017	Lake-effect Snow	No	Highway Department overtime
December 24-29, 2017	Lake-effect Snow	No	Highway Department overtime
January 2, 2018	Blizzard	No	The town did not report any damage associated with this hazard event.
October 6, 2018	Lightning	No	The town did not report any damage associated with this hazard event.
February 24, 2019	High Wind	No	The town did not report any damage associated with this hazard event.
February 24, 2019	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	The town did not report any damage associated with this hazard event.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Emergency services/Highway Department overtime
November 27, 2019	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
January 12, 2020	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	The town did not report any damage associated with this hazard event.
March 2020-Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Clarence's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Clarence. The Town of Clarence has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the earthquake hazard risk should be decreased from High to Medium and that the wildfire hazard should be decreased from High to Low. The Town believed that both hazards occur infrequently.

Table 9.14-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
N/A	Medium	Medium	Medium	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.14-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Clarence Center	Fire Station	X	X	2022-T Clarence-004
Clarence Northwest USID79866	Fire Station	X	X	2022-T Clarence-004
Stahley Road Pump station	Wastewater Pump Station	X	X	2022-T Clarence-011
Unnamed	Wastewater Pump Station	X	X	2022-T Clarence-011

Source: FEMA 2021

Identified Issues

After review of the Town of Clarence's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Clarence has identified the following vulnerabilities within their community:

- There are locations along Gott Creek that experience localized flooding
- Creek beds within the town are jammed with debris, trees and branches that impede the flow of stormwater and contribute to flooding.
- The town does not participate in the Community Rating System, denying affected community members the benefit of reduced flood insurance rates.
- The Clarence Center Fire Department is located within the SFHA
- Several critical facilities, including the Clarence Center Fire Department, are located within the SFHA and are at risk of flooding.
- The Post Office is located within the SFHA and at risk of flooding.
- Two runways at the Buffalo Airport are located within the SFHA, exposing them to potential flooding.
- Four Fire stations in the town store hazardous materials – these materials should be protected from leakage.
- Two public stations and St. Mary's School are in the 0.2 percent chance flood zone
- Floodplain managers need training.
- The town may contain Repetitive Loss Properties.
- The town is unable to identify emergency shelters or to define the capacity of identified temporary housing locations.

9.14.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.14-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Sand Bagging Operation to protect old homes from Tonawanda, Beeman, Gott, Ransom, and Black Creeks as well as surrounding streams and subdivision retention ponds	Flood and Storm Events	Flooding of old houses in town in the areas east, west, and north of Wolcott Rd	Highway Dept	No Progress	Cost		1. Discontinue in 2022 HMP 2. 3. Completed task
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Prevention of dangerous travel in flood events through intergovernmental efforts for key presence at main intersections, town vehicles, large signage, barricades, and for larger events – driving ban regulations	Flood and Storm Events	Flooded roads become impassible and have a wake effect on nearby homes	Highway Dept, Emergency Services, Town Security	In Progress	Cost		1. Discontinued 2. 3. Ongoing
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Debris removal and maintenance	Flood and Storm Events	Jams that create possible flood conditions	Highway Supt. Jurisdiction	In Progress	Cost		1. Include in 2022 HMP 2. Addressed by Proposed Action # 2022-Town of Clarence-002 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Engineering	Complete	Cost		1. Discontinue 2. 3. Completed project
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Join the Community Rating System (CRS)	Flood	Not Identified	Engineering	In Progress	Cost		1. Include in 2022 HMP 2.
						Level of Protection		

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Damages Avoided; Evidence of Success		3.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Clarence did not identify any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Clarence participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.14-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	-	-	-	-	-	-	-	-	X
Cyber Attack	X	-	-	-	-	-	-	-	-	X
Earthquake	X	-	-	-	-	-	-	-	-	X
Expansive Soils	X	-	-	-	-	-	-	-	-	X
Extreme Temperature	X	-	-	-	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	X	X	X
Hazardous Materials	X	X	-	X	X	X	-	-	-	X
Landslide	X	-	-	-	-	-	-	-	-	X
Pandemic	X	-	-	-	-	-	-	-	-	X
Severe Storm	X	-	-	-	-	-	-	-	-	X
Severe Winter Storm	X	-	-	-	-	-	-	-	-	X
Utility Failure	X	-	-	-	-	-	-	-	-	X
Wildfire	X	-	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.14-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Clarence would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.14-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence-001	Implement flood mitigation measures along Gott Creek	1	Flood	**Problem:** There are locations along Gott Creek that experience localized flooding. **Solution:** In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek The town should pursue completion of these mitigation measures, such as floodwalls, levees, etc.	No	Yes	Within 5 years	Town Highway Department, Town Board	TBD by detailed engineering analysis of recommended mitigation actions	Reduce the risk of flooding along Gott Creek	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP, SP
2022-T Clarence-002	Debris removal and maintenance Program	2	Flood	**Problem**: Creek beds within the town are jammed with debris, trees and branches that impede the flow of stormwater and contribute to flooding. **Solution**: Town staff will regularly clear the creek bed of trees, branches, and debris	No	No	Within 1 year, ongoing once established	Town Highway Department	$10,000 annual cost	Reduce flood hazard from creek overflowing	Municipal budget	Medium	NSP	NR
2022-T Clarence-003	Join the Community Rating System	2	Flood	**Problem**: The town does not participate in the CRS, denying affected community members the benefit of reduced flood insurance rates. **Solution**: The town will take steps necessary to join the CRS.	No	No	Within 3 years	Town Engineer, Emergency Manager, Administration	Staff time	Heighten floodplain administration practices and standards.	Town budget	Medium	LPR	PR

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence-004	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	1	Flood	**Problem:** The Clarence Center Fire Department is located within the SFHA. **Solution:** The town will conduct a feasibility study and determine what protections are necessary and carry out the necessary upgrades.	Yes	No	Within 3 years	Town Engineer, Town Fire Department	TBD by engineering feasibility study	Protect facility from flooding and potential release of hazardous material	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-T Clarence-005	Floodplain Administrator to attend training on floodplain management	3	Flood	**Problem:** Floodplain Managers require training. **Solution:** Obtain/host training and certification for floodplain managers. To enable Certified Floodplain Manager/Town Engineer to maintain certification and to acquire latest best practices.	No	No	Within 5 years	FPA, Town Board, County Emergency Management	$3,000	Certified floodplain managers trained Floodplain management improved.	County and municipal budgets	High	LPR	PR
2022-T Clarence-006	Protect the East Amherst Post Office to the 0.2% annual chance flood event	1	Flood	**Problem:** The Post Office is located within the SFHA and at risk of flooding. **Solution:** The town will contact the facility manager of this facility owned by the federal governmental and discuss options for protecting the facility to the 0.2 chance flood event.	Yes	Yes	Within 3 years	Town engineer, Town Board	TBD by engineering feasibility analysis	Ensure operational continuity at this critical facility	Municipal budget	Medium	EAP	PI
2022-T Clarence-007	Protect St. Mary's School to the 0.2%	1	Flood	**Problem:** The St. Mary's School is located within the SFHA.	Yes	Yes	Within 5 years	Town Engineer, Town	$1,000 staff time	Ensure operational continuity in	Municipal budget	High	EAP	PI

Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	annual chance flood event			**Solution:** The town will contact the facility managers of this facility and discuss options for protecting the facility to the 500-year flood level.				Emergency Manager		this critical facility				
2022-T Clarence-008	Protect four town fire stations from the hazardous materials risk	1	Haz Mat	**Problem:** Four town Fire Departments are exposed to the Hazardous Materials risk; Clarence Fire Station, Clarence Center Fire Station, Harris Hill Fire Station, Swormville Fire Station **Solutions:** The town will conduct an engineering feasibility study to identify best mitigation actions to address the hazardous materials risk at each firehouse. The Town Emergency Manager will then work to implement recommendations of the study.	Yes	Yes	Within 5 years	Town Fire Department, Emergency Manager	TBD by engineering feasibility analysis	Ensure continuity of operations at this critical facility.	Municipal budget	High	SIP	PP
2022-T Clarence-009	Protect the Buffalo Airport runways to the 0.2% annual chance flood event	1	Flood	**Problem**: Two runways at the Buffalo Airport are located within the 1% chance flood area, exposing them to potential flooding. **Solution**: The town will support the Airport Authority in ensuring that mitigation steps are taken to protect the	Yes	Yes	Within 5 years	Town Engineer, Emergency Manager	$1,000 staff time	Ensure continuity of operations at this critical facility.	Town staff	Medium	EAP	PI

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				two runways from flooding.										
2022-T Clarence-010	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share with homeowners	High	SIP	PP
	Protect two pump	1	Flood	**Problem:** Two pump stations are in the SFHA. These include a station at	Yes	No	Within 2 years	Erie County Sewer District Number 5,	TBD by Engineering Analysis	Ensure services	HMGP, BRIC,	High	SIP	PR

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.14-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Clarence -011	stations to the 0.2% annual chance flood event			Stahley Road and another unnamed station. **Solution:** The Town Highway Department will determine and then implement recommended flood mitigation measures.				Town Highway Department		continue at this critical facility	municipal budget			
2022-T Clarence -012	Identify Permanent Housing Locations	1	All Hazards	**Problem:** The town was unable to identify locations for permanent housing for use after natural hazards. **Solution:** The town will coordinate with county staff to identify locations for permanent housing to use after a natural hazard.	Yes	No	Within 2 years	FPA, Town Board	Staff time	Ensure secure locations for people to settle if displaced by natural hazard	Municipal Budget	High	LPR	ES

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.14-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Clarence-001	Implement flood mitigation measures along Gott Creek	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-T Clarence-002	Debris removal and maintenance Program	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-003	Join the Community Rating System	1	1	1	1	1	1	0	1	1	0	0	1	1	0	10	High
2022-T Clarence-004	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-005	Floodplain Administrator to continue attending training on floodplain management to maintain certification	1	0	1	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-006	Protect the East Amherst Post Office to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-T Clarence-007	Protect St. Mary's School to the 0.2% annual chance flood event	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-008	Protect four town fire stations from the hazardous materials risk	1	1	1	1	1	1	1	1	1	1	0	0	1	0	11	High
2022-T Clarence-009	Encourage protection of the Buffalo Airport runways to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High

Table 9.14-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Clarence-010	Residential Property Flood Mitigation.	1	1	1	1	0	1	0	1	1	1	0	0	1	0	10	High
2022-T Clarence-011	Protect two pump stations to the 0.2% annual chance flood event	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-T Clarence-012	Identify Permanent Housing Locations	1	1	1	1	0	1	0	1	1	1	1	0	1	0	10	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.14.9 Action Worksheets

The following action worksheets have been developed by the Town of Clarence to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Clarence Action Worksheet			
Project Name:	Implement flood mitigation measures along Gott Creek		
Project Number:	2022-T Clarence-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	There are locations along Gott Creek that experience localized flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	In November 2020, an analysis/report was completed that recommended specific mitigation measures along the Gott Creek. Resilient New York Flood Mitigation Initiative: Gott Creek. The town should pursue completion of specified mitigation measures such as floodwalls, levees, or other appropriate measures.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect properties from flooding.	**Estimated Benefits (losses avoided):**	Reduce risk of flooding along Gott Creek
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	TBD by feasibility engineering assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	3 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Highway Department, Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Remove roadways along creek	High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Implement flood mitigation measures along Gott Creek	
Project Number:	2022-T Clarence-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services on roadways along the creek
Property Protection	1	Project will protect adjacent properties from flood damage risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	1-5 years
Agency Champion	1	Town Highway Department, Town Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Clarence Action Worksheet			
Project Name:	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event		
Project Number:	2022-T Clarence-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The Clarence Center Fire Department is located within the SFHA. The pump station is vulnerable to the flood hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	**Solution:** The town will conduct a feasibility study and determine what protections are necessary and carry out the necessary upgrades.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations at the Fire Station
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	TBD by engineering feasibility assessment	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Engineer, Town Fire Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new Fire Station	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Clarence Center Fire Station to the 0.2% annual chance flood event	
Project Number:	2022-T Clarence-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the Clarence Center Fire Station.
Property Protection	1	Project will protect the Fire Station from damage caused by flooding.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	1 year
Agency Champion	1	Town Fire Department Town Engineer
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 53-Section-9.14-Clarence-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.15 Town of Colden

This section presents the jurisdictional annex for the Town of Colden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the municipality's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.15.1 Hazard Mitigation Planning Team

The following individuals have been identified as the municipality's hazard mitigation plan primary and alternate points of contact. The Town of Colden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Code Enforcement, and Emergency Management. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.15-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James P. DePasquale, Supervisor Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-474-0579 Email: james.depasquale@townofcolden.com	Name/Title: Patricia A. Zubrick, Deputy Town Supervisor Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-864-3897 Email: patricia.zubrick@townofcolden.com
NFIP Floodplain Administrator	
Name/Title: John Kotlarsz, Code Enforcement Officer Address: 8812 NY-240, Colden, NY 14033 Phone Number: 716-923-3454 Email:bsudyn@gmail.com	

9.15.2 Municipal Profile

Colden is in the southeastern part of Erie County. The town is 35 square miles in area and is bounded on the north by the Town of Aurora, on the west by the Town of Boston, on the south by the towns of Concord and Sardinia and to the west by the Town of Holland.

The first settler in Colden was Richard Buffum. Buffum purchased 2,000 acres of land from the Holland Purchase Company. The town was incorporated in 1828 and the first post office established in 1830 (Town of Colden 2021).

According to the U.S. Census, the 2010 population for the Town of Colden was 3,265. The estimated 2019 population was 3,328, a 1.9 percent increase from the 2010 Census. Data from the 2019 U.S. Census American

Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 19.0 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.15.3 Jurisdictional Capability Assessment and Integration

The Town of Colden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.15.3). The municipality's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Colden. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.15-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 26 (Building Construction)	Local	Town CEO
Comment: *Building code used to determine whether building construction is suitable for jurisdiction and to create a standard to mitigate any avoidable damage or accidents.*					
Zoning Code	Yes	No	Chapter 108 (Zoning)	Local	Building/ Code Enforcement
Comment: *The purpose of the zoning code is to increase community resilience through the following measures. 1) Signs shall withstand a wind pressure load of at least 30 pounds per square foot. 2) Existing natural features, such as trees, brooks, drainage channels and views, shall be retained. Whenever such features interfere with the proposed use of such property, a retention of the maximum amount of such features consistent with the use of the property shall be required.*					
Subdivision Ordinance	Yes	No	Chapter 92 (Subdivision of Land)	Local	Building/ Code Enforcement
Comment: *The subdivision ordinance incorporates resilience related measures through the following means: 1) A preliminary plat shall include: all pertinent features, such as existing structures, streets, railroads, water bodies, streams, swamps and large trees, that may influence the design of the subdivision, and topography at contour interval of not more than five feet; proposed provision of water supply, fire protection, disposal of sanitary waste, stormwater drainage, street trees, streetlighting fixtures, street signs and sidewalks. 2) The Planning Board may require, where steep slopes exist, that present elevations of all proposed streets shall be shown every 100 feet at five points on a line at right angles to the center line of the street, and said elevation points shall be at the center line of the street, each property line and*					

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
points 30 feet inside each property line. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard.					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
Comment:					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *A property condition disclosure statement must be presented to the buyer of a property. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract.*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 108 (Zoning)	Local	Town Planning
Comment: *Unless otherwise provided and as regulated by Chapter 92, Subdivision of Land, of the Town of Colden, a site plan review and a site plan approval shall be required for all uses, buildings and structures that require a building permit or certificate of compliance under this chapter and for which an application therefor has been made to the Town of Colden, except for a one-family dwelling or a two-family dwelling and its permitted accessory uses, buildings or structures, prior to the issuance of a building permit or certificate of compliance.*					
Environmental Protection Ordinance	Yes	Yes	Chapter 43 Environmental Quality Review, Local Law 1, Adopted 1980.	Local	Town Board
Comment: *No decision to carry out or approve an action other than an action listed in § 43-4 hereof or Section 617.12 of Title 6 of NYCRR as Type II action, or an exempt or administrative action (6 NYCRR 617.13) shall be made by the Town Board or by any department, board, commission, officer or employee of the town until there has been full compliance with all requirements of this chapter and Part 617 of Title 6 of NYCRR; provided, however, that nothing herein shall be construed as prohibiting:* *A. The conducting of contemporaneous environmental, engineering, economic feasibility or other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action which do not commit the town to approve, commence or engage in such action; or* *B. The granting of any part of an application which relates only to technical specifications and requirements, provided that no such partial approval shall entitle or permit the applicant to commence the action until all requirements of this chapter and Part 617 of Title 6 of NYCRR have been fulfilled.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 52 (Flood Damage Control)	Local	Town CEO
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* *F. Qualify for and maintain participation in the National Flood Insurance Program.* *The Code Enforcement Officer is appointed local administrator to administer and implement the chapter by granting or denying floodplain development permits.* *Any new construction or substantial improvements of residential or non-residential properties located in the special flood hazard area must be elevated to at least two feet above the base flood elevation.*					

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	Yes	No	Agricultural district -within zoning	Local	Town Planning
Comment: *The Agricultural district is meant to manage the use of land under agricultural industry and provide guidance to farmers and other agricultural uses.*					
Planning Documents					
Comprehensive Plan	Yes	No	2002 Town of Colden Comprehensive Plan– will be updating 2021 Planning Board	Local	Town Planning
Comment: *The plan provides background on the conditions in the town, by means of a Land Use Study conducted in 1990, which resulted in the creation of a land use map. Additional "special studies" were conducted and presented to the public through a series of public meetings. The primary focus of the master plan is guiding growth and development, particularly the residential population of Colden which like much of Erie County has experienced a trend of decline. The plan envisioned that the town would "remain in a basic rural status" (p. 6) and that no substantial growth was predicted. The plan describes Colden as rural and lacking any significant public infrastructure. This lack of public infrastructure makes large scale development impossible and reinforces the need for large lot residential in much of the town. Commercial and industrial development is recommended to take place in the Town's denser hamlet area and along Route 240, a road that serves as the town's major arterial.* *The plan also addresses preservation and protection of natural resources as per the goal to preserve the community characteristics and provide safe and environmental healthy areas to create a better community for all residents.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *No information available at this time.*					
Urban Water Management Plan	No	No	-	-	-
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – if shoreline exists	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	CEMP 2018	Local	Town OEM
Comment: *The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	No	Conducted through ISO Assessment	Local	Town OEM

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *The National Risk and Capability Assessment (NRCA) is a suite of assessment products that measures risk and capability across the nation in a standardized and coordinated process. The County had an assessment completed in recent years which covered the town.*					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Colden to oversee and track development.

Table 9.15-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department/Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town has limited growth capabilities.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Colden and their current responsibilities which contribute to hazard mitigation.

Table 9.15-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board – The Planning Board may approve, conditionally approve or disapprove subdivision plans for the purpose of providing for the orderly and wise development of the town and affording adequate facilities for housing, transportation, distribution, comfort, convenience, safety and the health and welfare of its population.
Zoning Board of Adjustments	Yes	Zoning Board - The primary role of the zoning board is to review and decide cases where a relaxation of the ordinance

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		is sought or where there is an alleged error in a zoning decision.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Environmental Advisory Board that is meant to provide oversight on environmental and open space related topics within the town.
Open Space Board/Committee	Yes	Environmental Advisory Board that is meant to provide oversight on environmental and open space related topics within the town.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department - The department mission is to provide a safe, well maintained and efficient operation of the town highway and bridge system.
Construction/Building/Code Enforcement Department	Yes	Building and Code Enforcement - The Colden Building Department administers and enforces regulations, pertaining to use of property and the construction of buildings. The Department reviews plans and conducts filed inspections for compliance with various local and state, standards, particularly the Town Zoning Code and the New York State Uniform Fire Prevention and Building Code (NYSUFPBC). These codes apply to planning, zoning, building, plumbing, mechanical, electrical, fire, health and the environment. The Building Department receives and processes all applications for construction, alterations, additions, and accessory structures for residential and commercial projects, for compliance with the Town's Code and Building Department requirements, in addition to the requirements of the New York State Fire Prevention and Building Code. Projects under review by the department are not permitted to begin prior to the issuance of the permit. Responsibilities of the Department and Code Enforcement Officers are as follows: • Plan review for compliance with NYSFPBC, Town of Colden Code and applicable reference standards. • Issue permits for residential and commercial projects for new construction, additions, remodeling, accessory structures, change in use of buildings, installations or replacement of certain mechanical, fire safety and plumbing systems, back-up generators, demolition of structures, swimming pools, etc. • Conduct inspections for numerous phases of construction activity. • Issue Certificate of Occupancy or Certificate of Compliance for all permitted projects. • Conduct inspections based on complaints from citizens. • Respond to requests from the Town Fire Department pertaining to unsafe equipment or conditions, damage due to structure fires and illegal open burning.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		• Respond to structure fires for assistance to Fire Department command staff related to building design, contents, potential failure, damage estimates, origin and cause, determining if building can be occupied after the incident. • Conduct fire safety inspections of existing buildings for compliance with the NYS Fire Code. • Explain code requirements to permit applicants. • Attend NYS Required annual training.
Emergency Management/Public Safety Department	Yes	Emergency Management – comprised of police, fire, and disaster relief department that deal with municipal and intermunicipal emergency response.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED – The purpose is to send critical communications to residents and businesses in Colden. The system provides the ability to quickly deliver messages to targeted areas or the entire town. The system will be activated for emergency public safety messages and important public notifications. Alerts may include, but are not limited to: • Extreme weather • Missing and endangered persons • Evacuations and lockdowns • Water emergencies • Chemical spills or release • Security alerts
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stream management and highway department road maintenance
Mutual aid agreements	Yes	Highway Department and Fire District
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	GHD Engineering – contracted.
Engineers or professionals trained in building or infrastructure construction practices	Yes	GHD Engineering – contracted.
Planners or engineers with an understanding of natural hazards	Yes	GHD Engineering – contracted.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Emergency Manager trained in GIS and provides various services to town agencies and residents.
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Independent Contractors
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	Yes	GHD Engineering for stormwater engineering

Fiscal Capability

The table below summarizes financial resources available to the Town of Colden.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.15-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Colden.

Table 9.15-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Communications Officer
Personnel skilled or trained in website development	Yes	Contracted
Hazard mitigation information available on your website	Yes	The town's website contains hazard-related information. During an event, they will post information under the 'news' section of the site. With the current COVID-19 pandemic, the town provides resources and information on the disease.
Social media for hazard mitigation education and outreach	Yes	The town operates a Facebook page where they provide information on upcoming meetings, events, emergency alerts, and other information.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	CodeRED, municipal website, and social media accounts
Warning systems for hazard events	Yes	CodeRED
Natural disaster/safety programs in place for schools	Yes	Evacuation site for school at Colden Senior Center
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Colden.

Table 9.15-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Class 4	2018
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.15-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak - NA
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.15.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Kotlarsz, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Colden.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.15-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Colden	5	8	$6,758	7	0

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town describes flood-prone areas to be along creeks and farmland within the town. The town does not maintain a list of property owners interested in flood mitigation. There are currently no RiskMAP projects within the jurisdiction. As the code enforcement officer makes substantial damage determinations, there are no specific guidelines established and are determined on a case-by-case basis. There are no properties that have been mitigated within the town and the current flood maps adequately address the existing sites that have flooding.

NFIP Compliance

As per the town code, the Code Enforcement Officer is appointed as floodplain administrator for the Town of Colden. The code enforcement officer provides permit and site plan review, and inspection of whether proposed sites are located in a floodplain. At this time, there are no certified floodplain managers on staff. Due to the town's size, part-time staff, and volunteers, training is not required nor relevant to increase the town's capabilities.

Given the town's size, the town does not have adequate resources to determine future flooding conditions from climate change

The town does not have specific guidelines to determine substantial damage determinations. At this time the town does not have any outstanding violation issues. The municipality is also not aware of any barriers to increasing the effectiveness of the NFIP program. The town's most recent CAV date on record is January 21, 2020.

The town has documented that the local chapter for the flood damage prevention ordinance is titled "Flood Damage Control" Local Law 1 of 2019. The town along with its plans, programs, and other documents, meets the minimum requirements of the NFIP. The town is not interested in joining the FEMA Community Rating System (CRS) program.

9.15.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Colden has identified the following routes and procedures to evacuate residents prior to and during an event.

- State Route 240 (N/S)
- Center Street (County Route) (N/S)
- Boston/ Colden Road (County Route – E/W)
- Holland Glenwood Road (County Route E/W)

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Sheltering

The Town of Colden has identified the following designated emergency shelters within the town.

Table 9.15-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Colden Elementary School	8263 Boston-Colden Road, Colden, NY	500	Yes	Yes	Yes	Provided by fire company	No
Colden Senior Center	8811 NY-240, Colden, NY	100	Yes	Yes	No – mitigation action - 009	Various	No

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Colden has identified the following sites suitable for placing temporary housing units.

Table 9.15-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kummer Park	Park Street- off Route 240	40 acres of usable land	Park	Power/ Water/ Septic	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Colden has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.15-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kummer Park	Park Street- off Route 240	40 acres of usable land	Park	Power/ Water/ Septic	None

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.15.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.15-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.15-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	6	0	7	0	4	0	6	0	6	0	3	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**7**	0	**7**	0	**4**	0	**6**	0	**6**	0	**4**	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)
** Only location-specific hazard zones or vulnerabilities identified.*

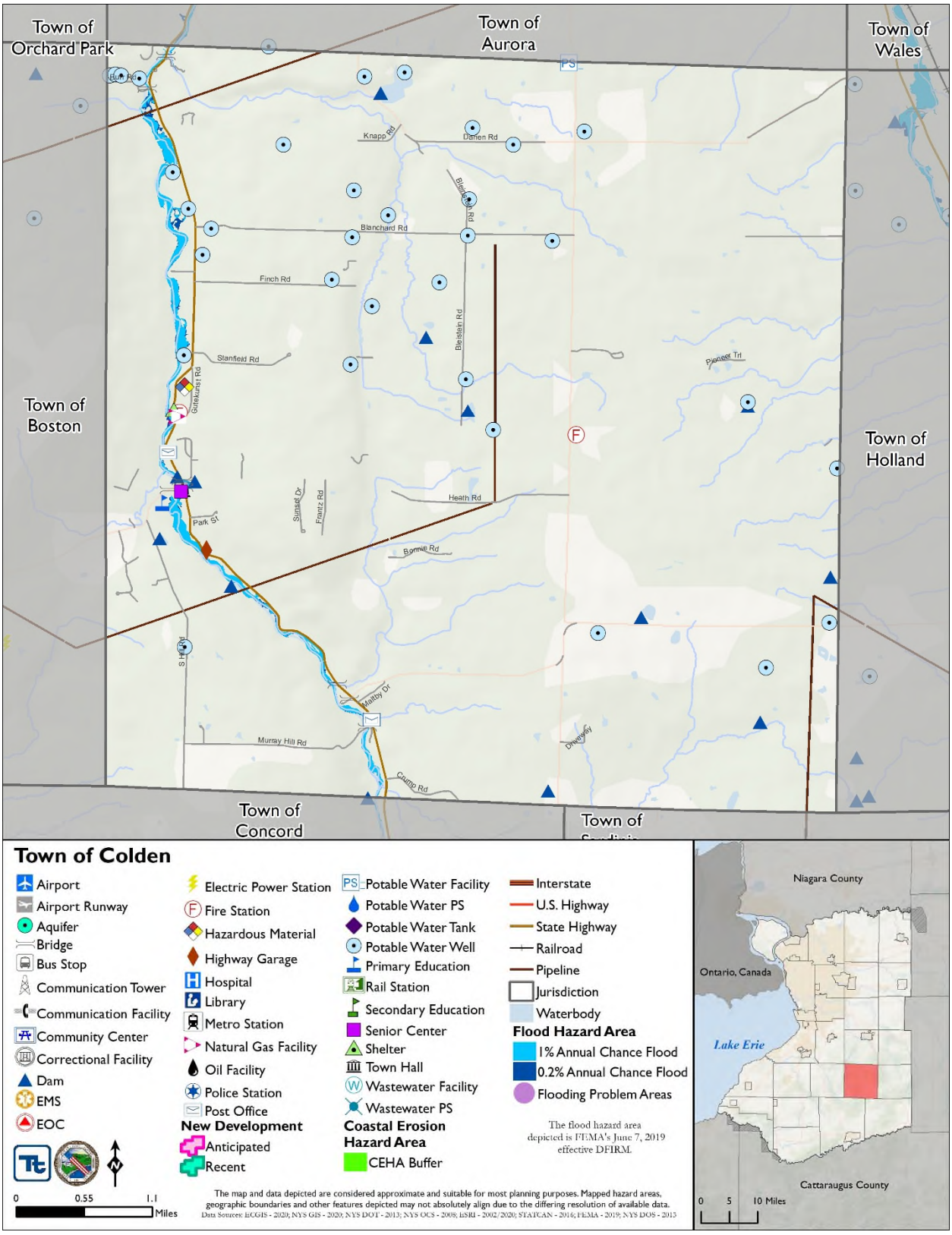
9.15.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the municipality's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Colden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

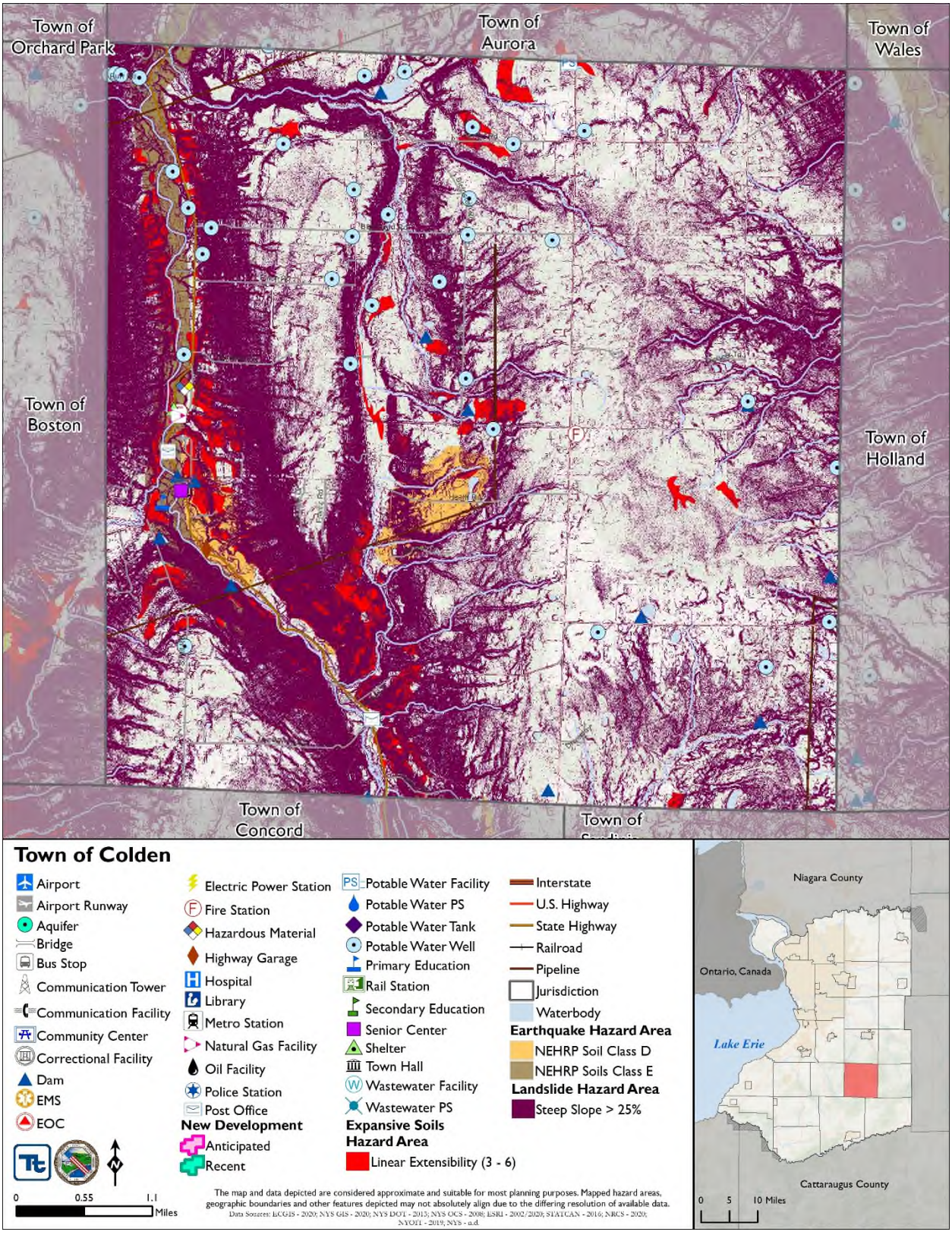
Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.15-1. Town of Colden Hazard Area Extent and Location Map 1



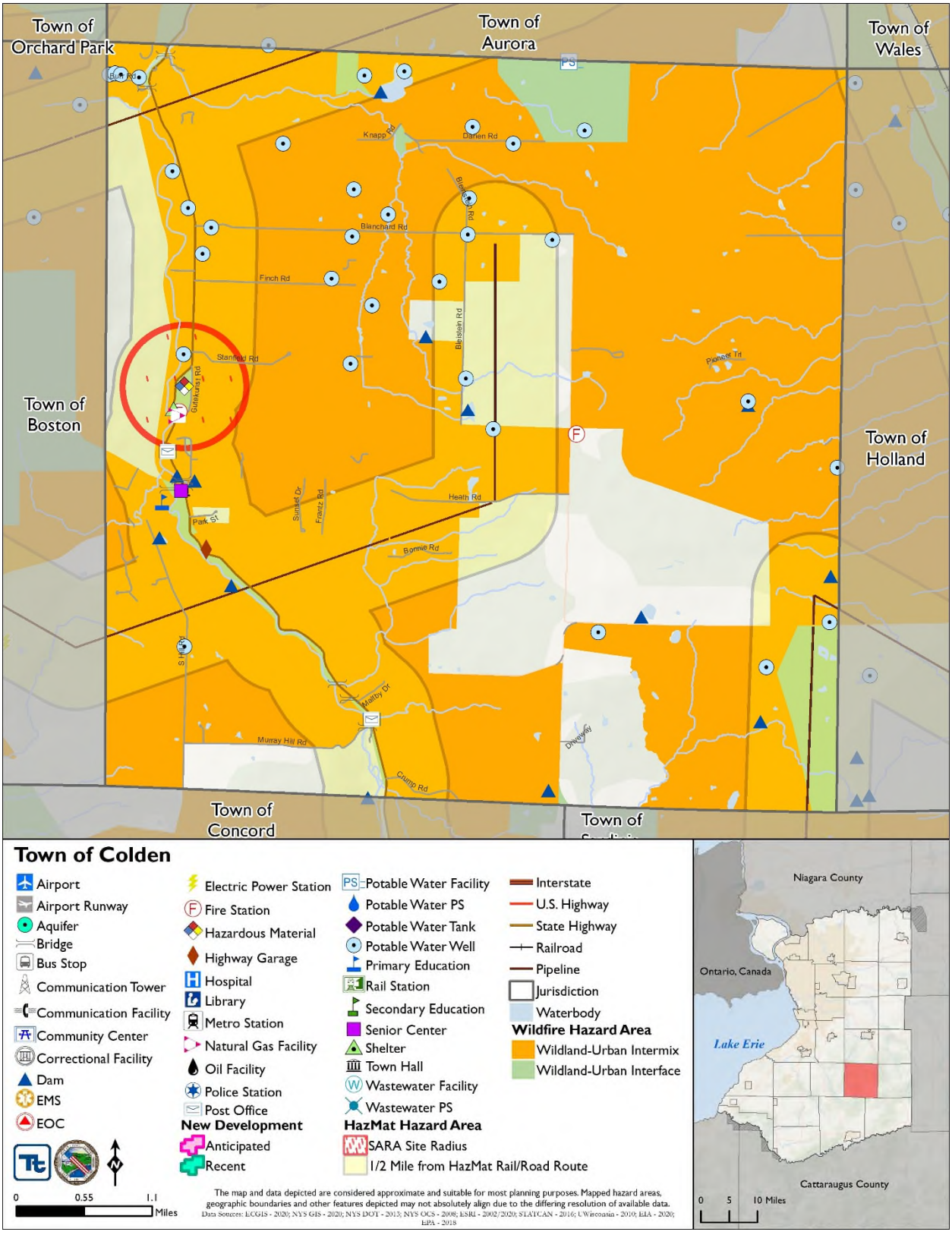
Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.15-2. Town of Colden Hazard Area Extent and Location Map 2



Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.15-3. Town of Colden Hazard Area Extent and Location Map 3



Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The municipality's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.15-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Ice Jam in Cazenovia Creek caused stream bank erosion and subsequent flooding
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous	Although the County was impacted, the town did not report damages

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The	Although the County was impacted, the town did not

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			track of the strong surface low was a classic high wind track for our region.	report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.15-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Ice Jam in Cazenovia Creek caused stream bank erosion and subsequent flooding
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region	Although the County was

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

Notes:
EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the municipality's risk assessment results and data used to determine the hazard ranking.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Colden. The Town of Colden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town has historically not been prone to earthquakes and thus rank the hazard from a medium to low.
- Wildfires have historically not been an issue for the town, thus decreasing the rank from high to medium, due to limited response capabilities but low overall threat.

Table 9.15-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Medium	Medium	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.15-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Millers Saw Mill Dam	Dam	X	X	007

Source: GIS 2021

Identified Issues

After review of the municipality's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Colden has identified the following vulnerabilities within their community:

- The town does not have a continuity of operations plan. In previous events, the town has struggled during hazard events because of no existing plan.
- The town currently has limited information on hazard identification and mitigation on its social media/ website. This is a recommendation by FEMA and other state and federal agencies and the town would like to comply with this recommendation.
- The Highway Garage, Town Hall, Senior Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events.
- West Branch of Cazenovia Creek has issues around streambank erosion, especially with ice jams during the winter months due to debris collecting and restricting the flow of water.
- Boston-Colden Road Buffalo Pittsburg Railroad Bridge entering the hamlet of Colden has major infrastructural issues regarding sightline and school evacuation route access. The bridge sidewalk is degraded and does not have the appropriate safety level for school children crossing the bridge.
- Currently, the town does not have any staff members that are Certified Floodplain Managers.
- The Millers Saw Mill Dam is located in a floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.
- The Colden Senior Center located at 8811 NY-240 is within the 100-year floodplain.

9.15.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.15-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Removal of debris and stabilization of creek banks	Flooding and erosion of property and roadways	Not Identified	Town of Colden Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Determine severity of each culvert and set a replacement plan for culverts starting with worst condition and high flow culverts. Also determine which roads have been more prone to flooding conditions and provide proper drainage for these roads	Roadway and private property damage	Not Identified	Town of Colden Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Trimming of brush and removal of trees 10-15 feet from shoulder	Long distance visibility to eliminate blind spots during driving	Not Identified	Town of Colden Highway	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Emergency Management, Planning	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	NFIP compliance	
	Designate/install a specific person to be your	Flooding	Not Identified		Complete	Cost	Low	1. Discontinue

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	municipality's Floodplain Administrator			Emergency Management, Planning		Level of Protection Damages Avoided; Evidence of Success	Moderate NFIP compliance	2. 3. Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Emergency Management, Planning	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	Low Moderate Flood Mitigation	1. Discontinue 2. 3. Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Emergency Management, Planning, Town Board	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. No longer relevant
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Emergency Management, Planning	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in the 2022 HMP 2. In progress - 006 3.
	Join the Community Rating System (CRS)	Flooding	Not Identified	Emergency Management	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Not interested/ no longer viable.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Colden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Fall of 2020, conducted flood retrofitting for private residential housing within the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Colden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.15-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X		X			X		X	X
Cyber Attack	X	X		X			X		X	X
Earthquake	X	X		X			X		X	X
Expansive Soils	X	X		X			X		X	X
Extreme Temperature	X	X		X			X		X	X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X	X		X			X		X	X
Landslide	X	X		X			X		X	X
Pandemic	X	X		X			X		X	X
Severe Storm	X	X		X			X		X	X
Severe Winter Storm	X	X		X			X		X	X
Utility Failure	X	X		X			X		X	X
Wildfire	X	X		X			X		X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.15-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Colden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.15-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Colden Town-001	Continuity of Operations Plan	1, 2	All	**Problem**: The town does not have a continuity of operations plan. In previous events, the town has struggled during hazard events because of no existing plan. **Solution**: The town will develop a continuity of operations plan for four municipal buildings (senior center, town hall, and highway garage, and park buildings). The plan will be implemented by the town and be developed and approved by the town board.	No	No	1 year	Town Board	$20,000	Increase preparedness	HMGP, Municipal Budget, Assistance to Firefighters Grant Program	High	LPR	ES
2022-Colden Town-002	Increase Hazard Awareness	1, 2, 4	All	**Problem**: The town currently has limited information on hazard identification and mitigation on its social media/ website. This is a recommendation by FEMA and other state and federal agencies and the town would like to comply with this recommendation. **Solution**: The town will include more information on the municipal Facebook page as well as the website on hazard mitigation and preparedness. Information will include flood mitigation measures, emergency preparedness guides, service helplines, warnings, and other services.	No	No	2 years	Town Board and clerk	$10,000	Increase awareness and preparedness	Municipal Budget, HMGP	High	EAP	PI
		1, 2	All	**Problem**: The Highway Garage, Town Hall, Senior	Yes	No	2 years	Town Supervisor,	$500,000	Continuity of operations	HMGP, and municipal	High	SIP	ES

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Colden Town-003	Generators for Critical Facilities and Shelters			Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events. **Solution**: Install permanent backup power generators on site for each facility. Each generator would have the capacity to continue operations at all times, as they are all identified critical facilities. The town will contact each facility operator and provide guidance on how to determine the generator capacity needed. Once this information is compiled, the town will apply for FEMA grants for all facilities. The generators shall be installed by each facility manager and maintained by the various entities as needed and as time progresses.				HIGHWAY DEPARTMENT, and Relevant Stakeholders			budget for preliminary assessment as needed			
2022-Colden Town-004	Streambank Restoration	1, 2	Flood	**Problem**: West Branch of Cazenovia Creek has issues around streambank erosion, especially with ice jams during the winter months due to debris collecting and restricting the flow of water. **Solution**: The town will implement a long term streambank restoration project to reduce flooding	No	No	5 years	Town Highway and SWCD	$1 million	Flood Mitigation	HMGP, BRIC, Climate Smart Communities Grant, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement	High	NSP	NR

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				along the creek. This will be a multiphase project. The town will first conduct a preliminary assessment of creek and restoration initiatives needed. The second phase will be to implement the plan at the same time conduct annual maintained as needed.							Project (WQIP) Program			
2022-Colden Town-005	Bridge Redevelopment and Retrofitting	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Boston-Colden Road Buffalo Pittsburg Railroad Bridge entering the hamlet of Colden has major infrastructural issues regarding sightline and school evacuation route access. The bridge sidewalk is degraded due to consistent flooding and erosion along the stormwater lines and does not have the appropriate safety level for school children crossing the bridge. **Solution**: The town will conduct an assessment regarding upgrades needed to redevelop the bridge to acceptable standards regarding safety and modern structural standards. The second phase will be to implement bridge redevelopment/redesign upgrades.	No	No	3 years	Town Highway Department	$1-2 million	Infrastructure Stabilization	BRIDGE NY, HMGP, BRIC, Climate Smart Communities Grant, Transportation Investment Generating Economic Recovery (TIGER)	High	SIP	PP
2022-Colden Town-006	CFM Certification	All	Flood	**Problem:** Currently, the town does not have any staff members that are Certified Floodplain Managers.	No	No	1 year	Code Enforcement Officer	Low	Have CFM staff; increase awareness and knowledge on	Municipal Budget	Medium	LPR	PR

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).						floodplain management in the town				
2022-Colden Town-007	Dam Retrofitting	1,2	Flood	**Problem:** The Millers Saw Mill Dam is located in a floodplain. **Solution:** While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Town Highway Department shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA and NYSDEC guidelines to withstand severe storms. If not, the town will apply for mitigation funding, accordingly.	Yes	No	2 years	Town Board and Highway Department	Medium	High	HMGP	High	SIP	SP
2022-Colden Town-008	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										
2022-Colden Town-009	Senior Citizen Center Flood Mitigation	1	Flood	**Problem:** The Colden Senior Center located at 8811 NY-240 is within the 100-year floodplain. **Solution:** The township must work with the facility operator to determine mitigation measures to reduce vulnerability to flooding. This might include retrofitting, elevation, and maybe even relocation if need be. The municipal officials, shall work with the facility operator to apply for FMA funding to increase the facility's resilience to future flooding.	Yes	No	3 years	Town Board along with the Senior Citizen Center Facility Manager	Moderate	High	FMA	High	SIP	SP

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV *Community Assistance Visit*
CRS *Community Rating System*
DPW *Department of Public Works*

Potential FEMA HMA Funding Sources:

FMA *Flood Mitigation Assistance Grant Program*
HMGP *Hazard Mitigation Grant Program*

Timeline:

The time required for completion of the project upon implementation

EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*
BRIC	*Building Resilient Infrastructure and Communities Program*

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:
Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.15-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Colden Town-001	Continuity of Operations Plan	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Colden Town-002	Increase Hazard Awareness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Colden Town-003	Generators for Critical Facilities and Shelters	1	1	1	1	1	1	-1	0	1	0	1	1	1	1	10	High
2022-Colden Town-004	Streambank Restoration	1	1	1	0	1	1	-1	1	1	1	0	1	1	1	10	High
2022-Colden Town-005	Bridge Redevelopment and Retrofitting	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Colden Town-006	CFM Certification	1	1	1	0	0	0	1	0	0	0	0	1	1	1	7	Medium
2022-Colden Town-007	Dam Retrofitting	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Colden Town-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Colden Town-009	Senior Citizen Center Flood Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.15.9 Action Worksheets

The following action worksheets have been developed by the Town of Colden to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Generators for Critical Facilities and Shelters		
Project Number:	2021-Colden Town-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The Highway Garage, Town Hall, Senior Center, and Park Building lack sufficient backup power for continuity of operations. All these facilities are identified critical facilities as well as evacuation shelters that are crucial during hazard events.		
Action or Project Intended for Implementation			
Description of the Solution:	Install permanent backup power generators on site for each facility. Each generator would have the capacity to continue operations at all times, as they are all identified critical facilities. The town will contact each facility operator and provide guidance on how to determine the generator capacity needed. Once this information is compiled, the town will apply for FEMA grants for all facilities. The generators shall be installed by each facility manager and maintained by the various entities as needed and as time progresses.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continuity of operations
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$0.5-2 million	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP and municipal budget for preliminary assessment as needed
Responsible Organization:	Town Supervisor, Highway Department, and Relevant Stakeholders	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar	High	Unreliable power
	Generator	High	Best alternative in the long run

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Generators for Critical Facilities and Shelters	
Project Number:	2022-Colden Town-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town Highway Department
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Dam Retrofitting		
Project Number:	2022-Colden Town-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Millers Saw Mill Dam is located in a 100 year floodplain and is identified as a critical facility.		
Action or Project Intended for Implementation			
Description of the Solution:	While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Town Highway Department shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA and NYSDEC guidelines to withstand severe storms. If not, the town will apply for mitigation funding, accordingly.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☒	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Safe route
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	Moderate	**Mitigation Action Type:**	Structural and Infrastructure project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP
Responsible Organization:	Town Board and Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Close road	Low	Would need to develop new route somewhere else – more expensive
	Bridge Redevelopment	High	Best and most cost effective in the long run

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Dam Retrofitting	
Project Number:	2022-Colden Town-007	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Protects life and property
Property Protection	1	Protects life and property
Cost-Effectiveness	1	This is most cost effective in long run
Technical	1	There are no technical issues
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	There is inadequate resources
Environmental	1	This has positive environmental impact
Social	1	This has positive social impact
Administrative	1	This has no administrative issues
Multi-Hazard	0	This addresses only a single hazard
Timeline	1	This timeline is feasible
Agency Champion	1	Town Highway Department
Other Community Objectives	1	This addresses multiple issues
Total	11	
Priority (High/Med/Low)	High	

Attachment: 54-Section-9.15-Colden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.16 Town of Collins

This section presents the jurisdictional annex for the Town of Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Collins's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.16.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Collins's hazard mitigation plan primary and alternate points of contact. The Town of Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Emergency Management, Code Enforcement and Highway Department. . The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.16-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Kenneth E. Martin, Supervisor Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-532-4874 x 103 Email: ken.martin@townofcollins.com	Name/Title: Ron Paluch, Emergency Manager Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-425-5127 Email: rrpaluch@gmail.com
NFIP Floodplain Administrator	
Name/Title: Gene Degman, Code Enforcement Officer Address: 14093 Mill St. PO Box 420, Collins, NY 14034 Phone Number: 716-532-4887 x 111 Email: accugene4@att.net	

9.16.2 Municipal Profile

The Town of Collins is the southernmost town in Erie County. The town is 48 square miles in area. The town is bordered by the Town of North Collins to the north, to the east by the Town of Sardinia, to the west by the Cattaraugus Indian Reservation, and to the south by the Towns of Persia, Otto, and East Otto which lie across the dramatic Zoar Valley of the Cattaraugus Creek. The town is approximately 30 miles from downtown Buffalo. Clear Creek is a significant waterway running through the town.

The town was first settled by whites in 1811. Many of the first settlers were Quakers. The town of Collins was created from a portion of the Town of Concord, and was named after the Collins' dairying family. The town surrendered land to the formation of the new towns of Brant in 1839 and North Collins in 1852. Because of the

concentration of dairy farms, there were once ten cheese and milk factories in the town (Town of Collins website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of Collins was 5,626. The estimated 2019 population was 5,418, a 3.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.3 percent of the population is 5 years of age or younger and 11.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.16.3 Jurisdictional Capability Assessment and Integration

The Town of Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.16.3). The Town of Collins's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.16-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 144 – Construction Codes, Uniform Adopted 9/18/2006					
Zoning Code	Yes	No	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 305 – Zoning Adopted 6/15/1987					
Subdivision Ordinance	Yes	Yes	Town Code Adopted 6/15/1987	All	Code Enforcement
Comment: Chapter 267 – Subdivision of Land Adopted 1/5/2015 Also found in NYS Real Estate and Environmental Conservation Laws					

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: None					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	No	No	-	-	-
Comment: None					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Town Code Adopted 6/15/1987	Local	Code Enforcement
Comment: Chapter 166 – Flood Damage Prevention Adopted 8/4/2008 .Meets minimum requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	Yes	1999 Joint Master Plan for the Town of Collins and Village of Gowanda	Local	Town Board/Code Enforcement
Comment: 1999 Joint Master Plan for the Town of Collins and Village of Gowanda Adopted August 1999					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Collins to oversee and track development.

Table 9.16-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.16-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board – Site Plan Reviews
Zoning Board of Adjustments	Yes	Zoning Board of Appeals – Approval of Variances
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – Remove debris from streams and culverts
Construction/Building/Code Enforcement Department	Yes	Code Enforcement – Through approval of building permits in flood prone areas
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Highway Deptartment – Agreements w/Erie County & neighboring municipalities
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer – 1 Approve permits in flood plain areas
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager – 1 Coordinate Response to disasters
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Collins.

Table 9.16-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Town Board
Capital improvements project funding	Yes – Town Board
Authority to levy taxes for specific purposes	Yes – Town Board
User fees for water, sewer, gas or electric service	Yes – Town Board
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – Town Board
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes – Town Board
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Town Board

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Collins.

Table 9.16-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Collins.

Table 9.16-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.16-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Strong
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Strong
Hazardous Materials	Moderate
Landslide	Moderate

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Utility Failure	Moderate
Wildfire	Moderate

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.16.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gene Degman,Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Collins.

Table 9.16-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Collins	3	6	$74,714	0	2

Source: *FEMA 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The town has identified areas along Cattaraugus and Clear Creeks and Floodprone. The town does not maintain a list of properties that have been damaged by flooding, nor a list of property owners interested in mitigation. There are no RiskMAP projects currently underway. Flood maps accurately address flood risk within the town.

NFIP Compliance

The Code Enforcement Department is responsible for flood mitigation within the town, however there are no certified floodplain managers currently on staff. Code Enforcement is responsible for permit review and inspections as well as NFIP administration. The Flood Damage Prevention Ordinance is located in Chapter 166 of the Town Code, and was last update don April 15, 2019. The last Community Assistance Visit (CAV) was on January 16, 2018. There are no outstanding compliance issues.

9.16.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Collins has identified the following routes and procedures to evacuate residents prior to and during an event.

- The Town of Collins does not have an Evacuation & Sheltering Plan outside of the Village of Gowanda. There is an old elementary school building with nine classrooms & a gym which could act as a shelter, but it is currently not equipped for sheltering.

Sheltering

The Town of Collins has identified the following designated emergency shelters within the Town.

Table 9.16-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Gowanda High School	10674 Prospect St, Gowanda, NY	As needed	Optional	Yes	Yes	As Needed	Food
Gowanda Elementary School	450 Aldrich St, Gowanda, NY	As needed	Optional	Yes	Yes	As needed	Food
Gowanda Fire Hall	230 Aldrich Street, Gowanda, NY	As needed	Optional	Yes	Yes	As needed	Food

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Collins has identified the following sites suitable for placing temporary housing units.

Table 9.16-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-T. Collins-#001.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Collins has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.16-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-T. Collins-#001.					

9.16.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.16-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.16-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	2	0	0	0	2	0	4	0	3	0	3	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	59	0	63	0	47	0	68	0	46	0	76	0
Total Permits Issued	**61**	**0**	**63**	**0**	**49**	**0**	**72**	**0**	**49**	**0**	**79**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Indicated					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

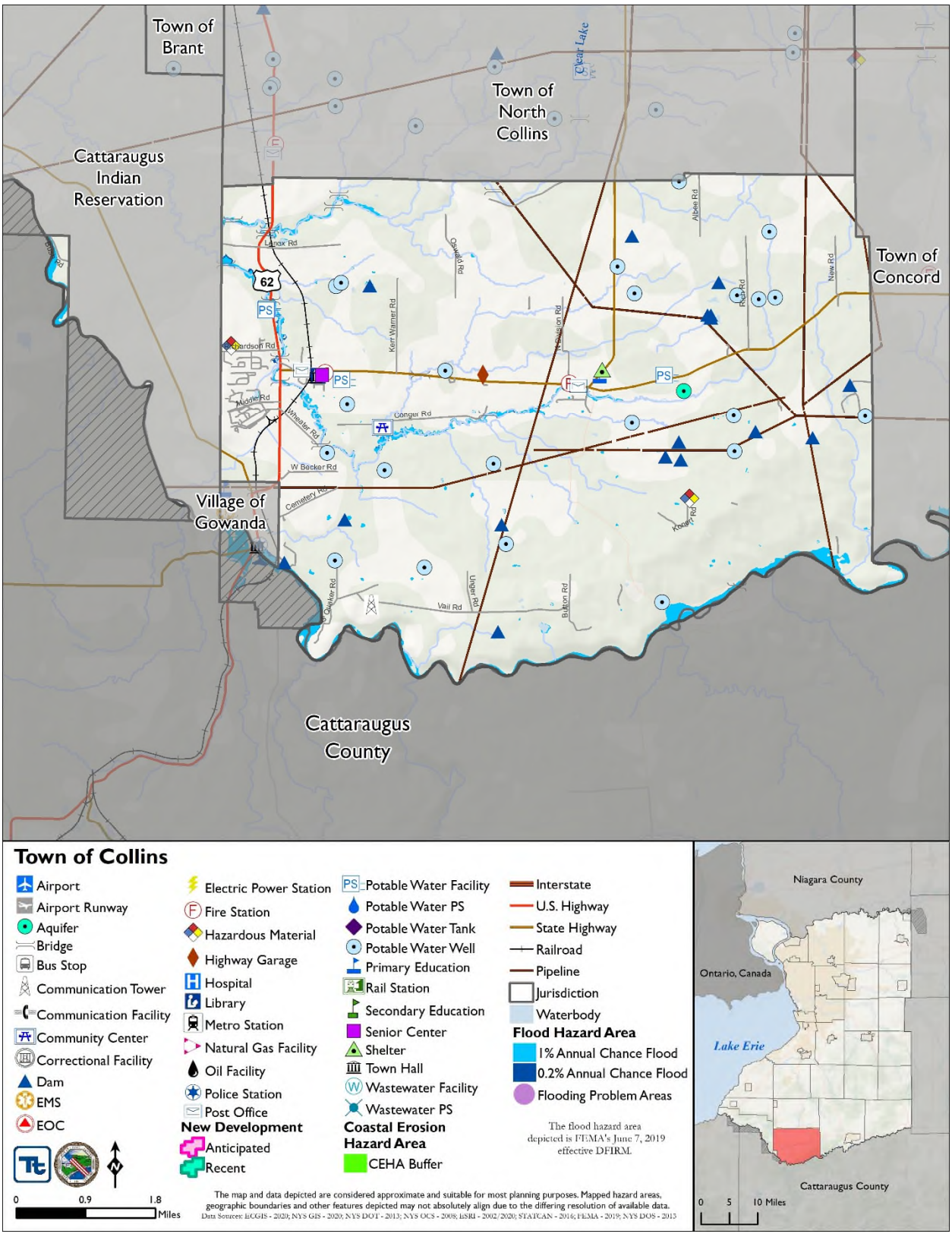
9.16.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Collins's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

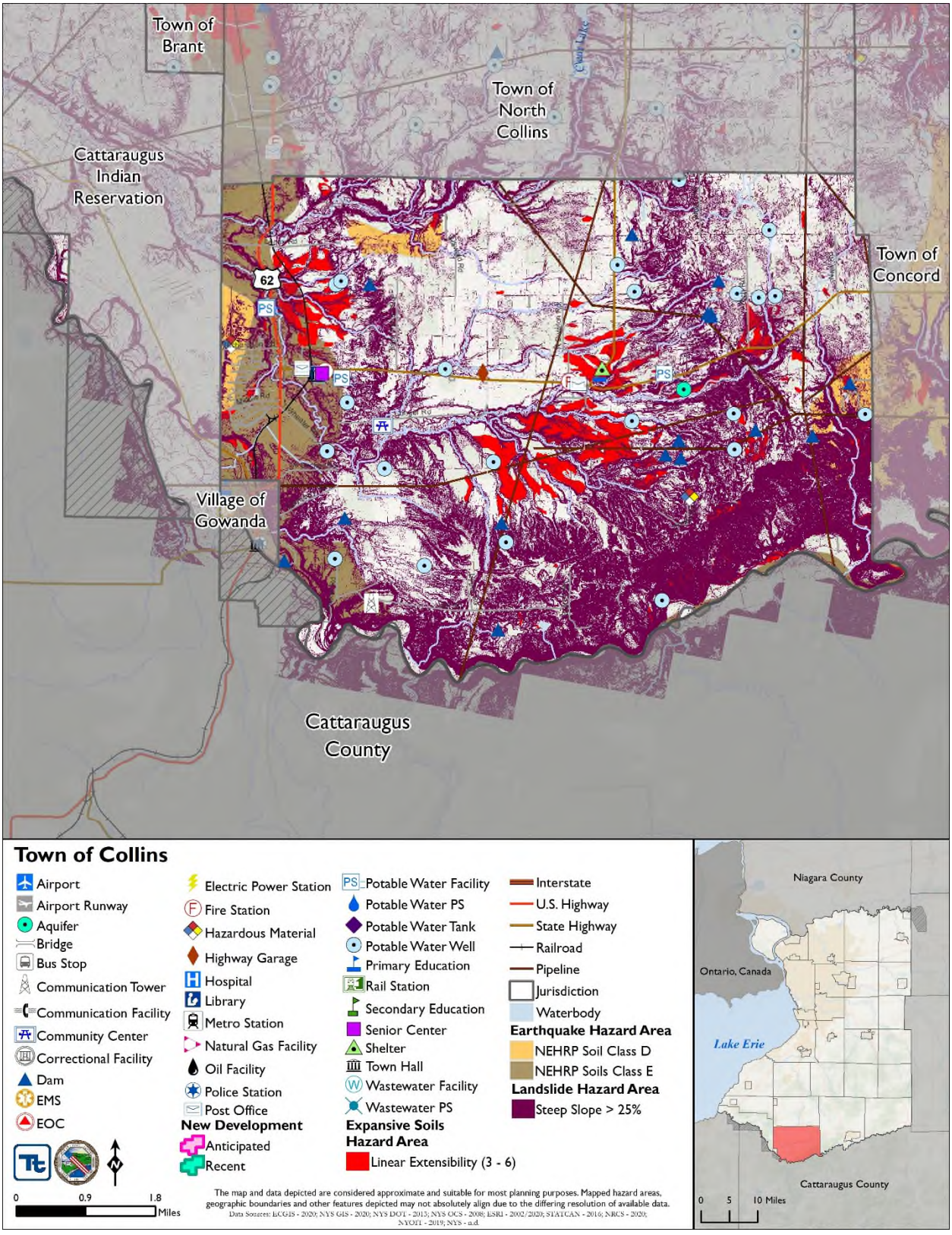
Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.16-1. Town of Collins Hazard Area Extent and Location Map 1



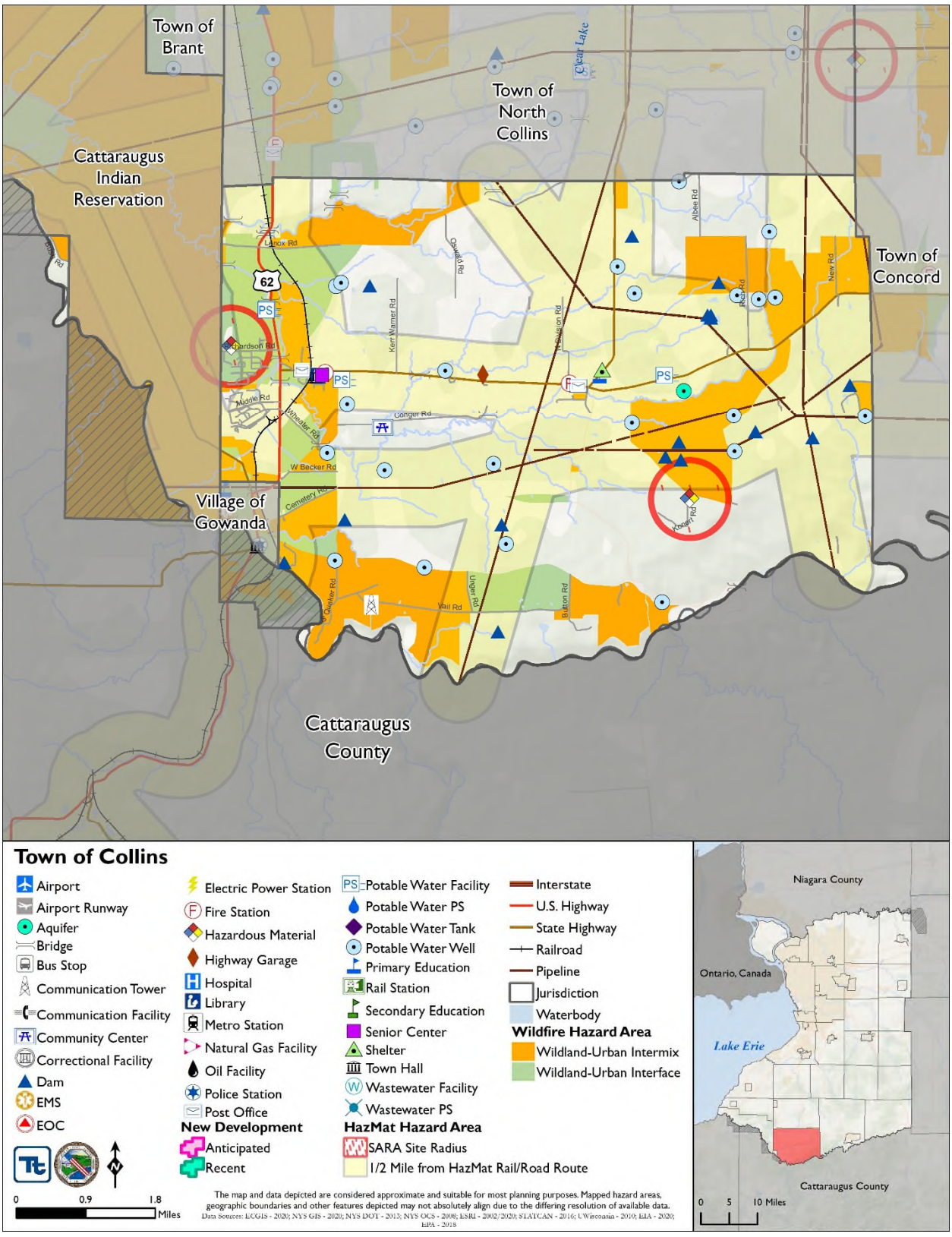
Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.16-2. Town of Collins Hazard Area Extent and Location Map 2



Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.16-3. Town of Collins Hazard Area Extent and Location Map 3



Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Collins's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.16-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.16-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the town did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the town did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the town did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the town did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the town did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the town did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the town did not report damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the town did not report damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.

Notes:
EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Collins's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Collins. The Town of Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.16-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Medium	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.16-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Gowanda Country Club Dam	Dam	A	X	2022-T. Collins-002

Source: Effective DFIRM

Identified Issues

After review of the Town of Collins's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Collins has identified the following vulnerabilities within their community:

- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- The Gowanda Country Club Dam is located within the 1% SFHA (100-year floodplain).
- Creeks and streams within the town become inundated with debris during and after hazard events and exacerbates damages and flooding along the banks.
- Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA.
- Town of Collins Water Districts #1 and #3 pump houses need back-up generators.

9.16.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.16-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Creek/Stream Debris Removal Program	Flood	Not Identified	Highway	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in the 2022 HMP 2. 2022-T. Collins-003 3.
-	Bridge/Culvert Inspection Program	Flood, Transportation	Not Identified	Highway	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in the 2022 HMP 2. 2022-T. Collins-004 3.
-	WO #1 Pump House Flood Control Project	Flood, Water Supply	Not Identified	Town Water Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	$163,962 Excellent Flooding of pumphouse	1. Discontinue 2. 3. Complete
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Code Enforcement	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
-	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Code Enforcement	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing Capability of the Town
-	Join the Community Rating System (CRS)	Flood	Not Identified	Code Enforcement	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing Capability of the Town

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.16-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X								X
Cyber Attack	X	X								X
Earthquake	X	X								X
Expansive Soils	X	X								X
Extreme Temperature	X	X								X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X	X								X
Landslide	X	X								X
Pandemic	X	X								X
Severe Storm	X	X	X		X			X	X	X
Severe Winter Storm	X	X	X		X			X		X
Utility Failure	X	X								X
Wildfire	X	X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.16-19 summarizes the comprehensive-range of specific mitigation initiatives the Town of Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.16-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.16-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Collins-001	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	No	No	Short term	Town of Collins, Erie County	Low-Medium	High, ensures alternative housing locations for displaced residents	Municipal Budget, CDBG	High	LPR	ES
2022-T. Collins-002	Gowanda Country Club Dam	1, 2, 3	Flood	**Problem**: The Gowanda Country Club Dam is located within the 1% SFHA (100-year floodplain). **Solution**: The Dam is privately owned and classified as a class A "low hazard" dam. The town will conduct outreach to the owners about the location within the floodplain and potential risks of increased flooding or failure, and support inspections or updates as deemed necessary by NYSDEC Dam Safety.	Yes	No	Short term	Town of Collins, Gowanda Country Club	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-T. Collins-003	Creek/Stream Debris	1, 2	Flood, Severe Storm,	**Problem**: Creeks and streams within the town become inundated with debris during and after hazard events	No	No	Ongoing once established	Town of Collins Highway	Medium	High, reduces flooding	Municipal Budget, HMA	High	LPR, NSP	PR, NR

Table 9.16-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	Removal Program		Severe Winter Storm	and exacerbates damages and flooding along the banks. **Solution**: The Town Highway Department will begin to implement a debris removal program after hazard events. The town will ensure that trees are monitored before storms and maintained to reduce impacts during events. After heavy storms, the town will assess damages and remove debris to ensure water flow and reduce backup.										
2022-T. Collins-004	Bridge/Culvert Inspection Program	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA. **Solution**: The Town Highway Department will begin to implement a bridge and culvert inspection and maintenance program to reduce road closures and roadway flooding. As damages are identified and reported, the town will seek funding to upsize and repair and replace culverts and bridges according to the needs.	No	No	Ongoing once established	Town of Collins Highway	Medium	High, reduces flooding	Municipal Budget, HMA	High	LPR, SIP	PR, SP
2022-T. Collins-005	Emergency Generators	1, 2	All Hazards	**Problem:** Town of Collins Water Districts #1 and #3 pump houses need back-up generators. **Solution:** The town will seek funding to install automatic, permanent generators at the above locations. The town will ensure that generators are placed in locations way from additional hazards (i.e. flooding, storm damages, etc.).	Yes	No	Short	Town of Collins	Medium, estimated $50,000/ generator	High, ensures continuity of operations at critical facilities	Municipal Budget, CDBG	High	SIP	ES

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.16-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Collins-001	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Collins-002	Gowanda Country Club Dam	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Collins-003	Creek/Stream Debris Removal Program	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
2022-T. Collins-004	Bridge/Culvert Inspection Program	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-T. Collins-005	Emergency Generators	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.16.9 Action Worksheets

The following action worksheets have been developed by the Town of Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Creek/Stream Debris Removal Program		
Project Number:	2022-T. Collins-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Creeks and streams within the town become inundated with debris during and after hazard events and exacerbates damages and flooding along the banks.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Department will begin to implement a debris removal program after hazard events. The town will ensure that trees are monitored before storms and maintained to reduce impacts during events. After heavy storms, the town will assess damages and remove debris to ensure water flow and reduce backup.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, reduces flooding
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Medium	**Mitigation Action Type:**	Local Plans and Regulations., Natural Systems Protection.
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	Ongoing once established	**Potential Funding Sources:**	Municipal Budget, HMA
Responsible Organization:	Town of Collins Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Ask residents to alert town to dangerous trees	$1,000	Reactive. Likely to miss most trees.
	Remove all trees along areas near creek/streams	N/A	Not feasible/environmentally damaging

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Creek/Stream Debris Removal Program	
Project Number:	2022-T. Collins-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces damages from debris
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	Town of Collins Highway
Political	1	
Legal	1	
Fiscal	1	
Environmental	0	Town will ensure to meet environmental requirements
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	Ongoing once established
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Bridge/Culvert Inspection Program		
Project Number:	2022-T. Collins-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Bridges and culverts and become damaged and clogged from debris during flood and storm events. Many bridges in the town are located within the 1% SFHA.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Department will begin to implement a bridge and culvert inspection and maintenance program to reduce road closures and roadway flooding. As damages are identified and reported, the town will seek funding to upsize and repair and replace culverts and bridges according to the needs.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, reduces flooding
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Medium	**Mitigation Action Type:**	Local Plans and Regulations.PR, Natural Systems Protection.SP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	Ongoing once established	**Potential Funding Sources:**	Municipal Budget, HMA
Responsible Organization:	Town of Collins Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Bridge/Culvert Inspection Program	
Project Number:	2022-T. Collins-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces damages from storm events
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	Town of Collins Highway
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding to upsize/replace culverts
Environmental	0	Town will ensure to meet environmental requirements
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	Ongoing once established
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Emergency Generators		
Project Number:	2022-T. Collins-005		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Town of Collins Water Districts #1 and #3 pump houses need back-up generators.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will seek funding to install automatic, permanent generators at the above locations. The town will ensure that generators are placed in locations way from additional hazards (i.e. flooding, storm damages, etc.).		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures continuity of operations at critical facilities
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Medium, estimated $50,000/ generator	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Municipal Budget, HMA
Responsible Organization:	Town of Collins	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)

Alternatives:	Action	Estimated Cost	Evaluation
	No Action	$0	Current problem continues
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Emergency Generators	
Project Number:	2022-T. Collins-005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures safe water
Property Protection	1	Critical Facility
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 55-Section-9.16-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.17 Town of Concord

This section presents the jurisdictional annex for the Town of Concord. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Concord's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.17.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Concord's hazard mitigation plan primary and alternate points of contact. The Town of Concord followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: The Emergency Management and Supervisor's office. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.17-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael Willibey, Emergency Manager Address: 86 Franklin Street, Springville, NY Phone Number: 716-998-0925 Email: Cd153oem@gmail.com	Name/Title: Clyde Drake, Supervisor Address: 86 Franklin Street, Springville, NY Phone Number: 716-592-4946 Email: concordtownsupervisor@gmail.com
NFIP Floodplain Administrator	
Name/Title: Jeffrey Singleton, Code Enforcement Officer Address: 86 Franklin Street, Springville, NY Phone Number: 716-592-4946 Email: concordcode@gmail.com	

9.17.2 Municipal Profile

The Town of Concord is situated in southern Erie County and contains the Village of Springville plus the ham. let's of Morton's Corners, East Concord, Fowlerville, Glenwood and Wyandale. The town is approximately 70 square miles in area and is approximately 30 miles from downtown Buffalo. The town's southern boundary is the pristine Zoar Valley of the Cattaraugus Creek which is a well-known recreational attraction. The Towns of Collins and North Collins are Concord's western border. The Towns of Boston and Colden form the northern boundary and the Town of Sardinia are the eastern border. The upper reaches of the Eighteen Mile Creek are within the town.

The town was first settled by Europeans in 1807 and incorporated in 1812. The town was originally much larger, stretching across the entire south part of the county. The town, however, was reduced by formation of the towns

of Collins, North Collins, and Sardinia. The town is believed to be named after Concord, Massachusetts, by early settlers from New England (Town of Concord 2016). Historically, Springville was the center of a prosperous agricultural district, providing services and goods to farmers in the countryside and serving as a market for agricultural products. Today, agricultural value to the local economy is diminishing. Commercial and industrial enterprises within the town exist in and around the Village of Springville. Kissing Bridge, a popular ski resort, is located within the town. In the early 1980's of US Route 219 was constructed as a limited access highway from Buffalo south to Springville which spurred development of a modern "big box" retail area (Town of Concord 2016). NYS Routes 39 also traverses the town.

According to the U.S. Census, the 2010 population for the Town of Concord was 4,198. The estimated 2019 population was 4,186, a nearly zero percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.1 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.17.3 Jurisdictional Capability Assessment and Integration

The Town of Concord performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.17.3). The Town of Concord's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Concord. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.17-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL3-1986, Town of Concord. 1986. Fire Prevention and	Local	Code Enforcement Officer

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
			Building Construction., Chapter 72		
Comment: Provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Concord. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this article. The Building Code requires that new structures be built to minimize exposure to natural hazards.					
Zoning Code	Yes	No	Town of Concord. 2005. Zoning, Chapter 150.	Local	Code Enforcement Officer and Planning Board
Comment: Comprehensive Zoning Plan is hereby established for the area of the Town of Concord outside the Village of Springville by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The Comprehensive Zoning Plan, set forth in the text and map which constitute this chapter, is adopted to promote, and protect public health, safety, comfort, convenience, prosperity, and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets or roads; to secure safety from fire, flood, panic and other dangers; to enhance the environment by the conservation of certain open land or wetland areas with certain desirable or unique characteristics worthy of preservation; to facilitate the adequate provision of transportation, parks, schools and other public requirements, including the transmission of power; and to preserve and promote the attractiveness of the Town of Concord.					
Subdivision Ordinance	Yes	No	Local Law 1-1997; Subdivision Ordinance, Chapter 129	Local	Code Enforcement Office and Planning Board
Comment: It is declared to be the policy of the Town of Concord to consider land subdivision plats as part of a plan for the orderly, efficient, and economical development of the Town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.					
Stormwater Management Ordinance	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: While the town does not have a standalone ordinance for growth management, it is referenced in the Comprehensive Plan.					
Site Plan Review	Yes	No	Town of Concord. 2005; Chapter 150 Zoning, Article XXXIII site Plan Review	Local	Planning Board
Comment: Unless otherwise provided and as regulated by the Subdivision Regulations of the Town of Concord, a site plan review and a site plan approval shall be required for all uses, buildings and structures that require a building permit or certificate of zoning compliance under this chapter and for which an application therefor has been made to the Town of Concord, except for a single-family dwelling or a two-family dwelling and its permitted accessory uses, buildings or structures, prior to the issuance of a building permit or certificate of zoning compliance. Site plans shall include: Site grading and landscape design; preliminary engineering plans of storm drainage system, public utility extensions, water supply, and sanitary sewer facilities					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Local Law 1-1987; Flood Damage Prevention	Local	FPA
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program. The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Local Law 2-1993; Stormwater Management	Local	Town Highway Department
Comment: The general purpose of this chapter is to provide for efficient, economic, environmentally safe, and legal operation of the Town's publicly owned treatment works (POTW). More specifically, there is a purpose to prevent the introduction of substances into the town's publicly owned treatment works (POTW) that will: • Interfere with the POTW in any way. • Pass through the POTW to the state's waters and cause contravention of standards for those waters or cause violation of the POTW's State Pollutant Discharge Elimination System (SPDES) permit. • Increase the cost or otherwise hamper the disposal of POTW sludge and/or residuals. • Endanger municipal employees. • Cause air pollution or groundwater pollution, directly or indirectly. • Cause, directly or indirectly, any public nuisance condition.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	LL3-1995, Chapter 59 Unsafe Buildings	Local	Code Enforcement
Comment: Unsafe buildings pose a threat to life and property in the Town of Concord. Buildings and structures may become unsafe by reason of damage by fire, the elements, age, or general deterioration. Vacant buildings not properly secured at doorways and windows also serve as an attractive nuisance for young children who may be injured therein, as well as a point of congregation by vagrants and transients. A dilapidated building may also serve as a place of rodent infestation, thereby creating a health menace to the community. Debris, rubble, or parts of buildings left on the ground and not removed constitute a dangerous, unhealthy, and unsightly condition. It is the purpose of this chapter to provide for the safety, health, protection and general welfare of persons and property in the Town of Concord by requiring such unsafe buildings to be repaired or demolished or removed.					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Concord and Village of Springville Joint Comprehensive Plan, 1999	Local	Planning Board, Code Enforcement
Comment: The Comprehensive Plan has the goals					

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
1) to preserve, protect, and enhance sensitive environmental conditions, including woodlands, steep slopes, waterways, habitat areas, and scenic resources. 2) In conjunction with Erie and Cattaraugus Counties, advocate for environmental protection and enhancement of the Zoar Valley and the town's other stream and creek valleys, including support for the Eighteen Mile Creek Watershed Plan being prepared by the Western New York Land Conservancy. 3) Continue to maintain and enhance village water and sewer facilities, including the program of reducing storm water infiltration into the sanitary sewer system.					
Capital Improvement Plan	Yes	No	Town Capital Improvement Plan	Local	Town Board
Comment: The town can progress hazard mitigation projects through its CIP.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County Comprehensive Emergency Plan	County	County
Comment: The CEMP improves emergency coordination and response.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Concord to oversee and track development.

Table 9.17-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The level of buildout in the town is unknown.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Concord and their current responsibilities which contribute to hazard mitigation.

Table 9.17-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Town Highway Department staff ensure safe passage over town roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Town Highway Department staff coordinate emergency response
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRed
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Highway Department
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Board members closely review development proposals and consider the potential impact of hazard impacts
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Highway staff understand the impact of hazard impacts upon highways and other infrastructure.
Planners or engineers with an understanding of natural hazards	Yes	Town Highway Department staff understand the impact of hazard impacts upon highways and other infrastructure.
Staff with expertise or training in benefit/cost analysis	Yes	Consulting Engineer

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	CEO and Consulting Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	Yes	Consulting Engineer
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	Yes	Consultants
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Consulting Engineer

Fiscal Capability

The table below summarizes financial resources available to the Town of Concord.

Table 9.17-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Concord.

Table 9.17-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Links to established agency websites
Warning systems for hazard events	Yes	CodeRed
Natural disaster/safety programs in place for schools	Yes	School System/Board of Cooperative Education Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Concord.

Table 9.17-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	8, 9	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.17-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.17.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Jeffrey Singleton, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Concord.

Table 9.17-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Concord	4	8	$58,398	4	4

Source: *FEMA 2020a and 2020b*
Notes:
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

Areas prone to flooding in the town are mainly agricultural fields. There are not any Risk MAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction. The town relies upon consulting engineers for guidance to address future flooding due to climate change.

NFIP Compliance

The Town of Concord does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in January 2011. The Code Enforcement Office is responsible for floodplain administration and the CEO is a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that its floodplain management staff would benefit from assistance or training to support its floodplain

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

management program. The town makes Substantial Damage determinations at time of plan review. The town's floodplain management meets minimum requirements. The Planning Board considers flood risk when reviewing development proposals.

9.17.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Concord has identified the following routes and procedures to evacuate residents prior to and during an event.

- The town utilizes Route 219 and Route 240 as north-south evacuation routes, and Route 39 and Genesee Road as east-west routes. As evacuation proceeds, the town will continually coordinate with county officials.

Sheltering

The Town of Concord has identified the following designated emergency shelters within the town.

Table 9.17-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Commerce Drive	100	Unknown	Yes	Yes	No	Shelter
East Concord Fire Department	Genesee Road	100	Unknown	Unknown	No	No	Warming
Morton County Fire Department	Morton's Corners Road	80	Unknown	Unknown	No	No	Warming

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Concord has identified the following sites suitable for placing temporary housing units.

Table 9.17-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. Town will work to identify suitable temporary housing locations per Proposed Mitigation Action #007					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

requirements and floodplain laws. The Town of Concord has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.17-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. Town will work to identify suitable permanent housing locations, per Proposed Mitigation Action #007					

9.17.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.17-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.17-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	81	0	88	0	83	0	65	0	81	0	92	0
Multi-Family	0	0	0	0	0	0	0	0	1	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**81**	**0**	**88**	**0**	**83**	**0**	**65**	**0**	**82**	**0**	**92**	**0**
Recent Major Development and Infrastructure from 2015 to Present												
Gas Transmission Line	Commercial		Pipeline		West end of town		HAZMAT		Tennessee Gas transmission line			
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
Genesee Road Solar	Commercial		350-megawatt solar farm		Concord/Sardinia line		Unknown		Solar farm			

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.17.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Concord's risk assessment results and data used to determine the hazard ranking discussed later in this section.

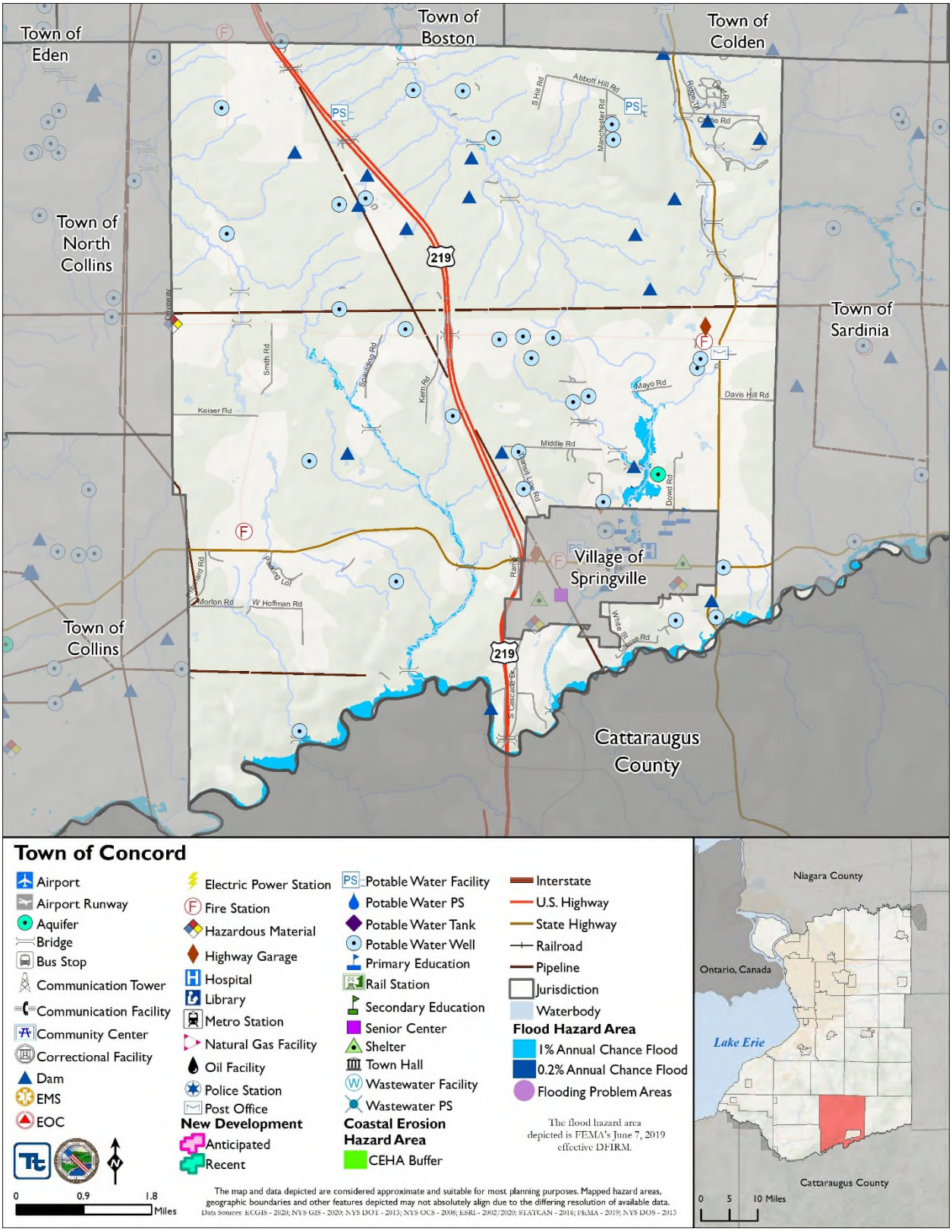
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

using mapping techniques and technologies and for which the Town of Concord has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

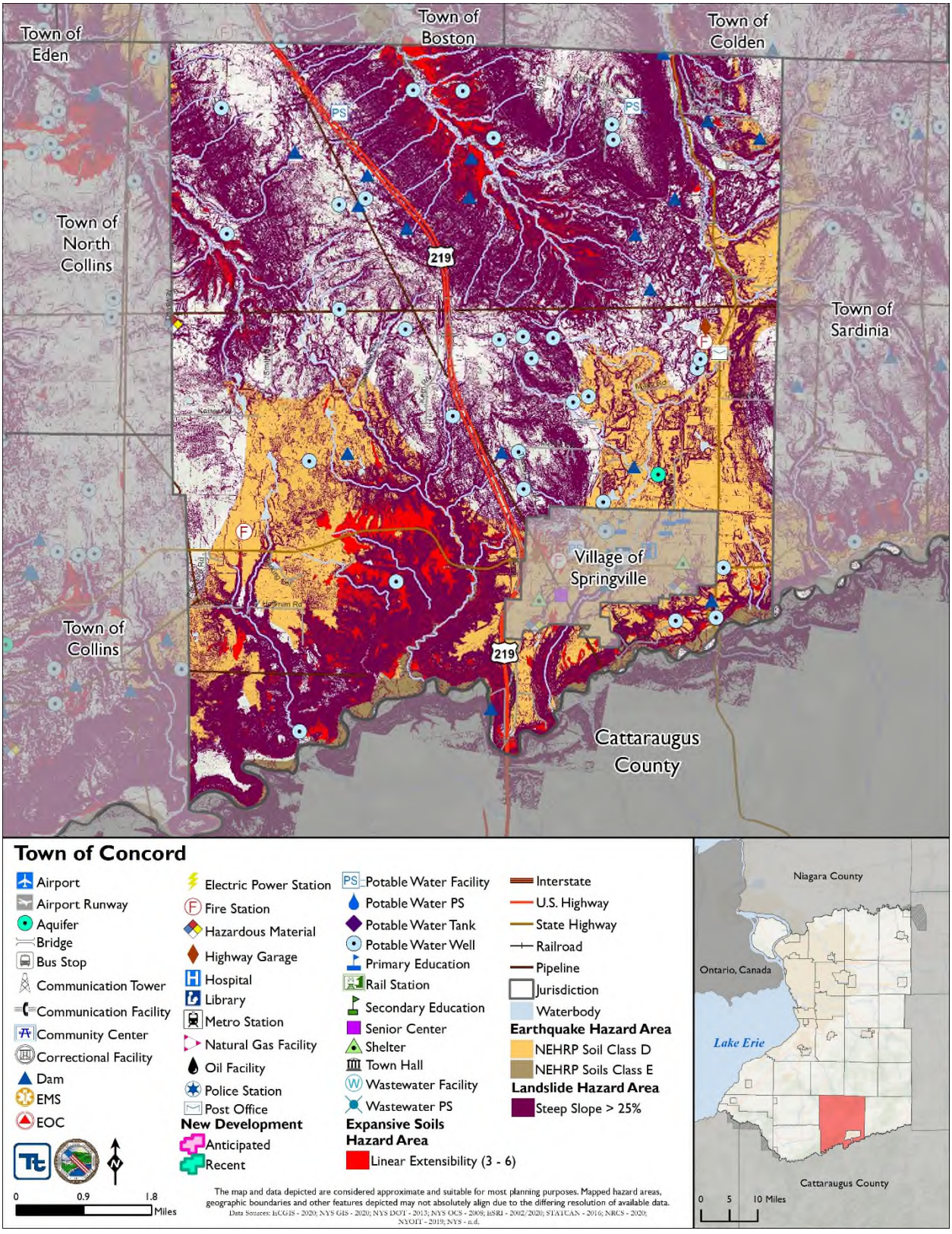
Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.17-1. Town of Concord Hazard Area Extent and Location Map 1



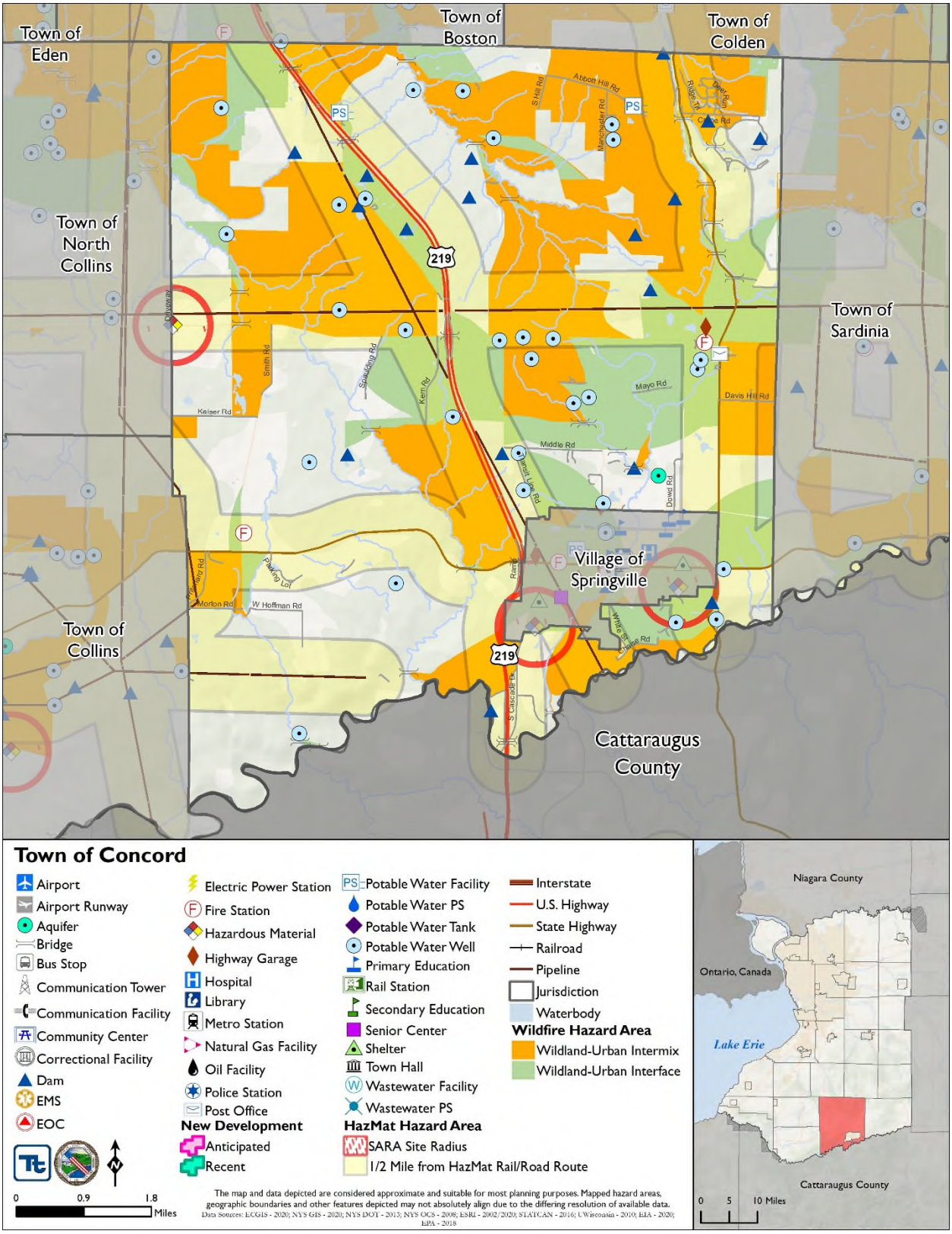
Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.17-2. Town of Concord Hazard Area Extent and Location Map 2



Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.17-3. Town of Concord Hazard Area Extent and Location Map 3



Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Concord's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.17-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.17-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, town did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, town did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, town did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, town did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, town did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, town did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Concord's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Concord. The Town of Concord has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated agreement with the following Hazard Rankings:

Table 9.17-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Medium	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.17-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Springville Dam	Dam	X	X	2022-Town of Concord-003

Source: FEMA 2021

Identified Issues

After review of the Town of Concord's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Concord has identified the following vulnerabilities within their community:

- There is erosion occurring on county highways.
- The town hall facility lacks backup power and is a critical facility.
- The Springville dam is a recognized high hazard dam and is identified as being in the Special Flood Hazard.
- Culverts are undersized on several roadways.
- Tree trimming is needed in specified locations to prevent power failure.
- Locations for temporary and permanent housing have not been identified.
- There are four Repetitive Loss Properties in the town

9.17.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.17-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Continue maintenance of drainage ditches, culverts and related structures	Flood	Not Identified	Highway	Ongoing	Cost		1. Discontinued
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability
	The Town will continue evaluate land that may be purchased that falls within the flood plain areas of the Town for recreation and stormwater management purposes	Flood	Not Identified	Town Board	Ongoing	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Legal, Town Board, Code Enforcement	Ongoing	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Concord has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The town coordinates with the County Highway Department to reduce damage from landslides and erosion throughout the town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Concord participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (FEMA 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.17-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	-		-	-	-	X
Cyber Attack	-	X	-	-	-		-	-	-	X
Earthquake	-	X	-	-	-		-	-	-	X
Expansive Soils	-	X	-	-	-		-	-	-	X
Extreme Temperature	-	X	-	-	-		-	-	-	X
Flood	-	X	-	X	-	X	X	X	X	X
Hazardous Materials	-	X	-	-	-		-	-	-	X
Landslide	-	X	-	-	-		-	-	-	X
Pandemic	-	X	-	-	-		-	-	-	X
Severe Storm	-	X	-	-	-	X	-	-	-	X
Severe Winter Storm	-	X	-	-	-		-	X	-	X
Utility Failure	-	X	X	-	-		-	X	-	X
Wildfire	-	X	-	-	-		-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.17-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Concord would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number. Table 9.17-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Concord-001	Protect town hall and town highway barns from risk of power failure	1	All Hazards	**Problem**: The Town Hall facility and Town Highway barns lack backup power, and these are critical facilities. **Solution**: The Town Highway Department and engineer will determine which size generators to purchase and will then install it at Town Hall and/or the Highway Barns.	Yes	No	Within 5 years	Town Highway Department, Town Engineer, Town Board	~$75,000 estimated cost to install generator	Ensure continued operations at this critical facility	HMGP, BRIC, Municipal Budget	High	SIP	ES
2022-Town of Concord-002	Erosion along county roadways	1	Flood, Severe Storms	**Problem:** Several roadways owned by the county are eroding due to flood events. Grote Road, Trevett Road, Mill Street, Route 240, Cattaraugus Street, Belscher Road. **Solution:** The county will address erosion and flooding issues along county roadways.	No	No	Within 3 years	County Highway Department	TBD by engineering analysis	Ensure continued emergency access over these roads	County, HMGP, BRIC, Municipal Budget	High	SIP	PP
2022-Town of Concord-003	Protect the Springville Dam from exposure to the 0.2% annual chance flood event	1	Flood	**Problem:** The Springville dam is county owned and identified as being in the Special Flood Hazard Area. **Solution:** The town will contact the county and encourage completion of a	Yes	No	Within 5 years	Town Highway Department, County Public Works	TBD by engineering analysis	Ensure continuity of flood protection services at this critical facility.	High Hazard Potential Dam grant, HMGP, BRIC, county budget	High	EAP	PI

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				survey to determine needed actions to protect the dam.										
2022-Town of Concord-004	Replace undersized/blocked culverts along several roadways that flood during heavy rainfall	1,2	Flood	**Problem**: Culverts along several roadways including Springville-Boston Road (county), Sharp Street (county) Morton Road (town), Kaiser Road (town) Route 240/Middle Road (county) and Ross Road (town) are undersized and blocked. **Solution**: Town staff will determine the correct repair for each roadway, which may include culvert replacement. Town Highway Department will implement these mitigation measures. The town will encourage the county to address culvert issues on county-owned road.	No	No	Within 5 years	Town Highway Department, County Highway Department	TBD by engineering analysis per road segment	Continued service and access by emergency access vehicles	BRIC, HMGP, CHIPS, Town budget, county budget	High	SIP	SP
2022-Town of Concord-005	Tree Trimming along roadways to prevent utility outages	1	Utility Failure	**Problem**: Several roadways in the town are vulnerable to power failure due to trees falling on utility lines during storms/wind events.	No	No	Ongoing once established	Town Highway Department, County Highway Department	Ongoing annual costs	Prevent utility failure and ensure continued service	County and Town Budget	High	NSP	NR

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will work to trim trees away from utilities.										
2022-Town of Concord-006	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Help residents to live elsewhere than flood prone housing.	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP
2022-Town of Concord-007	Identify locations for temporary and permanent housing	2	All Hazards	**Problem:** The town cannot identify locations for temporary and permanent housing	No	No	Within 5 years	CEO, FPA	Staff Time	Improve health and safety of residents who	Municipal Budget, HMGP	High	SIP	ES

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.17-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				when needed after a disaster. **Solution:** The CEO and FPA will work with the county to identify and potentially secure access to sites to locate temporary and permanent housing						are displaced by a disaster				

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.17-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Concord-001	Protect town hall and town highway barns facility from risk of power failure	1	1	1	1	1	1	1	1	1	1	1	0	1	0	12	High
2022-Town of Concord-002	Erosion along county roadways	1	1	1	1	0	1	0	1	1	1	1	1	1	1	12	High
2022-Town of Concord-003	Protect the Springville Dam from exposure to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Town of Concord-004	Replace undersized/blocked culverts along several roadways, town-owned and county-owned	1	1	1	1	0	1	0	1	1	1	0	0	1	1	10	High
2022-Town of Concord-005	Tree Trimming along roadways to prevent utility outages	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Town of Concord-006	Residential Property Flood Mitigation.	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High
2022-Town of Concord-007	Identify locations for temporary and permanent housing	1	1	1	1	0	1	0	1	1	1	0	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.17.9 Action Worksheets

The following action worksheets have been developed by the Town of Concord to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Concord Action Worksheet			
Project Name:	Protect town hall facility and town highway garage from risk of power failure		
Project Number:	2022-Town of Concord-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Town Hall facility lacks backup power, and these are critical facilities.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will determine the correct generator to install at the Town hall to provide protection from power failure. The Department will then install it at the Town Hall and or Highway garage.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect the town hall from power failure	**Estimated Benefits (losses avoided):**	Ensure continuity of services from these critical facilities
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	~$75,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	HMGP, BRIC, Municipal budget
Responsible Organization:	Town Highway Department, Town Engineer, Town Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues
	Construct solar field	High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect town hall facility from risk of power failure	
Project Number:	2022-Town of Concord-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will preserve critical services provided at the town facilities
Property Protection	1	Project will protect town facilities from damage during power outages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	5 years
Agency Champion	1	Town Highway Department, Town Engineer, Town Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Concord Action Worksheet			
Project Name:	Replace undersized/blocked culverts along several roadways		
Project Number:	2022-Town of Concord-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Culverts along several roadways including Springville-Boston Road (county), Sharp Street (county) Morton Road (town), Kaiser Road (town) Route 240/Middle Road (county) and Ross Road (town) are undersized and blocked.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will determine the correct repair for each roadway, which may include culvert replacement. The Town Highway Department will conduct a feasibility study and then implement the mitigation measures chosen. The town will encourage the county to address hazard issues along county roadways.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect to the 0.2% annual chance flood hazard	**Estimated Benefits (losses avoided):**	Ensure continuity of services along these critical roadways
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by engineering analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	HMGP, BRIC, town budget
Responsible Organization:	Town Highway Department, County Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues
	Construct solar field	High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Replace undersized/blocked culverts along several roadways	
Project Number:	2022-Town of Concord-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will preserve passageway over important town roadways
Property Protection	1	Project will protect passage along public roadways
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	5 years
Agency Champion	1	Town Highway Department, County Highway Department
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 56-Section-9.17-Concord-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.18 Village of Depew

This section presents the jurisdictional annex for the Village of Depew. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Depew's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.18.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Depew's hazard mitigation plan primary and alternate points of contact. The Village of Depew followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Code Enforcement, Administrator, Mayor, and Emergency Manager. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.18-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: RJ Neiman, Emergency Manager Address: 85 Manitou St. Depew, NY 14043 Phone Number: 716-683-1400 Email:rniewman@villageofdepew.org	Name/Title: Kevin Peterson, Mayor Address: 85 Manitou St. Depew, NY 14043 Phone Number: (716) 683-7451 Email: kpeterson@villageofdepew.org
NFIP Floodplain Administrator	
Name/Title: Anthony Fischione, Code Enforcement Officer Address: 85 Manitou St. Depew, NY 14043 Phone Number: (716) 683-7451 Email: afischione@villageofdepew.org	

9.18.2 Municipal Profile

The Village of Depew straddles two towns: it is divided by Transit Road, the boundary between the Town of Lancaster and the Town of Cheektowaga. The village also shares a border with the Village of Lancaster. The village is 11 miles east of downtown Buffalo.

The village area was first settled by members of the Erie Indian tribe and later by the Seneca. One of the earliest white settlers in the area was Appolos Hitchcock, who arrived in 1808. The 1825 opening of the Erie Canal spurred rapid settlement as farmers were now able to ship their crops to large cities like New York. In the late 1830s, large numbers of German immigrants moved into the area. In the late 1840s, immigrants from Ireland and Britain arrived seeking work on the railroads. Dutch immigrants settled in the village in the mid-1800s and Hungarians and Ukrainian emigrants arrived after 1913. Construction of the New York Central Railroad repair

shops spurred large-scale development in Depew. By 1893, the National Car Wheel Works, the Gould Coupler Works, the Union Car company, and the Brassworks were built and in operation. By 1900, the New York Central shops employed 1,000 men.

The village incorporated in 1894 at which time the population was 2,000 residents. In 1912, after moving back and forth between the north and south halves of Depew, village hall was finally settled permanently within the village's south side Growth of the village slowed during the Great Depression but the Second World War revived the economy as factories produced mass amounts of war material (Village of Depew 2018).

According to the U.S. Census, the 2010 population for the Village of Depew was 15,303. The estimated 2019 population was 15,102, a 1.3 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.0 percent of the population is 5 years of age or younger and 19.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.18.3 Jurisdictional Capability Assessment and Integration

The Village of Depew performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.18.3). The Village of Depew's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Depew. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.18-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 76 Local Law No. 9-2011	Local	Building Inspection/Code Enforcement

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code} and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.*					
Zoning Code	Yes	No	Chapter 260 Local Law No. 5-2012	Local	Building Inspection/Code Enforcement
Comment: *The purpose of this chapter is to provide for the orderly growth of the Village of Depew by setting minimum requirements in accordance with a comprehensive plan, designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. Specifically, the Zoning Law is adopted to:* *1) Filling of vacant or improved land of any size shall not occur without a grading and drainage plan approved by the Code Enforcement Officer.* *2) The construction of earthen berms and similar significant landscaping features, including retaining walls, requires grading drainage plan to be approved by the Code Enforcement Officer.* *3) The landscape plan shall show the location of all existing trees to be preserved and/or removed, the location of all trees and low level plantings, a planting schedule indicating the number of plant species, their size and common name. The plan shall also include typical planting details for trees and shrubs and specifications for ground cover with germination rates.* *4) Signs must be anchored to prevent overturning or becoming windblown.* *5) Site plan shall have a rough sketch (to scale), showing the locations and dimensions of principal and accessory structures, parking areas, vehicular ingress and egress points, proposed signage, existing and proposed vegetation, any other proposed exterior site features, anticipated changes in topography and natural site features, including floodplains, floodways and/or regulated wetlands or water bodies.*					
Subdivision Ordinance	No	No	-	-	-
Comment:					
Stormwater Management Ordinance	Yes	Yes	Chapter 188 Local Law No. 1-2008	Local	DPW and Stormwater Management Officer
Comment*: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 188-2A. This chapter seeks to meet those purposes by achieving the following objectives: 1) To establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 188-2A. 2) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels. 3) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *A property condition disclosure statement must be presented to the buyer of a property. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract.*					
Growth Management	Yes	No	Chapter 260 Local Law No. 5-2012	Local	Building Department
Comment: *The purpose of this chapter is to provide for the orderly growth of the Village of Depew by setting minimum requirements in accordance with a comprehensive plan, designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.*					
Site Plan Review	Yes	No	260-48 through 53 Local Law No. 5-2012	Local	Planning Board
Comment: *The goals and objective of site plan review include the following: 1) Filling of vacant or improved land of any size shall not occur without a grading and drainage plan approved by the Code Enforcement Officer. 2) The construction of earthen berms and similar significant landscaping features, including retaining walls, requires grading drainage plan to be approved by the Code Enforcement Officer. 3) The landscape plan shall show the location of all existing trees to be preserved and/or removed, the location of all trees and low level plantings, a planting schedule indicating the number of plant species, their size and common name. The plan shall also include typical planting details for trees and shrubs and specifications for ground cover with germination rates. 4) Signs must be anchored to prevent overturning or becoming windblown. 5) Site plan shall have a rough sketch (to scale), showing the locations and dimensions of principal and accessory structures, parking areas, vehicular ingress and egress points, proposed signage, existing and proposed vegetation, any other proposed exterior site*					

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
features, anticipated changes in topography and natural site features, including floodplains, floodways and/or regulated wetlands or water bodies.					
Environmental Protection Ordinance	Yes	Yes	Chapter 98 Local Law No. 2-1979	Local	Village Planning Board
Comment: *The purpose of this chapter is to implement for the Village of Depew SEQR and Part 617.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 109 Local Law No. 1-2019	Local	Building Inspections/Code Enforcement
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and;* *F. Qualify and maintain for participation in the National Flood Insurance Program.* *§109-16 and 17 provide standards for new and substantially approved residential and non-residential structures. If new or substantially improved structures are located in the SFHA, the structure must have their lowest floor elevated to or above two feet above the BFE.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 187 (Sewer Use), Section 42; amended by Local Law No. 4-1988	Local	DPW and Stormwater Management Officer
Comment: *The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Village of Depew through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4, in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02.*					
Emergency Management Ordinance	Yes	Yes	Chapter 106 Fire Safety Local Law Number 2 of 1971.	Local	Fire Department
Comment: *The law deals with the local fire and emergency response as well as clean up of hazardous waste during disaster event. The law also states the need for municipal intervention during a natural disaster event to reduce community exposure to hazard.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	Yes	No	Chapter 76 (Building Construction and Fire Prevention); adopted on November 28, 2011	Local	Code Enforcement Officer
Comment: *This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code} and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.*					
Disaster Reconstruction Ordinance	Yes	No	Chapter 76 (Building Construction and Fire Prevention); adopted on November 28, 2011	Local	Code Enforcement Officer
Comment: *This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code} and the State Energy Conservation Construction Code (the Energy Code) in the Village of Depew. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.*					
Other	No	-	-	-	-
Comment:					

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster, Village of Lancaster, and the Village of Depew Joint Comprehensive Plan, 2018	Local	Village Planning
Comment: *The Comprehensive Plan serves as the legal foundation for all zoning and land use regulation decisions made in each municipality. New York State Law dictates that Town and Village planning, zoning, capital budgeting and other decisions should be based on a comprehensive plan that represents the community's vision for its future. This Plan's articulation of the shared vision for the three communities helps ensure that land use regulations are built on a solid foundation. The goals of the 2018 Comprehensive Plan include:* *1) Prioritize a list of critical open spaces to preserve the community's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements.* *2) Allow conservation development in the Town code.* *3) The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features.* *4) The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities.* *5) Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities.* *6) Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought.* *7) Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters.* *8) Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects.* *9) The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.*				
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Village of Depew Stormwater Management Plan, May 1, 2015-April 30, 2017	Local	Village Planning
Comment: *The SWMP Plan is based on the Federal Stormwater Phase II rule, issued in 1999, which requires municipal separate storm sewer system (MS4) owners and operators, in U.S. Census-defined urbanized areas, to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures, include: 1. Public Education and Outreach 2. Public Involvement / Participation 3. Illicit Discharge Detection and Elimination 4. Construction Site Runoff Control 5. Post-Construction Stormwater Management 6. Pollution Prevention / Good Housekeeping for Municipal Operations.*					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	Yes	No	Village of Depew Stormwater Management Plan, May 1, 2015-April 30, 2017	Local	Village Planning
Comment: *The Western New York Stormwater Coalition (WNYSC) Stormwater Management Program (SWMP) Plan has been developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-10- 002). It is a shared SWMP Plan providing policy and management guidance to the regulated municipalities and agencies that are members of the WNYSC. The Village of Depew is a member of the Western New York Stormwater Coalition and a party to this SWMP Plan.*					
Habitat Conservation Plan	No	No	-	-	-

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:.					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	No	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County CEMP	County	Village Planning and County OEM
Comment: *No information available at this time*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Depew to oversee and track development.

Table 9.18-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is relatively urbanized and built out – no land available for relocation within jurisdiction.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Depew and their current responsibilities which contribute to hazard mitigation.

Table 9.18-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The planning board may approve, conditionally approve or disapprove subdivision plans for the purpose of providing for the orderly and wise development of the village and affording adequate facilities for housing, transportation, distribution, comfort, convenience, safety and the health and welfare of its population.
Zoning Board of Adjustments	Yes	The primary role of the zoning board is to review and decide cases where a relaxation of the ordinance is sought or where there is an alleged error in a zoning decision.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	The DPW handles the following services for the village: • Garbage Collection & Recycling • Large Appliance Disposal • Used Tire Recycling • Leaf Pick Up • Loose Branch Pickup (call 683-5700 for pickup) • Carcass Removal (on residential streets only) • Street Maintenance & Pothole Repair • Road Signs/Markings and Maintenance • ROW Tree Removal and Trimming • Storm & Sanitary Sewer Maintenance • Illicit Discharge Complaints • Snow Plowing/Snow Removal
Construction/Building/Code Enforcement Department	Yes	The Building Inspection/Code Enforcement Department provides the following services: • Residential and Commercial Building Inspection and Plumbing Inspection • Sewer Certificate of Compliance - needed to sell your home • Information on building permits for building, remodeling, fences, swimming pools, storage sheds, signs (all types), decks and porches • Village code enforcement • Liaison to Zoning Board and Planning Board • Floodplain development
Emergency Management/Public Safety Department	Yes	Staffed by volunteers from the community, the primary functions of the Depew Office Emergency Management are to: • Identify, assess and prioritize local vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them. • Outline short, medium and long range measures to improve the Village's capability to manage hazards. • Provide that Village government will take appropriate actions to prevent or mitigate effects of hazards and be prepared to respond to and recover from them when an emergency or disaster occurs and provide for the efficient utilization of all available resources during an emergency. • To provide for the utilization and coordination of Village, County, State and federal programs to assist disaster victims, and to prioritize the response to the needs of the elderly, disabled, low income, and other groups which may be inordinately affected. • Provide for the utilization and coordination of Village state and federal programs for recovery from a disaster with attention to the development of mitigative programs.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Garbage Collection & Recycling Large Appliance Disposal Used Tire Recycling Leaf Pick Up Loose Branch Pickup (call 683-5700 for pickup) Carcass Removal (on residential streets only) Street Maintenance & Pothole Repair Road Signs/Markings and Maintenance

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		ROW Tree Removal and Trimming Storm & Sanitary Sewer Maintenance Illicit Discharge Complaints Snow Plowing/Snow Removal
Mutual aid agreements	Yes	Fire
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Department of Building Inspection/ Code Enforcement offers the following services: • Residential and Commercial Building Inspection and Plumbing Inspection • Sewer Certificate of Compliance - needed to sell your home • Information on building permits for building, remodeling, fences, swimming pools, storage sheds, signs (all types), decks and porches • Village code enforcement • Liaison to Zoning Board and Planning Board • Flood Plain Development
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Contracted
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Depew.

Table 9.18-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Depew.

Table 9.18-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk is in charge of website updating
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Village website is the main source for this information
Social media for hazard mitigation education and outreach	Yes	The village maintains a Facebook page where they provide events and municipal updates.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Ready Erie Preparedness App, NY Alert, Social media/media outlets – have Facebook and mostly reliant on Erie OEM social media.
Natural disaster/safety programs in place for schools	Yes	Schools have their own safety programs.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Depew.

Table 9.18-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.18-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Strong
Pandemic	Strong
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.18.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Anthony Fischione, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Depew.

Table 9.18-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Depew	14	33	$23,675	0	4

Source: *FEMA 2020a, FEMA 2020b*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Flood Vulnerability Summary

Areas that are prone to flooding within the village are within the designated floodplains. The village maintains a list of properties that have been damaged by flooding by using the floodplain maps. The village does not maintain a list of property owners interested in flood mitigation. The village does not have any RiskMAP projects underway. The Village of Depew makes Substantial Damage determinations by using the NFIP guidance. So far, no properties were declared substantially damaged for recent flood events. There have not been any mitigation projects within the village. The village's flood hazard maps adequately address the flood risk within the village.

NFIP Compliance

The Building Inspection/Code Enforcement Department is responsible for floodplain management. At this time, there are no staff members that are certified floodplain managers. The Village of Depew does not have access to resources to determine possible future flooding conditions from climate change. The floodplain management staff needs assistance to support its floodplain management program including NFIP updates for 2020. The village provides engineering capabilities for their NFIP administration services. The village would determine if proposed development on an existing structure would qualify as a substantial improvement by using NFIP resources.

The Village of Depew expressed resources as being a barrier to running an effective NFIP program. The village does not have any outstanding NFIP compliance violations. The most recent Community Assistance Contact (CAC) was on July 22, 1997. The most recent Community Assistance Visit (CAV) was on February 22, 2008. Ch #109 Local Law 2019 is the flood damage prevention ordinance and there are various other plans and programs that support the floodplain management. The floodplain management program meets the minimum requirements. The jurisdiction does not participate in the CRS program.

9.18.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Depew has identified the following routes and procedures to evacuate residents prior to and during an event. Escape Routes.

- Transit Road – State Route 78
- Broadway – State Route 20
- Walden Ave – State Route 33

Sheltering

The Village of Depew has identified the following designated emergency shelters within the village.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.18-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	85 Manitou Street, Depew	25-50	Yes	Yes	Yes	Urgent Care	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Depew has identified the following sites suitable for placing temporary housing units.

Table 9.18-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Depew High School	5201 Transit Road	20-30	Parking lot	Water/ Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Depew has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.18-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Depew High School	5201 Transit Road	20-30	Parking lot/ Vacant Lot	Water/ Electric	None

9.18.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.18-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.18-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	1	0	2	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	2	0	1	0	0	0
Other (commercial, mixed-use, etc.)	1	0	0	0	3	0	2	0	1	0	0	0
Total Permits Issued	**2**	**0**	**2**	**0**	**3**	**0**	**3**	**0**	**2**	**0**	**2**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Broadway Apartment	Multi Residential	36 units/5 structures	4510 Broadway (103.76-1-1.1)	0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Planning
Landfill Solar	Utility	5 MW 24.97 acres	4293 Broadway (103.19-1-10, 103.19-1-13)	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Planning

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.18.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Depew's risk assessment results and data used to determine the hazard ranking discussed later in this section.

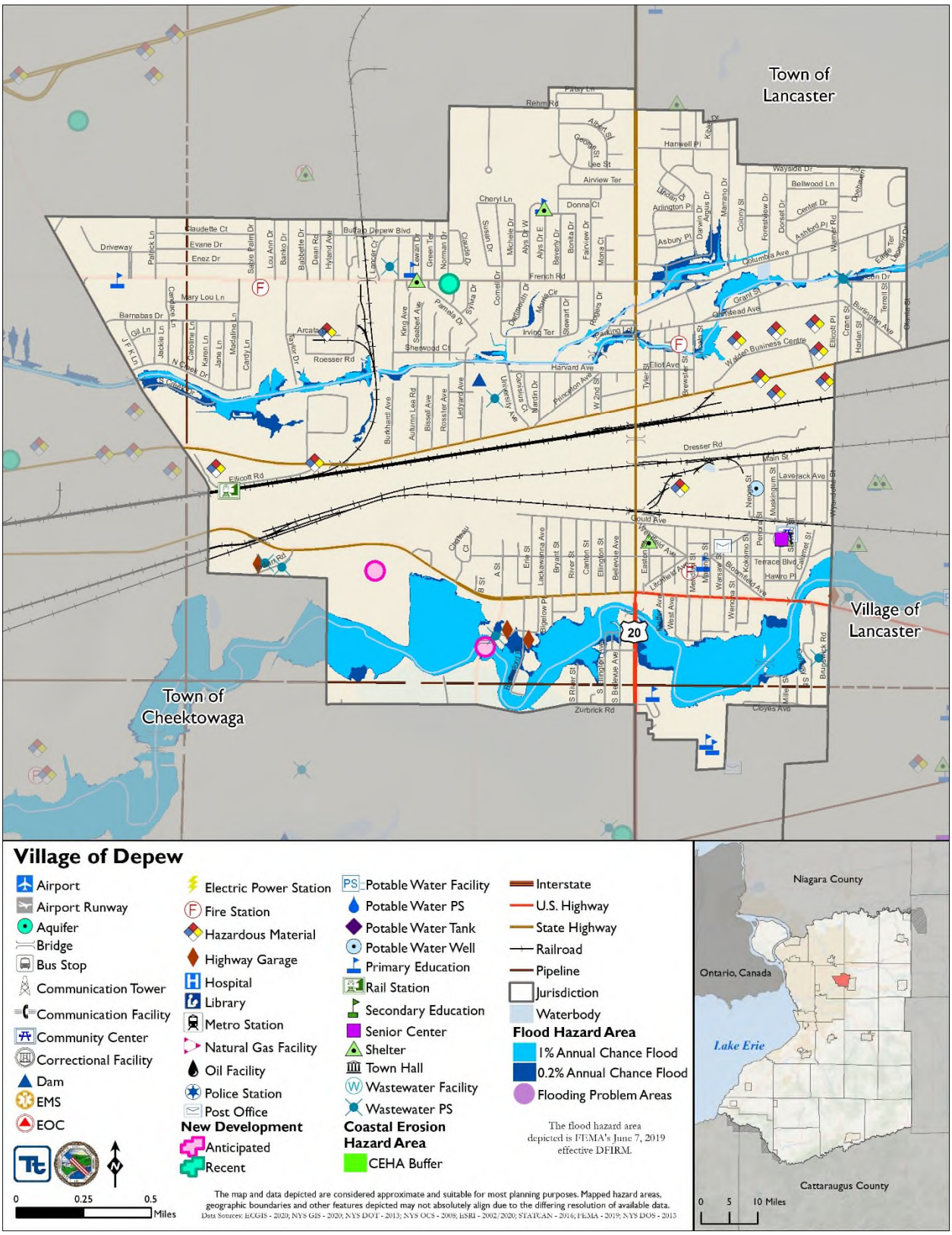
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

using mapping techniques and technologies and for which the Village of Depew has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

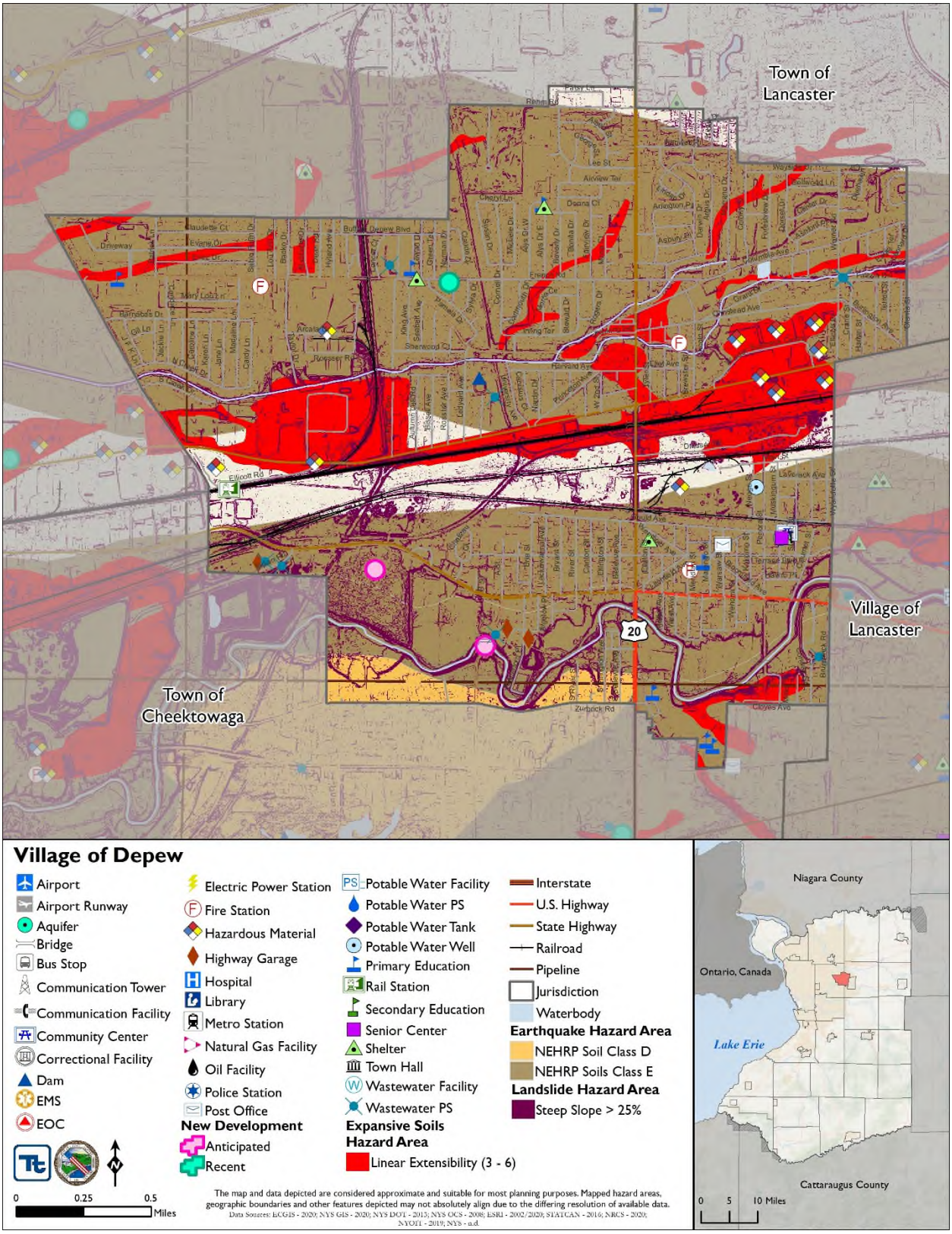
Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.18-1. Village of Depew Hazard Area Extent and Location Map 1



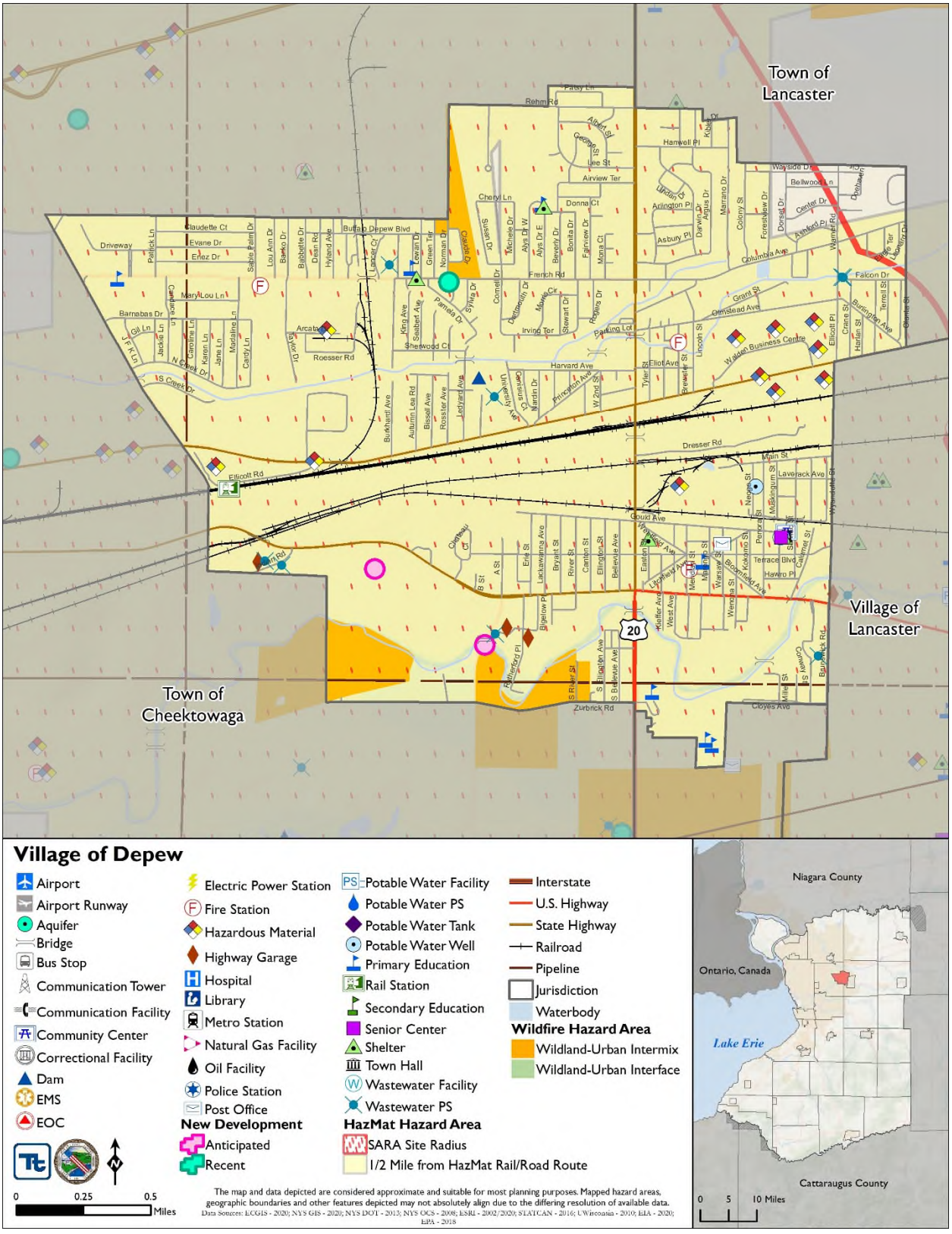
Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.18-2. Village of Depew Hazard Area Extent and Location Map 2



Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.18-3. Village of Depew Hazard Area Extent and Location Map 3



Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Depew's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.18-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.18-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No major loss – downed trees
August 11-15, 2015	Flash Flood	No	Although the County was impacted, the village did not report damages
October 28-29, 2015	High Wind	No	Although the County was impacted, the village did not report damages
November 6, 2015	Thunderstorm Wind	No	Although the County was impacted, the village did not report damages
November 12, 2015	High Wind	No	Although the County was impacted, the village did not report damages
November 18, 2015	High Wind	No	Although the County was impacted, the village did not report damages
January 11, 2017	High Wind	No	Although the County was impacted, the village did not report damages
March 8, 2017	High Wind	No	Although the County was impacted, the village did not report damages
March 13, 2017	Winter Storm	No	Although the County was impacted, the village did not report damages
July 20, 2017	Tornado	No	Although the County was impacted, the village did not report damages
August 4, 2017	Thunderstorm Wind	No	Although the County was impacted, the village did not report damages
December 10-15, 2017	Lake-effect Snow	No	Although the County was impacted, the village did not report damages
December 24-29, 2017	Lake-effect Snow	No	Although the County was impacted, the village did not report damages
January 2, 2018	Blizzard	No	Although the County was impacted, the village did not report damages
October 6, 2018	Lightning	No	Although the County was impacted, the village did not report damages
February 24, 2019	High Wind	No	Although the County was impacted, the village did not report damages
February 24, 2019	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the County was impacted, the village did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the County was impacted, the village did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the County was impacted, the village did not report damages
2020-21	COVID -19	No	The village was subject to closures and masking/social distancing requirements. Various losses not quantifiable

Notes:
EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Depew's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Depew. The Village of Depew has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village changed flood from low to high due to frequent flooding in various parts of the community.
- The village changed hazardous material incidents from low to medium. The village has many trains and tractor trailers that come through the village carrying various hazardous materials. A transfer station (located in Cheektowaga) is also located next to Cayuga Creek and threatens cascading water contamination.
    - Municipal Landfill is also adjacent to Cayuga Creek and threatens water quality.
- While storms are a major issue, the municipality has the capacity to respond and will revised the rankings for Severe Storms, Severe Winter Storms, and Utility Failure from high to medium.
- The village has historically not been threatened by earthquakes and will adjust the ranking from high to low.

Table 9.18-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	High	Medium

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Medium	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.18-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Wastewater Pump Station (unnamed)	Wastewater Pump Station		X	Yes
Warner Road #4 PS	Wastewater Pump Station		X	Yes

Source: 2021 GIS

Identified Issues

After review of the Village of Depew's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Depew has identified the following vulnerabilities within their community:

- The Wastewater Pump Station is in the 0.2% annual chance flood event.
- The Warner Road #4 PS Wastewater Pump Station is in the 0.2% annual chance flood event.
- Several, hazardous material facilities and private schools are in the earthquake hazard area
- There are several hazardous material facilities in the Village of Depew that may be at risk of experiencing damages caused by expansive soils.
- The Fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.
- The Fire department building at 45 Meridian St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- The Fire department building at 2325 George Urban Blvd. is old and needs to be renovated and expanded onto in order to increase capacity and comply with state regulations.
- The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.18-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Implementation of a radio system for the Fire Department and Office of Emergency Management that is interoperable with neighboring agencies and Erie County. Project will involve the application for a UHF system as well as the replacement of equipment that is not narrowband capable (as per FCC requirements). This will be located in each fire station, vehicle, and the Village EOC.	All Hazards	Not Identified	Fire Department	In Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Close to completion
	Debris cleanings in Cayuga and Scajaquada Creeks. Would be done periodically by the Dept. of Public Works to reduce the possibility of obstructions which could result in flooding.	Flooding	Not Identified	Public Works	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing
	Remediation and restoration of Cayuga Creek stream bank and public infrastructure at Zurbrick Rd. Stream bank is currently eroding and poses a hazard to existing homes and property located close to the bank, in addition to a village road that has partially collapsed as a result.	Flooding	Not Identified	Public Works	In Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Depew landfill under construction for land stabilization.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Planning Board, Village Board	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Recently adopted update 2019, but discontinue, for future plans
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Village Board	No Progress	Cost	-	1. Discontinue 2. 3. Staff member indicated that it is not within the village's capacity to have someone get certified at this time.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Depew has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

The village has worked on streambank restoration.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Depew participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.18-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X		X			X		X	
Expansive Soils		X		X			X		X	
Extreme Temperature		X							X	
Flood		X		X		X	X		X	
Hazardous Materials		X							X	
Landslide		X							X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X							X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.18-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Depew would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.18-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Depew -001	Earthquake mitigation	1,2	Earthquake	**Problem**: Several, hazardous material facilities and private schools are in the earthquake hazard area. **Solution**: The village public works shall work with the property owners and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes	Yes	None	Within 6 months for outreach	Village of Depew	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Village Budget	High	EAP	PI
2022-Village of Depew -002	Expansive soil mitigation	1,2	Expansive Soils	**Problem:** There are several hazardous material facilities in the Village of Depew that may be at risk of experiencing damages caused by expansive soils. **Solution:** Work with the facility owner to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.	Yes	None	Within 6 months for outreach	Village of Depew	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the hazardous material facilities from expansive soils	Village Budget	High	EAP	PI
2022-Village of Depew -003	Fire Department Expansion #1	1,2	All	**Problem**: The Fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land. **Solution**: The village will renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The Brewster St. facility shall undergo an assessment to understand the existing	Yes	Yes	3 years	OEM	$1 million	Expanded OEM capacity	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding.	High	SIP	PP

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				surrounding land that are not viable for development. Once suitable sites have been determined, the facility shall undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage.										
2022-Village of Depew -004	Fire Department Expansion #2	1,2	All	**Problem:** The Fire department building at 45 Meridian St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land. **Solution:** The village renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. Once suitable sites have been determined, the facility will undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage. The Meridian Street facility is confined by space so will only undergo a roof elevation to accommodate for the larger new vehicles.	Yes	Yes	3 years	OEM	$1 million	Expanded OEM capacity	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding.	High	SIP	PP
2022-Village of	Fire Department	1,2	All	**Problem:** The Fire department building at 2325 George Urban Blvd. is old and needs to be renovated and expanded	Yes	Yes	3 years	OEM	$1 million	Expanded OEM capacity	HMGP, Municipal funding,	High	SIP	PP

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Depew -005	Expansion #3			onto in order to increase capacity and comply with state regulations. **Solution**: The village renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The new building shall be retrofitted to reduce any potential to flood damage. And finally, the George Urban facility shall be renovated and expanded to accommodate for new equipment, vehicles, shelter space, generator, and office space.							BRIC, FEMA Fire Fighters Funding.			
2022-Village of Depew -006	BAS System Upgrade	1,2,4	Flood	**Problem:** The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance. **Solution:** The village will acquire a new BAS system to be installed and used by Code Enforcement and the Department of Public Works. The system will be utilized between departments to facilitate work and determine specific areas of concern that might be in need of consultation or hazard mitigation measures.	No	No	1 year	Village CEO	$60,000	Facilitated work for flood mitigation and code compliance	HMGP, BRIC	High	LPR	PR

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.18-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Depew -007	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Floodplain Administrator	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) – These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) – Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) – These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) – Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) – Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) – Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) – Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.18-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Depew-001	Earthquake Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Depew-002	Expansive Soil Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Depew-003	Fire Department Expansion #1	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Village of Depew-004	Fire Department Expansion #2	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-005	Fire Department Expansion #3	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-006	BAS System Upgrade	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Depew-007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.18.8 Action Worksheets

The following action worksheets have been developed by the Village of Depew to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Fire Department Expansion #1		
Project Number:	2022-Village of Depew-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The fire department building at 112 Brewster St. is old and needs to be renovated and expanded onto in order to increase capacity. Meridian St. facility is confined by land and has limited expansion capabilities, but will need to be elevated to accommodate newer sized vehicles. Brewster St. facility also has issues pertaining to flooding but mostly on the existing land.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will renovate all three facilities to increase emergency management capacities and to increase resilience of municipal assets. The Brewster St. facility shall undergo an assessment to understand the existing surrounding land that are not viable for development. Once suitable sites have been determined, the facility shall undergo renovation at the existing facility and an expansion to accommodate for new equipment, generator, office space, shelter space, and vehicle garage space. The new building shall be retrofitted to reduce any potential to flood damage.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Reduced flood danger and increased capacity
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$1 Million	**Mitigation Action Type:**	Structural and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, Municipal funding, BRIC, FEMA Fire Fighters Funding
Responsible Organization:	OEM	**Local Planning Mechanisms to be Used in Implementation if any:**	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Rebuild an entire new facility	High	Expensive and no space
	Retrofit and rebuild	High	Most feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Fire Department Expansion #1	
Project Number:	2022-Village of Depew-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective
Technical	1	The project is technically feasible
Political	1	No political opposition
Legal	1	No legal complications
Fiscal	-1	Need financial resources
Environmental	1	No environmental issues
Social	1	Positive social impact
Administrative	1	Have administrative support
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	The village OEM
Other Community Objectives	1	Various
Total	12	
Priority (High/Med/Low)	High	

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	BAS System Upgrade		
Project Number:	2022-Village of Depew-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Code Enforcement Officer would like to get funding for digital record keeping as the village does not have any access to such systems and the department would need expanded capacity. While this system is not necessarily directly impacting the resilience of the community, the limited technology impedes the municipal government, code enforcement, and department of public works from optimizing its operation. The existing system prevents the code enforcement officer from ensuring that all structure, houses, and commercial buildings are fully in compliance with the local code and flood ordinance.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will acquire a new BAS system to be installed and used by Code Enforcement and the Department of Public Works. The system will be utilized between departments to facilitate work and determine specific areas of concern that might be in need of consultation or hazard mitigation measures.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Facilitated work for flood mitigation and code compliance
Useful Life:	10 years	**Goals Met:**	1, 2, 4
Estimated Cost:	$60,000	**Mitigation Action Type:**	Local Plans and Regulations
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP, municipal budget, BRIC
Responsible Organization:	CEO	**Local Planning Mechanisms to be Used in Implementation if any:**	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Work with neighboring municipal systems	Low	Not as effective
	Purchase new BAS	Moderate	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	BAS System Upgrade	
Project Number:	2022-Village of Depew-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	The project is cost effective
Technical	1	The project is technically feasible
Political	1	No political opposition
Legal	1	No legal complications
Fiscal	-1	Need financial resources
Environmental	1	No environmental issues
Social	1	Positive social impact
Administrative	1	Have administrative support
Multi-Hazard	0	Addresses single hazard
Timeline	1	Timeline is feasible
Agency Champion	1	The village CEO
Other Community Objectives	1	Various
Total	12	
Priority (High/Med/Low)	High	

Attachment: 57-Section-9.18-Depew-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.19 Village of East Aurora

This section presents the jurisdictional annex for the Village of East Aurora. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of East Aurora's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.19.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of East Aurora's hazard mitigation plan primary and alternate points of contact. The Village of East Aurora followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Clerk and Highway Department. The Village Administrator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.19-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Cathryn Thomas, Village Administrator Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: cathie.thomas@east-aurora.ny.us	Name/Title: Matthew Hoeh, Supt. Public Works Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: matt.hoeh@east-aurora.ny.us
NFIP Floodplain Administrator	
Name/Title: Elizabeth Cassidy, Floodplain Administrator Address: 585 Oakwood Avenue, East Aurora NY Phone Number: 716-652-6000 Email: building@townofaurora.com	

9.19.2 Municipal Profile

The Village of East Aurora is located 25 miles from downtown Buffalo and is entirely contained within the Town of Aurora. The Buffalo Creek runs through the village. The village is 2.5 square miles in size. East Aurora was first settled by whites in 1804 and incorporated as a village in 1874. The village became home to U.S. President Millard Fillmore, the nation's 13th president, who built the Millard Fillmore House while a country lawyer. The village is the birthplace of the Roycroft Arts & Crafts movement and home to Fisher-Price Toys. During the late 1800s and early 1900s, East Aurora was a very popular place for horse races in New York State. The most famous track in East Aurora, the Jewett Farm track was an innovative, one-of-a-kind track at that time. (Town of Aurora/ Village of East Aurora 2012)

According to the U.S. Census, the 2010 population for the Village of East Aurora was 6,236. The estimated 2019 population was 6,184, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.0 percent of the population is 5 years of age or younger and 23.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.19.3 Jurisdictional Capability Assessment and Integration

The Village of East Aurora performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.19.3). The Village of East Aurora's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of East Aurora. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.19-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 108 Building Construction and Fire Prevention, Adopted 2020	Local	Code Enforcement
Comment: *This article shall provide for administration and enforcement of the New York State Uniform Fire Prevention and Building Code (Uniform Code) in the Village of East Aurora. This article is adopted pursuant to § 10 of Article 2 of the Municipal Home Rule Law. Except as otherwise provided within this article, state law, or within the Uniform Code, all premises regardless of use are subject to the provisions which follow.*					
Zoning Code	Yes	No	Chapter 285 of the East Aurora Village Code	Local	Code Enforcement
Comment: The goals and intent of the zoning ordinance are as follows: 1) The design of off-street parking and loading spaces shall be graded so as to provide for the proper mitigation of stormwater and runoff. 2) The landscape plan shall delineate the location and description of all existing and proposed trees, shrubs, and plantings. To ensure proper protection of plantings and planted areas, landscape materials to be used on the site shall be identified in a planting schedule to be included on the landscape plan with the following information: Type; Common and botanical names; size; quantity; and pit or bed treatment. 3) The location of all existing and proposed topography features, including, but not limited to, site grading, open spaces, woodlands, watercourses, steep slopes, wetlands, floodplains, and watersheds.					

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	Yes	No	Chapter 227 Subdivision of Land Amended 2020	Local	Village Board
Comment: The guidance and intent of the subdivision ordinance are as follows: 1) Where a subdivision is traversed by a watercourse, drainageway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of such watercourse and of such further width or construction, or both, as will be adequate for the purpose. Adequacy will be determined by the village board.					
Stormwater Management Ordinance	Yes	Yes	Chapter 220 Stormwater Management, Updated 2019	Local	Stormwater Management Officer
Comment: 1) Use of separate storm sewers and sanitary sewers is mandatory for all future construction in the village. Construction of combined sewers will not be allowed. 2) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment:					
Growth Management	No	-	-	-	-
Comment:					
Site Plan Review	Yes	No	Chapter 285 of the East Aurora Village Code	-	Village Board
Comment: *The intent of the site plan review process is to preserve and enhance the character of a neighborhood, achieve compatibility with adjacent development, mitigate potentially negative impacts on traffic, parking, drainage, and similar environmental concerns, improve the overall visual and aesthetic quality of the Village, and increase the capability of the Zoning Code to adapt to a variety of unique circumstances.*					
Environmental Protection Ordinance	Yes	No	LL7-2019 – Environmental Review Process.	Local	-
Comment: The goals of the Environmental Protection Law are as follows: 1) Discourage the use of non-compostable plastic beverage straws and stirrers by banning their use by food service establishments using non-compostable plastic straws and stir sticks, which furthers the village's goal of reducing nonbiodegradable litter and protecting the village's important natural resources.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 142 of the East Aurora Village Code	Local	Floodplain Administrator
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* *F. Qualify and maintain for participation in the National Flood Insurance Program.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 220 of the East Aurora Village Stormwater Code	Local	Village Engineer
Comment: Stormwater carries sediment, oil, grease, nitrogen, phosphorus, and other pollutants into storm drains and then, untreated, into nearby waterbodies. MS4 regulated municipalities such as East Aurora must prepare and implement a stormwater management program to comply with state and federal stormwater regulations.					
Emergency Management Ordinance	No	-	-	-	-

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Climate Change Ordinance	No	-	-	-	-
Comment:					
Disaster Recovery Ordinance	No	-	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment:					
Other: Historic Preservation	No	-	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	Yes	Town and Village of East Aurora Regional Comprehensive Plan December 2004	Local	Village and Town of Aurora
Comment: *The intent of the Regional Comprehensive Plan is to provide a regional planning document for the communities to increase resilience and safety as well as the general well being of community members. The Plan will be individually adopted by each municipality, and it will be the responsibility of the municipalities to act upon and implement the items pertaining to their respective communities.*					
Capital Improvement Plan	No	-	-	-	-
Comment:					
Disaster Debris Management Plan	No	-	-	-	-
Comment:					
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No				
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	Yes	No	Regional Comprehensive Plan and Draft Generic Environmental Impact Statement: Towns of Aurora, Elma, Holland and Wales and Village of Aurora, 2012	Local	Village

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control for all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems. 7) Prepare open space plans to identify and prioritize important environmental features such as wetlands, floodplains, steep slopes, and watersheds.					
Shoreline Management Plan	No	-	-	-	-
Comment:					
Community Wildfire Protection Plan	No	-	-	-	-
Comment:					
Forest Management Plan	No	-	-	-	-
Comment:					
Transportation Plan	No	-	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment:					
Agriculture Plan	No	-	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Village/Town Emergency Operations Plan	Local and Federal	Village Emergency Management.
Comment: *East Aurora's Comprehensive Emergency Management Plan (CEMP) establishes policies and introduces a concept of operations spanning the direction and control of an emergency from initial monitoring through post-disaster response, recovery and mitigation.*					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	-	-	-	-

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment:					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of East Aurora to oversee and track development.

Table 9.19-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Village Board approval
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	There are several large parcels zoned commercial and residential available for development.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of East Aurora and their current responsibilities which contribute to hazard mitigation.

Table 9.19-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Commission - The Village Planning Commission was originally established by village board resolution on February 22, 1926 pursuant to Article 12A of General Municipal Law. Members of the planning commission are appointed by the Mayor and Village Board; each of the members serve a staggered three term. Duties include the review of development plans, special permits and other special projects referred to the commission by the Village Board. A statute adopted by the New York State Legislature, effective January 1, 2007, requires that that members of planning boards and commissions and zoning board of appeals receive a minimum of four hours of training per year.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Zoning Board of Adjustments	Yes	Zoning Board of Appeals - Generally, the primary purpose of the ZBA is to hold public hearings and render decisions on applications seeking relief from the Village Zoning Ordinance. Specific duties and permitted actions by the ZBA are defined under §285-68 of the East Aurora Village Code, as well as Village Law §7-712-B. Each of the five Zoning Board of Appeals members serves a five-year term (staggered). Appointments are made by the Mayor with the approval of the Village Board of Trustees. New York State Law requires that ZBA members receive a minimum of four hours of training per year. Training must be completed in order for members to be eligible for reappointment.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Planning Commission and new Environmental Stewardship Committee - The East Aurora Environmental Stewardship Advisory Committee is a citizen advisory group comprised of students, residents, businesses, and government representatives. Our mission is to act in good faith and integrity for the stewardship of our planet and all its inhabitants for today and for future generations. Through a thoughtful and respectful exchange of ideas, we will help educate residents and propose ideas and practices to Village leaders regarding sustainability and environmental matters to achieve zero waste and climate action.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The department conducts various work on local infrastructure related projects
Construction/Building/Code Enforcement Department	Yes	The Building Department serves the Town of Aurora along with the Village of East Aurora. The department handles complaints for both zoning and property maintenance issues, conducts fire inspections, and enforces building and energy code regulations as well as zoning regulations of the municipalities. The department completes plan reviews and inspections on all permits to ensure compliance with the 2020 New York State codes, and the Town of Aurora and Village of East Aurora zoning ordinances. The daily goal of the department is to ensure that all ordinances handled by this office are enforced as fairly and efficiently as possible.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Some	Use of County mass notification system
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW
Mutual aid agreements	Yes	DPW
Other	Yes	Tree Board and Historical Commission.- The board reviews all development projects and subdivision developments, and makes recommendations on all commercial, industrial, and business development. This board also makes recommendations regarding proposed changes to the ordinance and has assisted in the development of a master development plan for the town.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		Zoning and development issues are handled through the Building and Code Enforcement Department.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Consulting Firm
Engineers or professionals trained in building or infrastructure construction practices	Yes	Consulting Firm
Planners or engineers with an understanding of natural hazards	Yes	Consulting Firm
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of East Aurora.

Table 9.19-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Very limited – seniors/handicapped
Capital improvements project funding	Limited
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of East Aurora.

Table 9.19-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	Yes	Village Administrator and Web Master and Consulting Firm
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Fire Hall outdoor signal; use of County mass notification system
Natural disaster/safety programs in place for schools	Yes	Each school has its own safety program
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of East Aurora.

Table 9.19-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	5	2011
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	2011
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.19-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak - NA
Cyber Attack	Moderate
Earthquake	Weak - NA
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.19.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Bill Kramer, Floodplain Administrator

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of East Aurora.

Table 9.19-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of East Aurora	27	37	184,988	6	13

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village has flood prone areas along Tannery Brook from the east village line to Oakwood Avenue. There is no list of properties that have been damaged nor interested in flood mitigation. There are no RISK Map projects currently underway and the village has not made any substantial determinations. No properties have been mitigated, and the flood maps adequately address the flood prone areas in the village.

NFIP Compliance

The village relies on the Town of Aurora Code Enforcement office for floodplain management. The village does not have any certified floodplain managers (current NFIP Administrator not certified) nor does the municipality

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

have adequate resources to address climate change. The village would like to have occasional training in basics of floodplain management to keep staff informed and refreshed. The NFIP administrator conducts permit review and determines substantial mitigation improvement by reviewing plans and code information. The village does not have any barriers to running the NFIP program and does not have any outstanding violations. The village had a CAV on April 22, 2020. The flood damage prevention ordinance is Chapter 142 of the village code. Last amended September of 2019. The village program meets the program requirements of the NFIP and does not have any additional ordinances or programs that support the program. The village is not interested in participating in the CRS program at this time.

9.19.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Procedurally, East Aurora Police will ensure orderly traffic flow for any evacuation and may be supplemented by personnel from the village DPW and the East Aurora Fire Department. Main evacuation routes include Route 20A, Route 400, Route 16, Route 78, Route 241, and Route 33.

Sheltering

The Village of East Aurora has identified the following designated emergency shelters within the village.

Table 9.19-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	101 King Street	100	No	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of East Aurora has identified the following sites suitable for placing temporary housing units.

Table 9.19-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Parking lot/fields	1003 Center Street	50-100 spots	Parking lot/fields	All	None	EAUF School District
Park	Emery Road east of Underhill	20-30 spots	Park	All	None	Erie County
Baseball fields	300 Gleed Avenue	50-100 spots	Baseball fields	All	None	Town of Aurora

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code	Ownership
Park	736 Warren Drive	50-100 spots	Park	All	None	Town of Aurora
Park	401 West Falls Road	50-100 spots	Park	All	None	Town of Aurora
Park	Buffalo Road west of village line;	50-100 spots	Park	All	None	NYS Office of Parks
Park	Knox Road west of village line; south side of road	50-100 spots	Park	Electric and Gas	None	NYS Office of Parks - managed by Town of Aurora
Field	Girard Avenue at Buffalo Road	50-100 spots	Field	All	None	Fisher Price Inc./Mattel
Parking lot/field	141 Girard Avenue	50-100 spots	Parking lot/field	All	None	EAUF School District

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The village would rely on County, State and Federal guidance, along with Red Cross and FEMA guidance, as to where to place temporary and/or permanent housing units in the event of an occurrence that would require these units. The village believes it should not designate a site that is not owned by the village i.e., school grounds, private property, county property or state property. Most of the large tracts of land that would/could accommodate the units are village, County or State parks. Water, gas, and electric are available at the road throughout most of the Village of East Aurora. Public sewer is available in limited areas that are already developed with residential housing. The location of private septic systems is a function of the Erie County Health Department.

Table 9.19-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Field	Girard Avenue at Buffalo Road	50-100 spots	Field	All	None

9.19.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.19-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.19-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	3	0	1	0	1	0	1	0	0	0
Multi-Family	0	0		0	0	0		0	1	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0		0	1	0		0		0
Total Permits Issued	**0**	**0**	**3**	**0**	**1**	**0**	**2**	**0**	**2**	**0**	**1**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Aurora Mills	Res	85	10 Aurora Mills Dr, Aurora, NY 14052	None	50% complete
Reed Hill	Res	33	18 Reed Hill Drive	None	50% complete
Hamlin Farms	Res.	8	37 Hamlin Ave.	None	75% complete
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

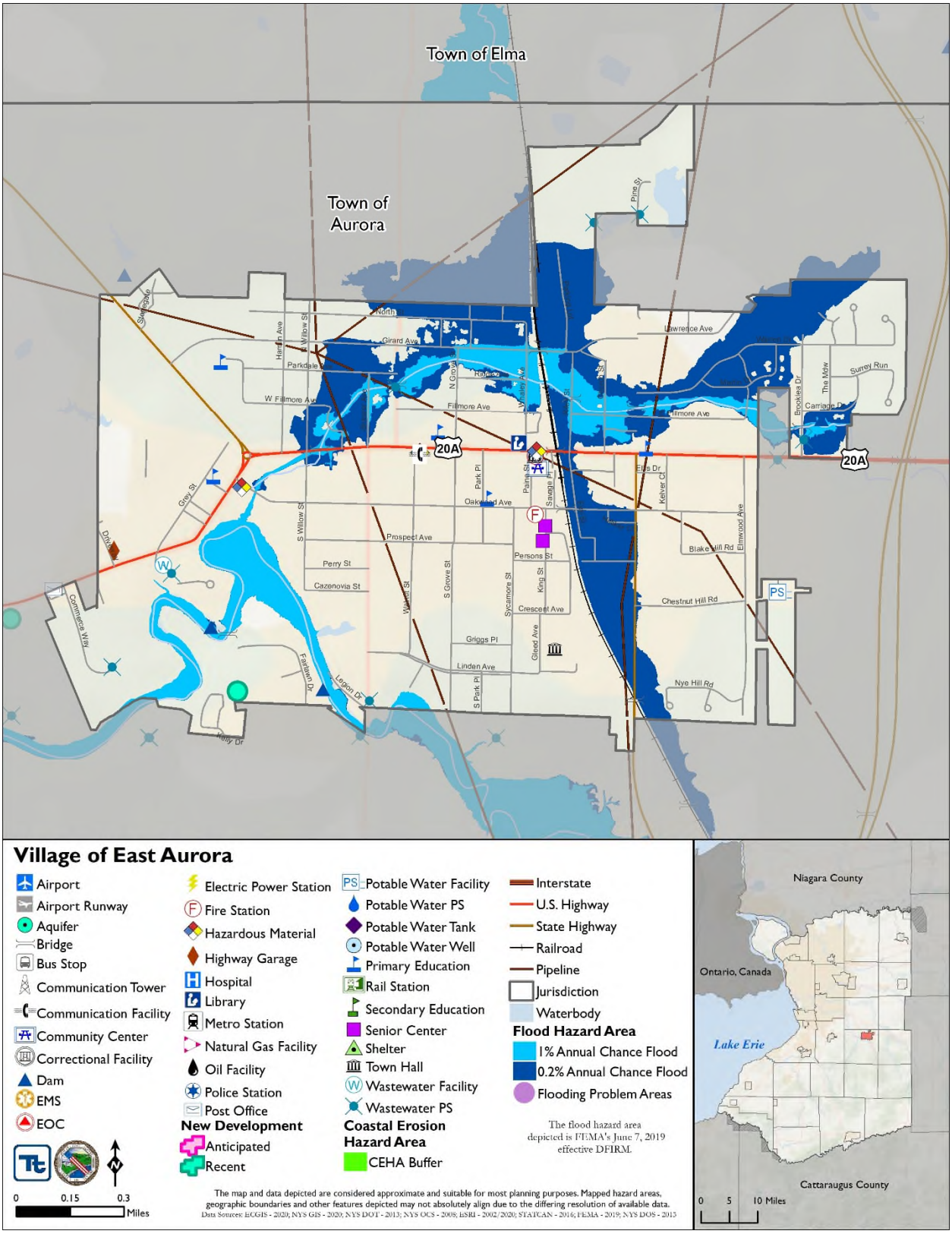
9.19.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of East Aurora's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of East Aurora has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.19-1. Village of East Aurora Hazard Area Extent and Location Map 1



Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.19-2. Village of East Aurora Hazard Area Extent and Location Map 2

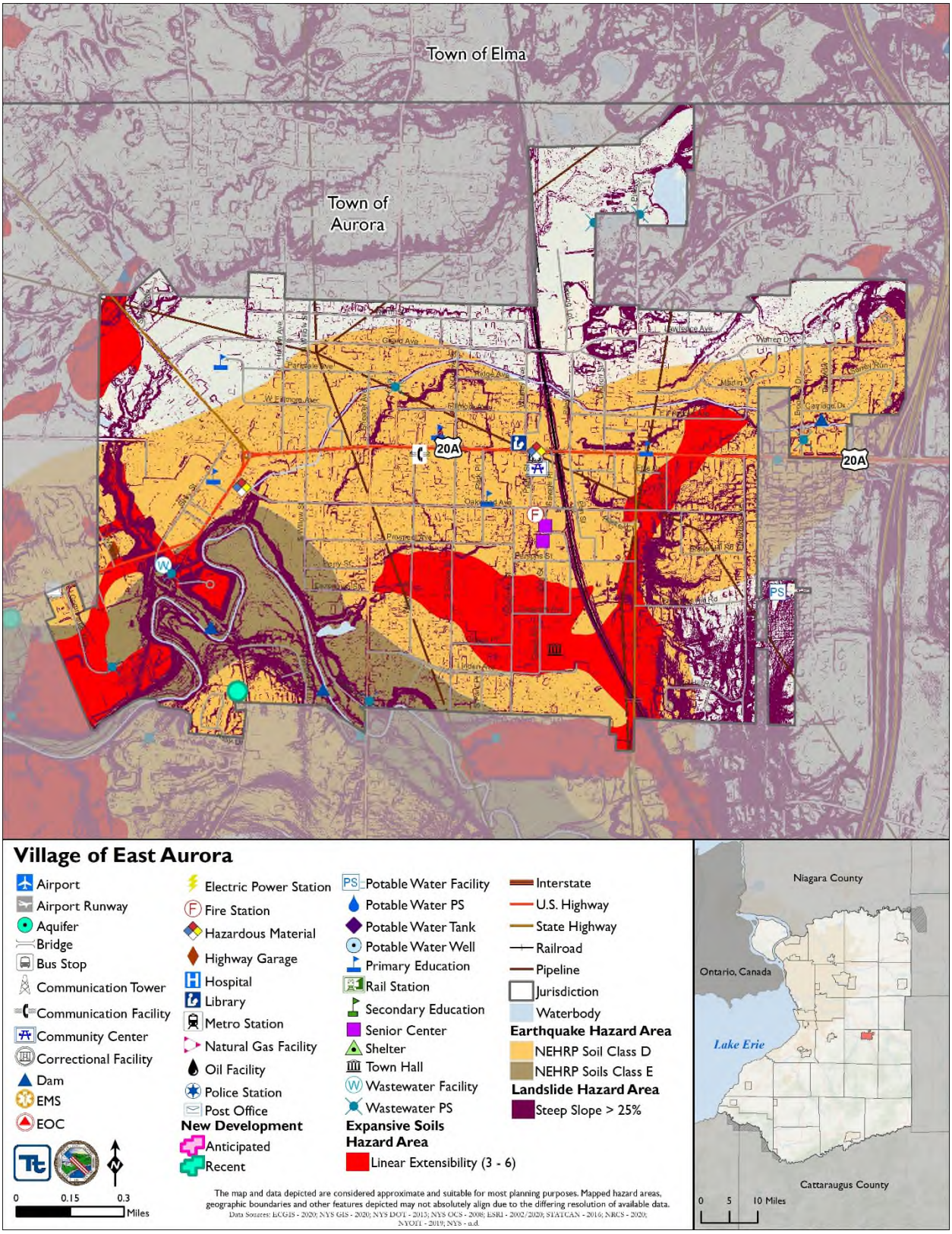
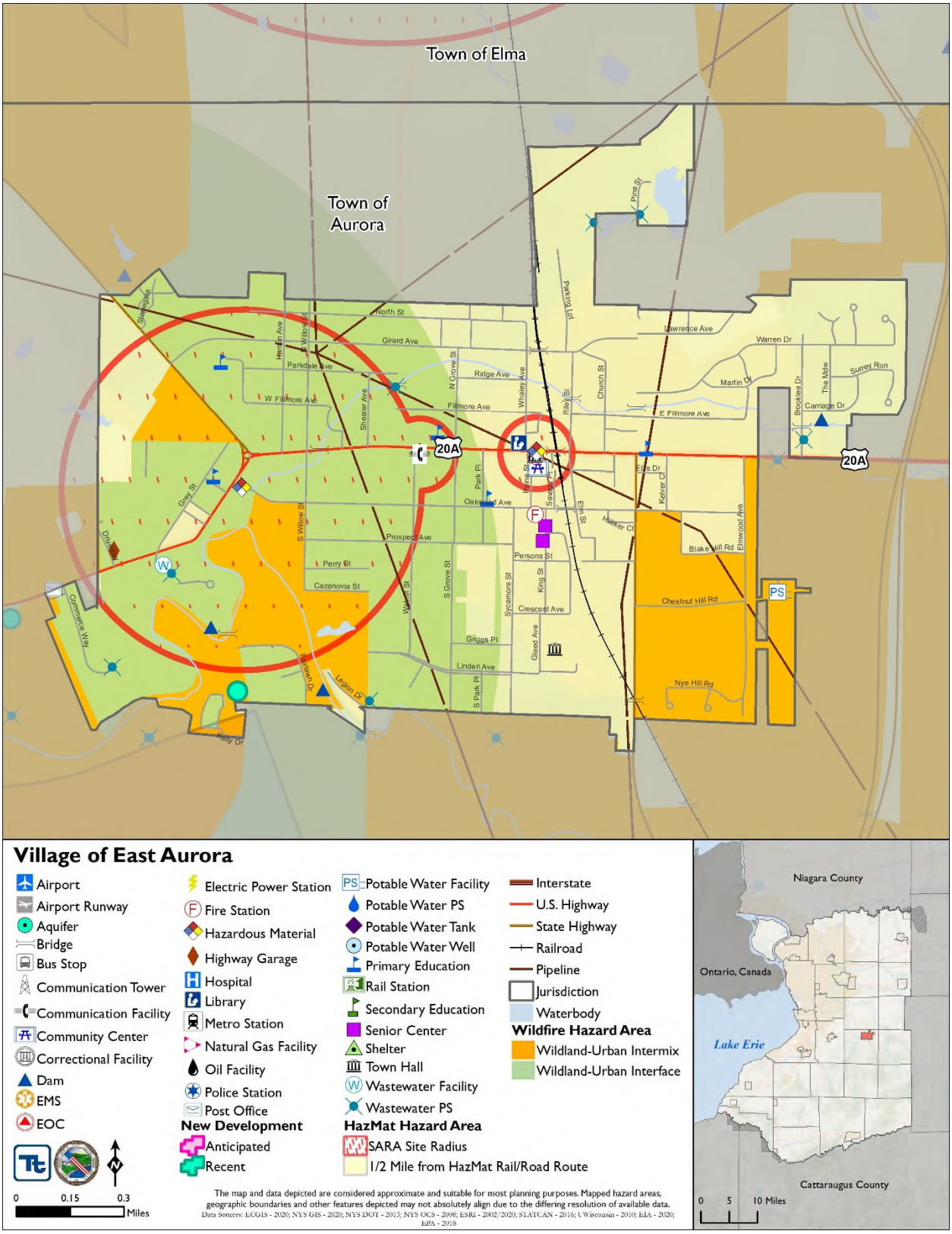


Figure 9.19-3. Village of East Aurora Hazard Area Extent and Location Map 3



Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of East Aurora's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.19-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.19-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the village did not report impacts.
August 11-15, 2015	Flash Flood	Yes	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the village did not report impacts.
October 28-29, 2015	High Wind	Yes	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the village did not report impacts.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 6, 2015	Thunderstorm Wind	Yes	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the village did not report impacts.
November 12, 2015	High Wind	Yes	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the village did not report impacts.
November 18, 2015	High Wind	Yes	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the village did not report impacts.
January 11, 2017	High Wind	Yes	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The	Yes – approx.. $400 DPW labor costs

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	Yes	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Yes – approx. $1,400 DPW labor costs
March 13, 2017	Winter Storm	Yes	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Yes – approx. $2,800 DPW labor costs
July 20, 2017	Tornado	Yes	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the village did not report impacts.
August 4, 2017	Thunderstorm Wind	Yes	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the village did not report impacts.
December 10-15, 2017	Lake-effect Snow	Yes	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was	Yes – approx. $17,000 DPW labor costs

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	
December 24-29, 2017	Lake-effect Snow	Yes	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	The village included approximately $6,500 in DPW labor costs.
January 2, 2018	Blizzard	Yes	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	The village included approximately $1,200 in DPW labor costs.
October 6, 2018	Lightning	Yes	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the village did not report impacts.
February 24, 2019	High Wind	Yes	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the village did not report impacts.
February 24, 2019	Lakeshore Flooding	Yes	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the village did not report impacts.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the	The event resulted in a need for brush chipping.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	The event resulted in a need for brush chipping.
November 27, 2019	Lakeshore Flooding	Yes	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3–5-hour period in the cold advection behind the cold front.	Although the County was impacted, the village did not report impacts.
January 12, 2020	Lakeshore Flooding	Yes	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the village did not report impacts.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 18, 2020	Lakeshore Flooding	Yes	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the village did not report impacts.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of East Aurora's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of East Aurora. The Village of East Aurora has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- Earthquakes have historically not been an issue for the community and will be re ranked from high to low.

Table 9.19-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.19-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Depew & Lancaster Co Dam	Dam	X	X	007

Source: 2020 GIS

Identified Issues

After review of the Village of East Aurora's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of East Aurora has identified the following vulnerabilities within their community:

- Tannery Brook has had continuous flooding issues.
- Stormwater rightsizing is needed across village.
- The village critical facilities lack backup power.
- The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room.
- The Village of East Aurora has a tree inventory that was developed in the early 2000s to manage the existing tree maintenance within the village. While the inventory is still used by the village DPW, it is outdated as trees have been cut and new ones have been planted since the last inventory and plan update was conducted. Additionally, because of the age of the plan, the information in the document is largely irrelevant and not as useful for the village when conducting annual tree maintenance.
- The village has continued issues around debris clogging stormwater infrastructure, causing subsequent flooding and drainage issues.
- The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- The village comprehensive plan is outdated and therefore no longer useful to the village planning activities. With increasing population overall, however, the village would need to develop an economic development and climate change-related strategy to guarantee the further expansion and improvement of municipal services and life in general.
- The village has recently passed the resolution to become a climate smart community and would like to become a bronze or silver climate smart community.
- The Depew/ Lancaster Dam is located in the 100-year floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.19.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.19-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Nursing Home Vulnerability: Revise Emergency Response Plan	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Low	
						Damages Avoided; Evidence of Success	Flood and other hazard mitigation	
2	Nursing Home Vulnerability: Mitigate flooding potential along Tannery Brook	Flooding	Not Identified	Emergency Management	In Progress	Cost	-	1. Discontinue 2. 3. Currently in progress and will be complete before plan is over.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Nursing Home Vulnerability: Conduct evacuation exercise	Flooding, Fire, HAZMAT	Not Identified	Emergency Management	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing capability
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Flood Control: Clearing of accumulating debris along Tannery Brook from Pine St to Whaley Ave	Flooding	Not Identified	DPW/Highway	Complete	Cost	High	1. Discontinue 2. 3. Complete
						Level of Protection	High	
						Damages Avoided; Evidence of Success	No flooding	
5	Flood Control: Surveil and, as necessary, take immediate action clear the Main St grates for Tannery Brook underpass to prevent destructive erosion of Main St and to prevent inundation flooding of large nursing home.	Flooding	Not Identified	DPW/Highway	Complete	Cost	High	1. Discontinue 2. 3. Complete
						Level of Protection	High	
						Damages Avoided; Evidence of Success	No flooding	

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
6	Flood Control: Enlarge and reinforce culvert on Benning Road	Flooding	Not Identified	DPW/Highway	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not for East Aurora Village Plan
7	School Vulnerability: Conduct an all-hazards vulnerability study of the eight primary-secondary schools and the one college in accordance with the Federal Readiness and Emergency Management in Schools (REMS)	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not under village jurisdiction
8	School Vulnerability: Prepare mitigation recommendations for all schools	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not under village jurisdiction
9	Potable Water Infrastructure Protection Plan: Conduct a specific all-hazards vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	Complete	Cost	High	1. Discontinue
						Level of Protection	High	2.
						Damages Avoided; Evidence of Success	Better understanding of water resources	3. Complete
10	Potable Water Infrastructure Protection Plan: Prepare mitigation recommendations from vulnerability study	Water Supply Contamination	Not Identified	DPW/Highway	Complete	Cost	Moderate	1. Discontinue
						Level of Protection	High	2.
						Damages Avoided; Evidence of Success	Better understanding of water resources	3. Recommendations have been done
11	Potable Water Infrastructure	Water Supply Contamination	Not Identified	DPW/Highway	No Progress	Cost	-	1. Discontinue

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Protection Plan: Obtain funding for mitigation actions					Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. N/A – County responsibility
12	Special Needs Population: Utilizing three area CERT/Auxiliary teams analyze the population of the Township to determine all those who will require special services during a major emergency	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not village responsibility
13	Special Needs Populations: Prepare a modern database of the special needs population for input to the Township's GIS	All Hazards	Not Identified	Emergency Management	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not village responsibility
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flood	Not Identified	OEM	Complete	Cost	Low	1. Discontinue
						Level of Protection	Low	2.
						Damages Avoided; Evidence of Success	Compliance with State	3. Complete - Local Law Adopted/Village Code Section Chapter 142
15	Designate/install a specific person to be your municipality's Floodplain Administrator.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	Compliance with State	3. Complete. Appointment made
16		Flood			No Progress	Cost	-	1. Discontinue

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.		Not Identified	Code Enforcement Officer		Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Not feasible
17	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue
						Level of Protection	Low	2.
						Damages Avoided; Evidence of Success	Compliance with state	3. Complete. Local Law Adopted/Village Code Section Chapter 142
18	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).	Flood	Not Identified	Code Enforcement Officer	Complete	Cost	Low	1. Discontinue
						Level of Protection	Low	2.
						Damages Avoided; Evidence of Success	Compliance with State	3. Complete
19	Very low financial or political incentive to take action given the current fiscal climate	Not Identified	Local Fiscal Climate	Code Enforcement Officer	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. No longer relevant

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of East Aurora has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The village has completed the Oakwood project to fix drainage issues along Oakwood Road to mitigate flooding.
- The village has spent approximately $45,000 to mitigate the spread of Ash Borer as well as Japanese knotweed within the village and the surrounding town.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of East Aurora participated in a mitigation action workshop in and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.19-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X	X		X			
Cyber Attack	X			X	X		X			
Earthquake	X			X	X		X			
Expansive Soils	X			X	X		X			
Extreme Temperature	X			X	X		X			
Flood	X	X	X	X	X	X	X	X		
Hazardous Materials	X			X	X		X			
Landslide	X			X	X		X			
Pandemic	X			X	X		X			
Severe Storm	X	X		X	X	X	X	X		
Severe Winter Storm	X	X		X	X	X	X	X		
Utility Failure	X	X		X	X	X	X			
Wildfire	X			X	X		X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.19-19 summarizes the comprehensive range of specific mitigation initiatives the Village of East Aurora would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.19-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -001	Village Generator Installation	1, 2	Flood Severe Storm Severe Winter Storm Utility Failure	**Problem**: -The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room. **Solution**: Conduct a structural assessment of municipal building to determine whether the generator can be located elsewhere besides outside. Potential locations proposed by the village are in the basement or on the roof. Once location is determined, the village or town engineer would need to determine the remaining backup power needed for the municipal office. Given the municipality purchased 2 new generators that power different parts of the building, the third generator would need to power the remaining office space during a severe storm event. All generators shall be installed after the assessment of the buildings are complete by the municipal engineer, which will be over multiple years once funding secured.	Yes	No	2 years	Town of Aurora DPW/ Village of East Aurora Engineer	$100,000	Continued operation	HMGP, Community Facilities Grant Program, Municipal budget	High	SIP	ES

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -002	Tree Inventory/ Plan Update	1, 3, 4	Severe Storms, Severe Winter Storms	**Problem**: The Village of East Aurora has a tree inventory that was developed in the early 2000s to manage the existing tree maintenance within the village. While the inventory is still used by the village DPW, it is outdated as trees have been cut and new ones have been planted since the last inventory and plan update was conducted. Additionally, because of the age of the plan, the information in the document is largely irrelevant and not as useful for the village when conducting annual tree maintenance. **Solution**: Update the existing plan and inventory to include the most recent trees within the village. The village DPW shall take charge of implementing this project with oversight from the village planning committee. Additional assistance can be provided by the Soil and Water conservation District which could provide guidance as to what are the most up to date strategies in regard to tree maintenance. Additionally, the village would like to purchase a 75-foot-long tree maintenance truck to increase capacity around clean up after severe storms.	No	No	1 year	Village DPW and SWCD	$50k + $100k for truck	Reduced property damage from fallen trees	Tree Cities USA, Environmental Protection & Improvement Grants, Municipal Budget	High	LPR, NSP	NR

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -003	Purchase Vacuum Truck	1, 2	Flood, Severe Storms	**Problem**: The village has continued issues around debris clogging stormwater infrastructure, causing subsequent flooding and drainage issues. **Solution**: The village would like to purchase a vacuum truck to facilitate the response to residents who are having stormwater drainage issues. By having this truck, the village would not have to conduct dredging (which takes a lot of time) and could respond quickly to residents complaining about their clogged stormwater infrastructure.	No	No	1 year	Village DPW	$150k	High	municipal budget	High	SIP	PR

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -004	Stormwater drainage infrastructure rightsizing.	2,3,4	Flood	**Problem**: The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure. **Solution**: The village shall conduct a multi-phase project. The first phase would be to conduct a professional engineering study that evaluates the existing undersized stormwater infrastructure in the village and provide guidance and strategy as to how the municipality could increase overall capacity across the board. The study would need to be specific and provide specific, detailed location-based evacuations as to which pieces of infrastructure need to be upgraded. The second phase of the project would then for the village to apply for funding to implement the proposals given in the assessment study. This would likely be a multi-year/ multi-million-dollar project but would prepare the village to increase overall resilience in the long run.	No	No	5 years	Village DPW, Engineer, Village Board	High	High	BRIC, HMGP, FMA, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG), Climate Smart Communities Grant	High	SIP	SP

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora-005	Update village comprehensive plan	3, 4	All	**Problem**: The village comprehensive plan is outdated and therefore no longer useful to the village planning activities. With increasing population overall, however, the village would need to develop an economic development and climate change-related strategy to guarantee the further expansion and improvement of municipal services and life in general. **Solution**: The village would like to hire a consulting firm to conduct a comprehensive plan for the community. This would require applying for grant funding and developing strategy for future economic development and climate adaptation strategies.	No	No	Long	Village Board and Planning	$150k	New and improved comprehensive plan	NYS Climate Smart Communities	High	LPR	PR
2022-V. East Aurora-006	Becoming a bronze climate Smart community	All	All	**Problem:** The village has recently passed the resolution to become a climate smart community and would like to become a bronze or silver climate smart community. **Solution:** The village would like to execute actions suggested by the CSC program that range from greenhouse gas reduction to increasing climate resilience and preparedness. The village would need supplemental funding to execute some of these projects. To begin, the village would need to contact the NYSERDA regional coordinator who could provide guidance as to how to municipality can work towards becoming a Bronze certified climate smart community.	No	No	3 years	Village Board, NYSERDA	High	High	Climate Smart Communities Program, Clean Energy Communities Program, HMA	Medium	EAP	PI

Table 9.19-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. East Aurora -007	Dam Retrofitting	1, 2	Flood	**Problem:** The Depew/ Lancaster Dam is located in the 100-year floodplain. **Solution:** While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Village DPW shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA guidelines to withstand severe storms. If not, the village will apply for mitigation funding, accordingly.	Yes	No	2 years	Village DPW	Moderate	High	HMGP	High	SIP	SP
2022-V. East Aurora -008	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.19-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. East Aurora-001	Village Generator Installation	1	1	1	1	1	0	-1	0	1	0	1	1	1	1	9	High
2022-V. East Aurora-002	Tree Inventory/ Plan Update	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-V. East Aurora-003	Purchase Vacuum Truck	1	1	1	1	1	1	0	1	1	0	1	0	1	1	11	High
2022-V. East Aurora-004	Stormwater drainage infrastructure rightsizing.	1	1	1	0	1	1	-1	1	1	1	0	0	1	1	9	High
2022-V. East Aurora-005	Update village comprehensive plan	1	1	1	0	0	1	0	1	1	0	1	1	1	1	10	High
2022-V. East Aurora-006	Becoming a bronze climate Smart community	1	1	1	0	0	0	0	1	1	0	1	0	1	1	8	Medium
2022-V. East Aurora-007	Dam Retrofitting	1	1	1	1	1	1	-1	1	1	0	0	1	1	1	10	High
2022-V. East Aurora-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.19.9 Action Worksheets

The following action worksheets have been developed by the Village of East Aurora to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Village Generator Installation		
Project Number:	2022-V. East Aurora-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	The village recently moved into the town office - currently 2 generators on site – town owned senior center and shelter (one part of the building) is powered by generators, but not for the full municipal building. – would need additional generator but no room.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct a structural assessment of municipal building to determine whether the generator can be located elsewhere besides outside. Potential locations proposed by the village are in the basement or on the roof. Once location is determined, the village or town engineer would need to determine the remaining backup power needed for the municipal office. Given the municipality purchased 2 new generators that power different parts of the building, the third generator would need to power the remaining office space during a severe storm event. All generators shall be installed after the assessment of the buildings are complete by the municipal engineer, which will be over multiple years as funding is secured.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding received
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP
Responsible Organization:	Town of Aurora DPW/ Village of East Aurora Engineer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management.

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Unreliable energy source
	Generator	High	Best Option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Village Generator Installation	
Project Number:	2022-V. East Aurora-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	0	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	0	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	9	
Priority (High/Med/Low)	High	

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Stormwater drainage infrastructure rightsizing.		
Project Number:	2022-V. East Aurora-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The entire village stormwater infrastructure system is under-sized and can easily get overwhelmed with severe storms. With increasing extreme precipitation events like climate change, the village needs to increase resilience within its stormwater infrastructure.		
Action or Project Intended for Implementation			
Description of the Solution:	The village shall conduct a multi-phase project. The first phase would be to conduct a professional engineering study that evaluates the existing undersized stormwater infrastructure in the village and provide guidance and strategy as to how the municipality could increase overall capacity across the board. The study would need to be specific and provide specific, detailed location-based evacuations as to which pieces of infrastructure need to be upgraded. The second phase of the project would then for the village to apply for funding to implement the proposals given in the assessment study. This would likely be a multi-year/ multi-million-dollar project but would prepare the village to increase overall resilience in the long run.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Flood Vulnerability Reduction
Useful Life:	25 years	**Goals Met:**	1, 3, 4
Estimated Cost:	High	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding received
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	BRIC, HMGP, FMA, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG), Climate Smart Communities Grant
Responsible Organization:	DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Develop a new stormwater system	High	Extremely high cost
	Stormwater project	High	Less costly – best alternative
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Stormwater drainage infrastructure rightsizing.	
Project Number:	2022-V. East Aurora-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project will increase capacity to protect life
Property Protection	1	This project helps protect life
Cost-Effectiveness	1	This is the most cost-effective option in the long run
Technical	0	The technical aspects have not been fully realized
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	The town does not have adequate resources to address this issue
Environmental	1	This has a positive impact on the environment
Social	1	This has a positive impact on the community
Administrative	1	There are no administrative issues
Multi-Hazard	0	This addresses concerns to multiple hazards
Timeline	0	Timeline is not yet solidified
Agency Champion	1	The DPW
Other Community Objectives	1	Reduces exposure to rain and loss of salt
Total	9	
Priority (High/Med/Low)	High	

Attachment: 58-Section-9.19-East-Aurora-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.20 Town of Eden

This section presents the jurisdictional annex for the Town of Eden. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Eden's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.20.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Eden's hazard mitigation plan primary and alternate points of contact. The Town of Eden followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Emergency Management, Highway Department, and Code Enforcement. The Town Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.20-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Brian Burgstahler, Emergency Manager Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-525-2654 Email: emergencyservices@edenny.gov	Name/Title:Melissa Hartman, Town Supervisor Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-992-3408 ext. 1 Email: mhartman@edenny.gov
NFIP Floodplain Administrator	
Name/Title: David Rice, Code Enforcement Official Address: 2795 East Church Street, Eden, NY 14057 Phone Number: 716-992-3408 ext. 2	
Additional Contributors	
Name/Title: Ron Maggs, Highway Supervisor Method of Participation: Provided data and information	

9.20.2 Municipal Profile

The Town of Eden is one of the county's "Southtowns", lying in the south-central part of the county. The Town of Eden is four square miles in area and was formed from a larger original town called Willink. Later, Eden surrendered territory to form the towns of Evans and Hamburg and is 40 square miles in size. The Town is bordered on the north by the Town of Hamburg, on the west by the Town of Evans, on the south by the Town of North Collins and on the east by the Town of Boston (Town of Eden website, accessed 2020). US Route 62 and NYS Route 75 traverse the town.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Deacon Samuel Tubbs was the first white settler to the town in 1808 (Town of Eden website, accessed 2020). Eden surrendered land was named "Hill's Corners" until 1822 at which point the first post office was established and the name changed to Eden. The productive farmland and the Eighteen Mile Creek made the area attractive for settlement. Through the 1800s Eden's three milling communities at Eden Valley, Toad Hollow and Clarksburg grew steadily. The expansion of rail lines served the town's farming and industrial business community (Town of Eden Comprehensive Plan, 2015).

According to the U.S. Census, the 2010 population for the Town of Eden was 7,688. The estimated 2019 population was 7,631, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.6 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.20.3 Jurisdictional Capability Assessment and Integration

The Town of Eden performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.20.3). The Town of Eden's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Eden. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	110 Building Construction	Local	Building Dept
Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					
Zoning Code	Yes	Yes	225 Zoning	Local	Building Dept
Comment: Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan"11 or "in accordance with a comprehensive plan."12 Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan" requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level					
Subdivision Ordinance	Yes	No	184 Subdivision of Land	Local	Building Dept/Planning Board
Comment: Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified in a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).					
Stormwater Management Ordinance	Yes	Yes	Western NY Storm water Coalition	Local	Highway Department
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department					
Post-Disaster Recovery Ordinance	Yes	Yes	Disaster Emergency Plan 4/24/2012	Local	Supervisor
Comment: It is the objective of this guideline to give the residents in the Town of Eden a central location of information to assist them in preparing for different types of Disasters that may occur.					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	Not Indicated	Local	Not Indicated
Comment: In New York State, virtually all land use regulation, which is the primarily tool for Smart Growth, takes place at the municipal level (i.e., in a city, village or town government). Land use planning is also primarily a municipal function. While State law provides for certain planning functions at the county or regional level, these mechanisms are largely advisory, whereas municipal planning is directly related to land use regulation.					
Site Plan Review	Yes	No		Local	Planning Board
Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc. • The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. • Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations.					
Environmental Protection Ordinance	No	-	-	-	-

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 114, Flood Damage Prevention, adopted 4/10/2019	Local	Code Enforcement
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. • It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Western NY Stormwater Coalition	Local	Code Enforcement
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	Yes	Yes	See disaster recovery above	Local	Highway Department
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.					
Climate Change Ordinance	No	-	-	-	-
Comment: The environmental conservation law was amended by adding ARTICLE 75 - CLIMATE CHANGE under Assembly Bill A. 8429 and Senate Bill S. 6599, dated June 18, 2019.					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Cultivate Eden 2018	Local	Supervisors Office
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	-	-	-	-
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: Based on past experience with disaster management, it is apparent that local municipalities that have an Emergency Debris Management Plan in place are able to manage their emergency response in a more comprehensive and coordinated manner and are able to address recovery and clean up faster and more efficiently than those without plans. With that in mind, the Department developed an Emergency Management Plan Tool Kit. The NYSDEC (Department) strongly urges all municipal officials to conduct pre-disaster planning and prepare emergency debris management plans. The Department recommends that these plans should be reviewed and updated annually.					
Floodplain or Watershed Plan	No	-	-	-	-

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Yes	November 2010	Local	Western New York Stormwater Coalition/ Town of Eden Highway
Comment: Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses.					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: Laws related to habit protection and biodiversity control the use and application of certain pesticides, demolition projects and clearing of vegetated areas. Identifying certain critical habitat areas could be included in the Comprehensive Plan. Critical Habitat is a part of certain State and Federal Permitting. The State had a Wildlife Action Plan requires to maintain eligibility for the State Wildlife Grant Program.					
Economic Development Plan	No	-	-	-	-
Comment: An Economic Development Plan may be prepared by a local government and be included or separate from the Comprehensive plan.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones.					
Shoreline Management Plan	N/A	-	-	-	-
Comment: Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: Under the federal Farm Bill, every 10 years each state must submit a State Forest Action Plan to the U.S. Forest Service. The Plan must be approved by the State Forester, who in New York is the director of DEC's Division of Lands and Forests. The next update of the Plan must be submitted to the Forest Service by June 2020.					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Agricultural and Farmland Protection Plan 2008	Local	Supervisors Office
Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	No	Erie County CEMP	County	Erie County OEM
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: HIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the State's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment:					
Continuity of Operations Plan	No	-	-	-	-
Comment: According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations.					
Public Health Plan	No	-	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Eden to oversee and track development.

Table 9.20-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	This is tracked with town building permits
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	This is tracked with town building permits
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Eden and their current responsibilities which contribute to hazard mitigation.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. Follow Master Plan with improvements in the town
Zoning Board of Adjustments	Yes	Zoning Board of Adjustments. Adjust the Zoning Code if needed
Planning Department	Yes	Building Department and Planning consultant
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Conservation Board
Open Space Board/Committee	Yes	Conservation Board
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Superintendent
Construction/Building/Code Enforcement Department	Yes	Building Construction and Code Enforcement
Emergency Management/Public Safety Department	Yes	Emergency Coordinator
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red and Outdoor warning signals
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department and Off-road Drainage Committee
Mutual aid agreements	Yes	State, County, multiple surrounding towns
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering and planning consultants
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering and planning consultants
Planners or engineers with an understanding of natural hazards	Yes	Engineering and planning consultants
Staff with expertise or training in benefit/cost analysis	Yes	County
Professionals trained in conducting damage assessments	Yes	Highway and Consultants
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Highway and GIS Consultant
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	EM Office
Grant writer(s)	Yes	Consultants
Resilience Officer	No	-

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Eden.

Table 9.20-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Unknown
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Eden.

Table 9.20-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor
Personnel skilled or trained in website development	Yes	Consultant
Hazard mitigation information available on your website	Yes	Highway Superintendent
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Emergency Management team
Other programs already in place that could be used to communicate hazard-related information	Yes	Emergency Management

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	Eden Central Schools
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Eden.

Table 9.20-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.20-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

**Strong* *Capacity exists and is in use*

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.20.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Rice, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Eden.

Table 9.20-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Eden	4	6	$35,311	2	0

Source: *FEMA, 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

There are no areas prone to flooding or floodplains within the Town. Therefore, the town does not maintain a list of property owners that are interested in flood mitigation projects, nor are there any RiskMAP projects currently underway. The flood hazard maps for the Town adequately address the flood risk. There have been zero homes that have previously been mitigated against flood damages. The Code Enforcement Officer makes Substantial Damage determinations based on if the repair cost of a home is 50 percent or more of the market value, excluding land.

NFIP Compliance

The Town of Eden Code Enforcement Officer is responsible for floodplain management within the Town. There are no certified floodplain managers within the Town, but floodplain management staff are open to any training or assistance available.

Chapter 114 (Local Law 2-2019) of the Town of Eden Code refers to the Flood Damage Prevention Ordinance, which meets minimum requirements. The FDPO was most recently updated on April 10, 2019. The Town Planning Board and ZBA review floodplain areas in order to supports floodplain management and discourage development within flood-prone areas.

There are no outstanding NFIP compliance issues within the Town.

9.20.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Eden has identified the following routes and procedures to evacuate residents prior to and during an event.

- US 20, 62 & 75, Northbound and Southbound
- East Eden Road, Northbound and Southbound
- East and West Church Streets, Eastbound and Westbound
- Shadagee Road, Eastbound and Westbound

Sheltering

The Town of Eden has identified the following designated emergency shelters within the Town.

Table 9.20-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Eden JR/SR HS	3000 Schoolview Rd Eden NY 14057	250	Yes	Yes	Yes	None	None
Eden Town Hall	2795 East Church Street Eden NY 14057	40	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Eden has identified the following sites suitable for placing temporary housing units.

Table 9.20-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Eden American Legion	2912 Legion Drive Eden NY 14057	40	FEMA Trailers	Fully outfitted for all utilities	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Eden has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Evergreen Acres	Beverly Drive, Eden NY 14057	40	Empty lots staked out for housing	None. Utilities would have to be installed	Yes
Pleasant Ave and Weller Dr subdivision	Pleasant Ave and Weller Dr, Eden NY 14057	20	Empty lots staked out for housing	None. Utilities would have to be installed	Yes

9.20.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.20-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.20-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	10	-	7	-	9	-	8	-	10	-	4	-
Multi-Family	0	-	0	-	3	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	3	-	1	-	5	-	1	-	0	-	3	-
Total Permits Issued	**13**	-	**8**	-	**17**	-	**9**	-	**10**	-	**7**	-

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Timac Agro USA Inc.	Commercial	1	8639 Depot St	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Commercial fertilizer plant/ Completed
Kelly's Place	Residential	18	8121 N Main St	None	1) 8 unit apartment, 2) 5 unit town houses/ Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Eden Solar	Commercial	1	7501 Sisson Hgwy	½ Mile Buffer from HazMat Roadways, Expansive Soils Hazard Area	5.16 megawatt solar farm/planning

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

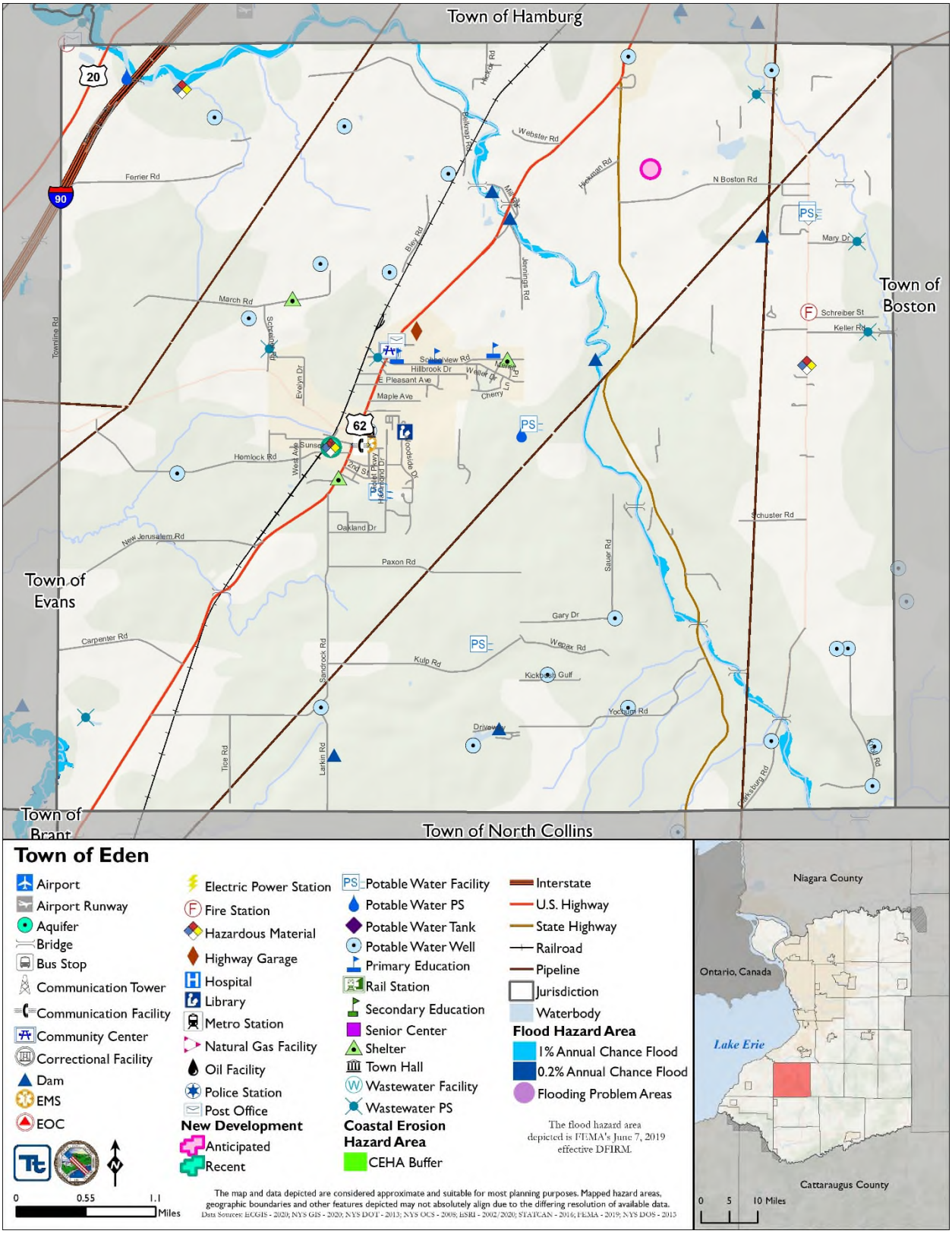
9.20.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Eden's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Eden has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

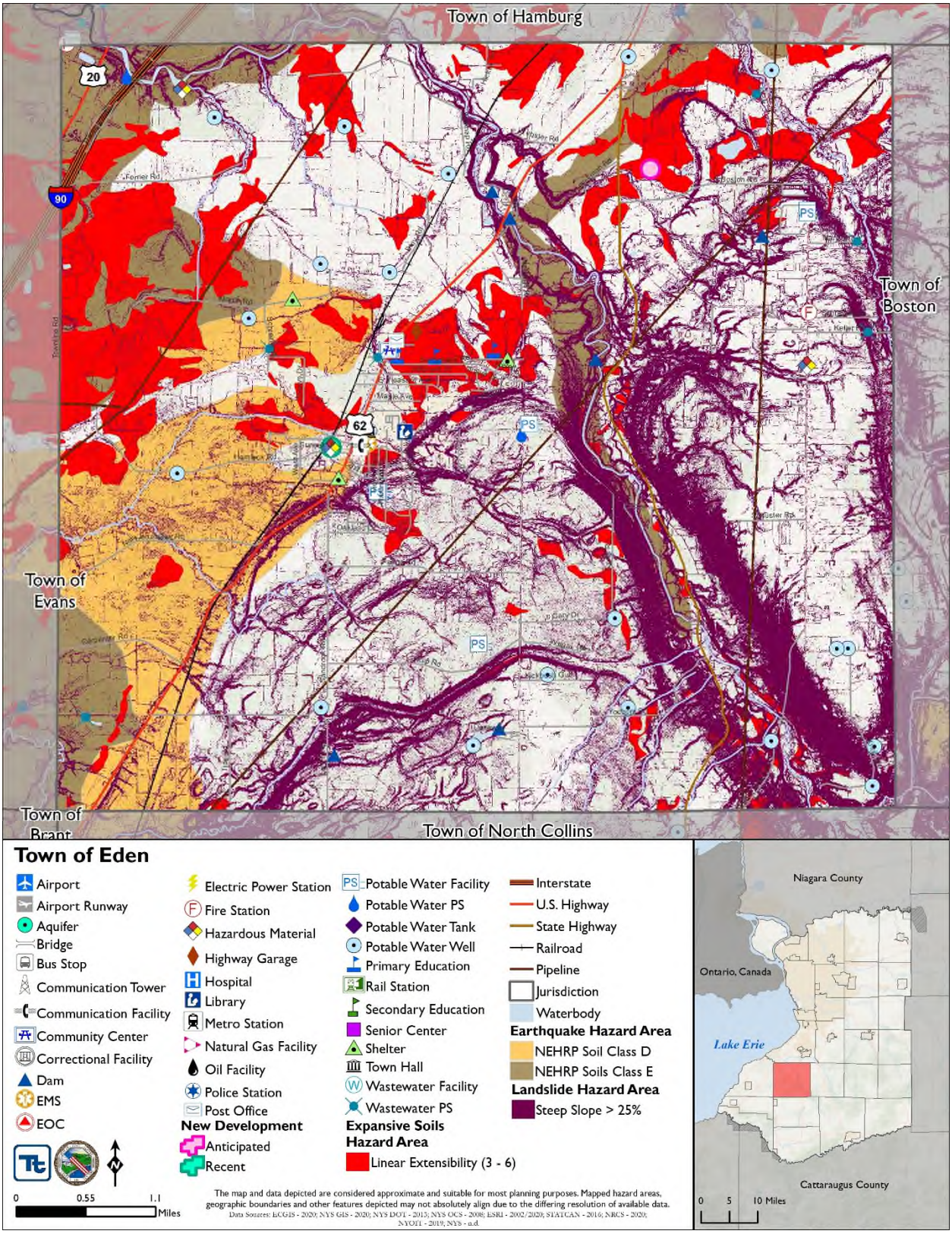
Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.20-1. Town of Eden Hazard Area Extent and Location Map 1



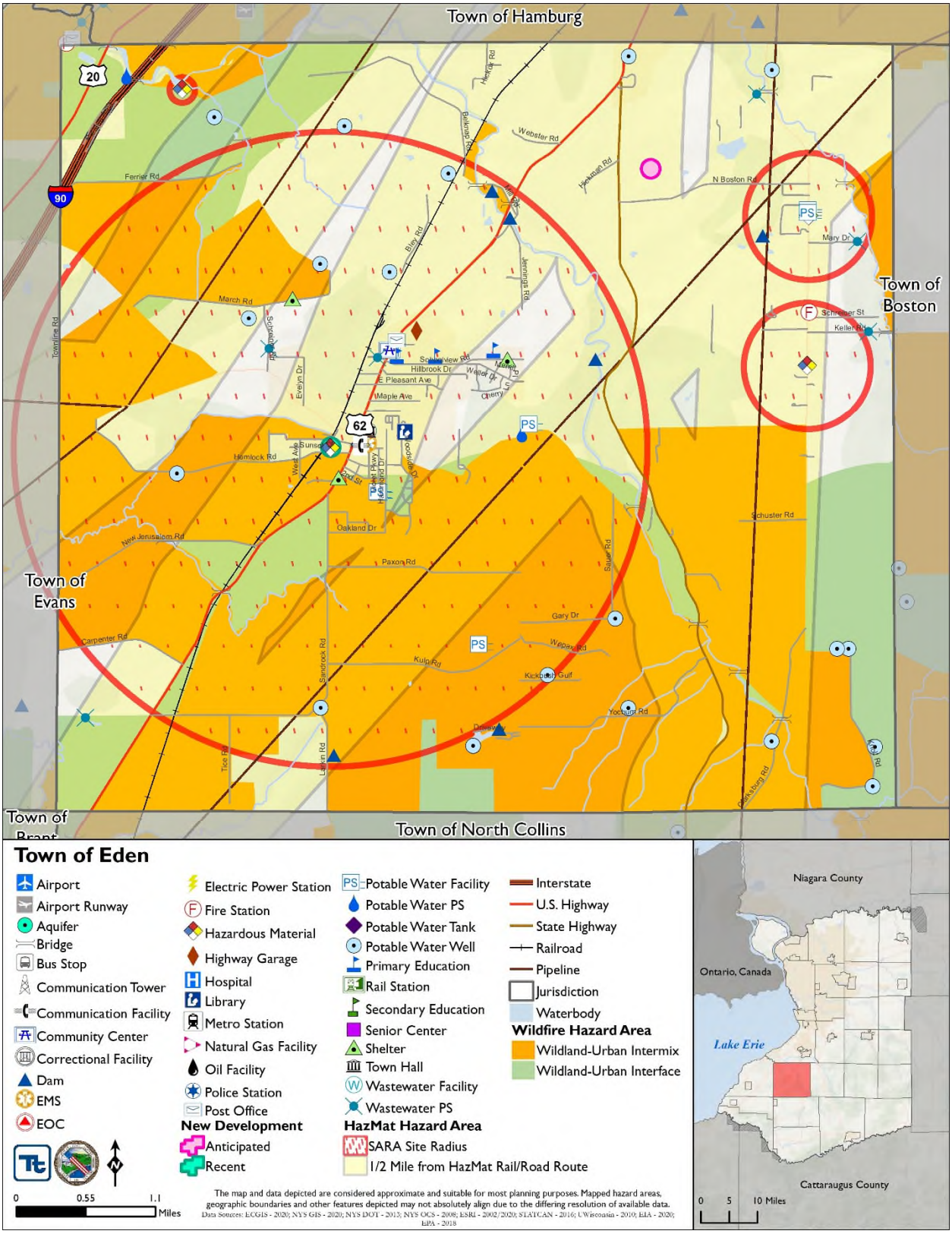
Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.20-2. Town of Eden Hazard Area Extent and Location Map 2



Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.20-3. Town of Eden Hazard Area Extent and Location Map 3



Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Eden's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.20-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.20-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
June 20, 2016	Thunderstorm Wind	No	A Thunderstorm developed ahead of an approaching cold front, producing winds exceeding 50 kts. Isolated storms caused damages southeast of the City of Buffalo, including reports of three quarter inch hail.	Law enforcement reported trees down by thunderstorm winds on Sisson Highway (NY-75), causing an estimated $10,000 in damages.
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured at 64 mph.	The Town of Eden Fire Department received 3 wind calls during the event, for minor damages.
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph.	The Town of Eden Fire Department received 9 wind calls, including a woman injured and trapped in car under tree.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 19 inches of snow were reported in the Town of Eden.
December 29, 2017	Lake Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 22 inches of snow were reported in the Town of Eden.
January 12, 2018	Winter Storm	No	A winter storm brought a wintery mix of precipitation. Ice accumulations up to a tenth of an inch were reported along the lake shore counties. Heavy snow fell overnight, accumulating up to two inches per hour.	An estimated 10 inches of snow were reported in the Town of Eden.
March 1, 2018	Winter Storm	No	A low pressure storm brought heavy, wet snow, and increased wind speeds across the entire region, resulting in downed trees and wires.	An estimated 20 inches of snow were reported in the Town of Eden.
October 31-November 1, 2019	High Wind/Lakeshore Flooding DR-4472 NY	Yes	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	The Town of Eden Fire Department received 3 wind related calls during the event, for minor damages. There were an observed 1.88 inches of rainfall in the Town.

Notes:

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Eden's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Eden. The Town of Eden has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Town indicated the following:

- The Town of Eden Fire Departments have recently upgraded equipment and tanker trucks to hold more water in the event that they need to reach areas where water is not available. Due to this, risk for wildfire has been decreased to medium for the community.
- The Town indicated that they have an extensive list of residence that require oxygen, medicine, etc. If power is out for a long period of time, we can tend to their needs, through the Police, Fire departments as well as EMS. Due to this, risk for utility failure has been decreased to medium for the community.

Table 9.20-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	Medium	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	Medium	Medium

Note: *The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction*

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.20-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Amos J Zittel Pond Dam	Dam	A	A	2022-T.Eden-002

Source: Effective DFIRM

Identified Issues

After review of the Town of Eden's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Eden has identified the following vulnerabilities within their community:

- Clarksburg Road
- East Pleasant Road
- Larkin Road

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- No Response Received

9.20.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Flood prevention of homes, businesses, and businesses	Flooding	Stormwater Management Office, Code Enforcement, Planning, Town Board and Conservation Board	Economic Loss	In Progress	Cost	No Cost	Include in 2022 HMP as 2022-T. Eden-001 to continue outreach and engagement with repetitive loss homeowners.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Town code up to date	
-	Fire Structure Collapse	Fire, Structural Stability	Town Board	Death, Injury, Economic Loss	Complete	Cost	-	Completed, discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Utility Failure	Not Identified	Town Board	Injury/Life Support, Death, Economic Loss	Complete	Cost	-	Completed, discontinue.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Code Enforcement Officer	Not Identified	Complete	Cost	No Cost	Completed, discontinue.
						Level of Protection	Medium	
						Damages Avoided; Evidence of Success	Ordinance is up to date	
-	Designate/install a specific person to be your municipality's Floodplain Administrator	Flooding	Code Enforcement Officer, Stormwater Management Officer	Not Identified	Complete	Cost	-	Completed as of June 2021. The Town Building Inspector has been identified as the NFIP Floodplain Administrator.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Town Board	Not Identified	Ongoing Capability	Cost	-	Ongoing Capability, discontinue
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Eden has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Erie County Soil and Water works to relieve flooding in the area by securing Resilient Farming Grants, and by reestablishing wetlands to reduce flood events.
- The Town of Eden EMS provides yearly CPR courses, as well as National Incident Management System (NIMS) Trainings, with all new members being required to take courses 100, 200, and 800. Eden EMS also provides monthly EMS training courses, with EMT/AMET/Paramedic courses offered though Erie County, and Utilizing Target Solutions for on-line training courses.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Eden participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.20-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils										
Extreme Temperature										
Flood		X				X			X	
Hazardous Materials										
Landslide										
Pandemic										
Severe Storm		X				X			X	
Severe Winter Storm		X				X			X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.20-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Eden would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.20-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Eden-001	Repetitive Loss Property Outreach	1, 2, 3	Flood	**Problem**: There are 2 Repetitive Loss properties within the Town. **Solution**: The Town of Eden, supported by Erie County OEM, will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the Town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	6 months	Town of Eden Code Enforcement	Low	High	Municipal Budget	High	LPR, EAP	PI, PP
2022-T. Eden-002	Amos J Zittel Pond Dam Outreach	1, 2, 3	Flood	**Problem**: The Amos J Zittel Pond Dam is exposed to the 100-year SFHA (1% floodplain). **Solution**: The dam is privately owned and classified as a "low-hazard" class A dam. The Town will coordinate and conduct outreach with the owners of the dam's location within the floodplain and additional risk associated with the structure and support inspections of the dam as needed.	Yes	No	6 months	Town of Eden Code Enforcement	Low	High	Municipal Budget	High	EAP	PI
2022-T. Eden-003	Clarksburg Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	**Problem**: Branches off of the South Branch Eighteen Mile Creek exacerbate flooding and road closures along Clarksburg Road. **Solution**: The Town of Eden Highway Department will upsize and replace a total of 7 culverts along Clarksburg Road where Eighteen Mile Creek crosses the road. 60' of 30" pipe will be used at each crossing, for a total of $10,500. Including fill, blacktop replacements and labor and equipment, total project cost will be $30,800. See	No	No	1 year	Town of Eden Highway Department	Medium, $30,800	High	NYSDOT, FEMA HMGP, CHIPS	High	SIP	SP, PP

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.20-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Action Worksheet below for images of locations and cost breakdown.										
2022-T. Eden-004	East Pleasant Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	**Problem**: A branch off of the South Branch Eighteen Mile Creek runs directly through a neighborhood development and an undersized culvert exacerbates flooding concerns and stormwater runoff and backflow onto properties in the area. **Solution**: The Town of Eden Highway Department will upsize and replace the culvert at East Pleasant Road where Eighteen Mile Creek crosses the roadway. A 42" and 12" culvert pipe, along with two catch basins will be installed, as per the Highway Department's recommendations and needs of the area. Including parts, fill, blacktop replacements and labor and equipment, total project cost will be $12,400. See Action Worksheet below for images of location and cost breakdown.	No	No	1 year	Town of Eden Highway Department	Low, $12,400	High	NYSDOT, FEMA HMGP	High	SIP	SP, PP
2022-T. Eden-005	Larkin Rd Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Weather	**Problem**: A portion of Big Sister Creek flows under Larkin Road, which causes repetitive flooding and road washouts. **Solution**: The Town of Eden Highway Department will upsize and replace the culvert at Larkin Road with a 60' x 4' x 8' box culvert to better manage water flow of the Creek and reduce impacts during floods and heavy rainstorms. Including head wall, wingwall, and cutoff walls, fill, blacktop, labor and equipment, total project cost will be $127,500. See Action Worksheet below for images of location and cost breakdown.	No	No	1 year	Town of Eden Highway Department	High, $127,500	High	NYSDOT, FEMA HMGP	High	SIP	SP, PP

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.20-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Eden-001	Repetitive Loss Property Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Eden-002	Amos J Zittel Pond Dam Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-T. Eden-003	Clarksburg Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-T. Eden-004	East Pleasant Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-T. Eden-005	Larkin Rd Culvert Replacement	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.20.9 Action Worksheets

The following action worksheets have been developed by the Town of Eden to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Clarksburg Rd Culvert Replacement		
Project Number:	2022-T. Eden-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	Branches off of the South Branch Eighteen Mile Creek exacerbate flooding and road closures along Clarksburg road.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace a total of 7 culverts along Clarksburg Road where Eighteen Mile Creek crosses the road. 60' of 30" pipe will be used at each crossing, for a total of $10,500. Including fill, blacktop replacements and labor and equipment, total project cost will be $30,800. See Action Worksheet Below for images of locations and cost breakdown.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces flood risk
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$30,800	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months-1 year
Estimated Time Required for Project Implementation:	7 days	**Potential Funding Sources:**	NYSDOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

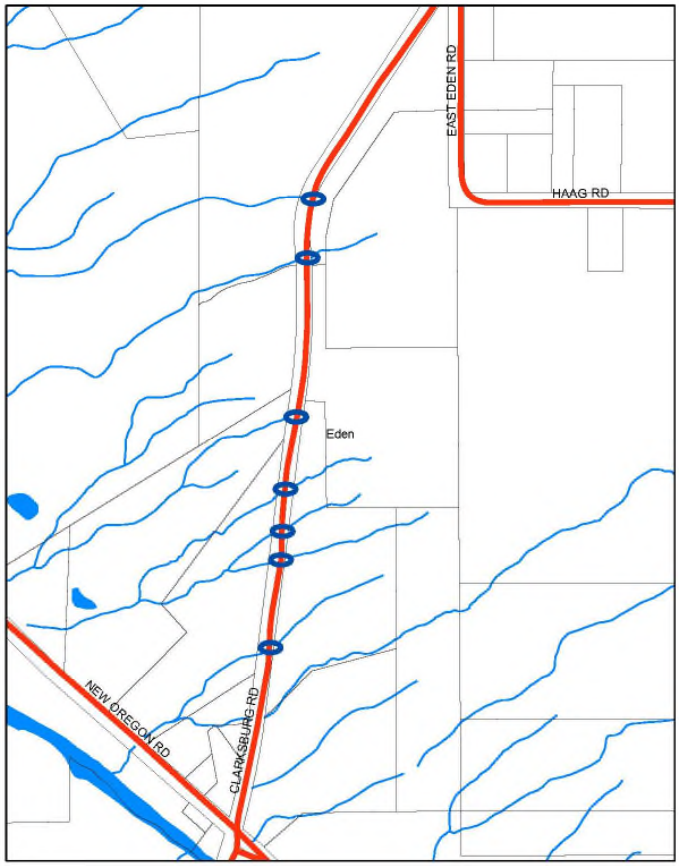
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate entire roadway	$1 million	Not cost effective, too many crossings, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Clarksburg Rd Culvert Replacement	
Project Number:	2022-T. Eden-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	Town will seek funding
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	2 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)



TOWN OF EDEN
CULVERT REPLACEMENT
CLARKSBURG ROAD
2021

N

Legend

- centerline
- Eden Tax Parcels 2020
- Stream
- River or Pond
- 7 Culvert Replacements

Description of Culvert Replacement (7)

Pipe - 60' of 30" Pipe ($25/ft) = $1,500
$1,500/crossing x 7 = $10,500.00

Select Fill - 20 Ton ($20/Ton) = $400
$400/crossing x 7 = $2,800.00

Blacktop - 10 Ton ($100/Ton) = $1,000
$1,000/crossing x7 = $7,000.00

Labor & Equipment
$1,500/day @ 1 crossing/day = 7 Days
7 Days x 7 crossings = $10,500.00

TOTAL = $30,800.00

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	East Pleasant Rd Culvert Replacement		
Project Number:	2022-T. Eden-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	**A** branch off of the South Branch Eighteen Mile Creek runs directly through a neighborhood development and an undersized culvert exacerbates flooding concerns and stormwater runoff and backflow onto properties in the area.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace the culvert at East Pleasant Road where Eighteen Mile Creek crosses the roadway. A 42" and 12" culvert pipe, along with two catch basins will be installed, as per the Highway Department's recommendations and needs of the area. Including parts, fill, blacktop replacements and labor and equipment, total project cost will be $12,400. See Action Worksheet Below for images of location and cost breakdown.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces flood risk
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$12,400	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months-1 year
Estimated Time Required for Project Implementation:	2 days	**Potential Funding Sources:**	NYSDOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

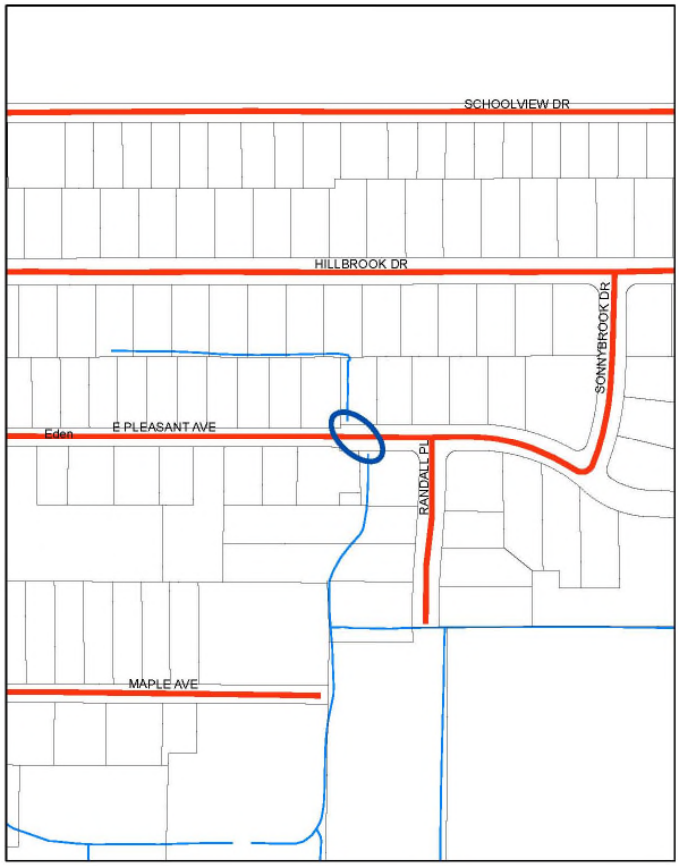
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate entire roadway	$1 million	Not cost effective, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	East Pleasant Rd Culvert Replacement	
Project Number:	2022-T. Eden-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	2 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)



TOWN OF EDEN
CULVERT REPLACEMENT
EAST PLEASANT ROAD
2021

N

Legend

- centerline
- Eden Tax Parcels 2020
- Stream
- River or Pond
- 1 Culvert Replacment

Description of Culvert Replacement (1)

Pipe - 120' Of 42" ($45/ft) = $5,400

Pipe - 40' Of 12" ($5/ft) = $200

Catch Basins (2) ($1,000 ea) = $2,000

Select Fill - 40 Ton ($20/Ton) = $1,600

Blacktop - 20 Ton ($100/Ton) = $2,000

Labor & Equipment
$1,500/day @ 2 Days = $3,000

TOTAL = $ 12,400.00

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Larkin Rd Culvert Replacement		
Project Number:	2022-T. Eden-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Weather		
Description of the Problem:	A portion of Big Sister Creek flows under Larkin Road, which causes repetitive flooding and road washouts.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Eden Highway Department will upsize and replace the culvert at Larkin Road with a 60' x 4' x 8' box culvert to better manage water flow of the Creek and reduce impacts during floods and heavy rainstorms. Including head wall, wingwall, and cutoff walls, fill, blacktop, labor and equipment, total project cost will be $127,500. See Action Worksheet Below for images of location and cost breakdown.		
Is this project related to a Critical Facility?		Yes ☐	No ☒
Is the critical facility located in the 1% annual chance flood area?		Yes ☐	No ☒
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces flood risk
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	$127,500	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months-1 year
Estimated Time Required for Project Implementation:	7 days	**Potential Funding Sources:**	NYSDOT, FEMA HMGP
Responsible Organization:	Town of Eden Highway Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

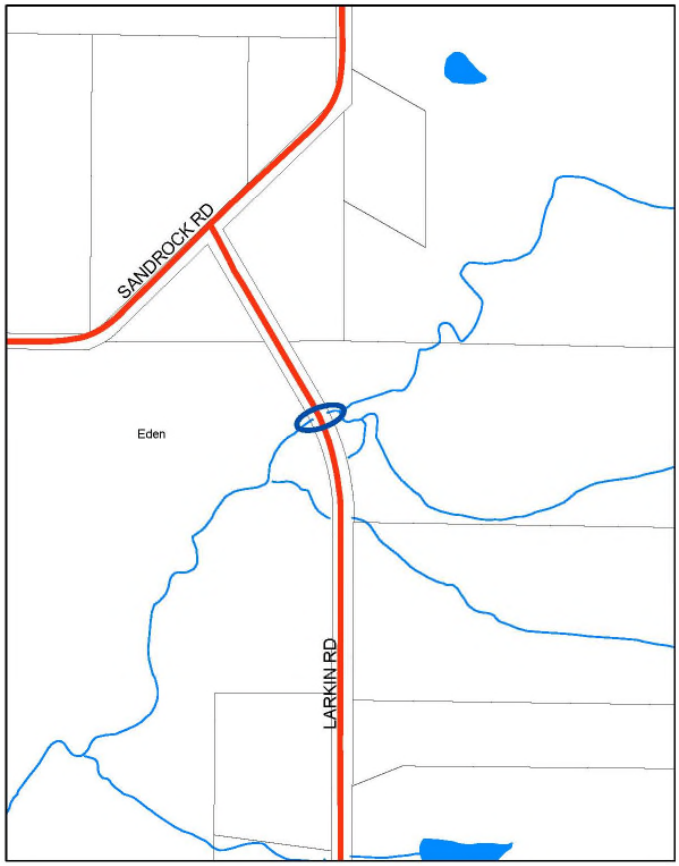
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate entire roadway	$1 million	Not cost effective, would disrupt properties along the road
	Relocate roadway	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Larkin Rd Culvert Replacement	
Project Number:	2022-T. Eden-005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flood risk to homes
Property Protection	1	Reduces flood risk for to properties
Cost-Effectiveness	1	
Technical	1	Town of Eden Highway can complete project
Political	1	Town supports
Legal	1	Town-owned road
Fiscal	0	Town will seek funding
Environmental	1	No anticipated concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Weather
Timeline	1	7 days to complete construction
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)



TOWN OF EDEN
CULVERT REPLACEMENT
LARKIN ROAD
2021

N

Legend

- centerline
- Eden Tax Parcels 2020
- Stream
- River or Pond
- 1 Box Culvert

Description of Box Culvert Replacement (1)

Box Culvert - 60' x 4' x 8' ($1200/ft) = $72,000

Head Wall, Wing Wall & Cut off Wall - $40,000

Select Fill - 150 Ton ($20/Ton) = $3,000

Blacktop - 20 Ton ($100/Ton) = $2,000

Labor and Equipment
$1,500/Day @ 7 Days = $10,500

TOTAL = $127,500.00

Attachment: 59-Section-9.20-Eden-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.21 Town of Elma

This section presents the jurisdictional annex for the Town of Elma. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Elma's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.21.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Elma's hazard mitigation plan primary and alternate points of contact. The Town of Elma followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Deputy Supervisor/Councilman, and Town Engineer. The Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.21-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Wayne A. Clark, Supervisor Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 652-3260 x7 Email: supervisor@elmanewyork.com	Name/Title: Michael Nolan, Deputy Supervisor/Councilman Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 998-4736 Email: mnolan@elmanewyork.com
NFIP Floodplain Administrator	
Name/Title: Joseph Colern Jr., CEO Address: 1600 Bowen Road Elma, NY 14059 Phone Number: (716) 652-6779 Email: jim@stonymfg.com	

9.21.2 Municipal Profile

The Town of Elma is located in the south and center of Erie County. Elma is the county's youngest town, having incorporated in 1857. Elma is 36 square miles in size and was formed from portions of the towns of Aurora and Lancaster. The town contains the following hamlets; Blossom, East Elma, Elma Center, Elma Village, Jamison Road, and Springbrook. The area called "Big Flats" by the local Native Americans became Elma Village. The town is 35 square miles in size. The town is bounded on the west by the Towns of West Seneca and Orchard Park, on the south by the Town of Aurora, on the East by the Town of Marilla and on the north by the Town of Lancaster. US Route 20 and five separate NYS Routes pass through the Town of Elma. The Buffalo Creek traverses the town's northern tier (Town of Elma 2018).

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

White settlement of this area began in earnest after the Seneca Indians were removed from their reservation lands. White settled near creeks which were a source of power for the plentiful sawmills, grist mills and cider mills. As the woods were cleared, the rich soil yielded productive farm yields. Lumber, dairy products, and farm produce were shipped into Buffalo by rail. Today the town is characterized as a suburban mix (Town of Elma 2020).

According to the U.S. Census, the 2010 population for the Town of Elma was 11,317. The estimated 2019 population was 11,732, a 3.7 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.4 percent of the population is 5 years of age or younger and 23.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.21.3 Jurisdictional Capability Assessment and Integration

The Town of Elma performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.21.3). The Town of Elma's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Elma. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.21-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 52 (Building Construction); fully amended September 22, 1954	Local/State	Building Department
Comment: *It is the intent and purpose of this chapter to set certain minimum requirements for the construction of:* *A. New buildings for residential, commercial or industrial purposes.* *B. Additions to or conversions of existing buildings to be used for residential, commercial or industrial purposes in the Town of Elma.*					

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
The town has also adopted the State of New York Building Code and accepts the applicability of the State Building Construction Code for the Town of Elma of the County of Erie of the State of New York in accordance with the provisions of § 374-a of the Executive Law.					
Zoning Code	Yes	No	Chapter 144 (Zoning); 7-18-1950	Local	Building Department and Zoning Board
Comment: *Pursuant to the authority conferred by Article 16 of the Town Law of the State of New York and for each of the purposes specified therein, the Town Board of the Town of Elma, County of Erie and State of New York, has ordained and does hereby enact the following chapter regulating and restricting, by zones, the number of stories and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, the density of population and the location and use of buildings, structures and land for trade, industry and residence and providing for setbacks and line clearances or other purposes. Such regulations shall apply to the Town of Elma.* *These regulations are made in accordance with a Comprehensive Plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewage, schools, parks and other public requirements.*					
Subdivision Ordinance	Yes	No	Chapter 123 (Subdivision of Land); amended July 19, 9189	Local	Planning Board and Town Board
Comment: *It is declared to be the policy of the Town of Elma Planning Board to consider land subdivision plats as part of a plan for the orderly, economic and efficient future growth and development of the Town. Whenever any subdivision of land is proposed, and before any contract for the sale of or any offer to sell any lots in such subdivision or any part thereof is made, and before any permit for the erection of any structure in such proposed subdivision shall be granted, the subdivider or his duly authorized agent shall apply, in writing, for approval of such proposed subdivision in accordance with the following procedures.*					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 120 (Stormwater Management); adopted by Local Law No. 2-2015	Local/State	Engineering
Comment: *The purpose of the stormwater management chapter is to stablish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of §120-2A. The chapter's following objectives are as follows:* 1. *Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* 2. *Require land development activities to conform to the substantive requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-02-01, or as amended or revised;* 3. *Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* 4. *Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* 5. *Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* 6. *Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 117 (Site Plan Review); adopted by Town Board on 4/16/1986	Local	Planning Board

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *Prior to the issuance of either a building permit or use permit in any zoning district, except for a one- or two-family dwelling, related accessory uses or agricultural uses permitted by right under this chapter and the Town of Elma Zoning Ordinance, the Building Inspector shall refer the permit applicant to the Planning Board for site plan consideration in accordance with § 274-a of the Town Law and the procedure and standards set forth in this chapter. The requirements for site plan review include the following: 1) A sketch plan shall include a map of site topography at no more than five-foot contour intervals. If general site grades exceed 5% or portions of the site have susceptibility to erosion, flooding or ponding, a soil overlay and a topographic map showing contour intervals of not more than two feet of elevation should additionally be provided. 2) In the preliminary site plan approval process, the planning board will pay special attention to the adequacy of structures, roadways and landscaping in areas with susceptibility to ponding, flooding and/or erosion.*					
Environmental Protection Ordinance	No	-	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 82 (Flood Damage Prevention); adopted by Local Law No. 1-2019	Local	Code Enforcement Officer
Comment: *The Elma Town Board of the Town of Elma finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Town of Elma and that such damages may include: destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages and to achieve the purposes and objectives hereinafter set forth, this chapter was adopted. The purpose of this chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* *F. Qualify for and maintain participation in the National Flood Insurance Program.* *The town enforces standards for structures in the floodplain. For residential structures, any new construction or substantial improvements in the SFHA must elevate the lowest floor at or above two feet above the BFE. For non-residential structures, any new construction or substantial improvements in the SFHA must have the lowest floor elevated to or above two feet above the BFE.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 115 (Sewers); adopted on 8/17/2005	Local	WWTP/Engineering/Building
Comment: *The general purpose of this chapter is to provide for efficient, economic, environmentally safe, and legal operation of the Town of Elma's publicly owned treatment works. Article 165 of this chapter discusses storm sewers. The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Elma through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of contaminants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02.*					
Emergency Management Ordinance	No	No	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Planning Documents					
Comprehensive Plan	Yes	No	Regional Comprehensive Plan May 2003-4	Local	Planning Board – Intermunicipal Planning Commission
Comment: *The intent of the Regional Comprehensive Plan is to provide a regional planning document for the five communities. The town's goals of the plan are as follows:* • *Preserve the rural community character* • *Encourage orderly growth and development* • *Preserve and promote recreational opportunities* • *Provide for economic development* • *Protect significant environmental resources* • *Minimize the loss of remaining prime farmland soils to development.* • *Provide a safe and efficient transportation system* *The major goals of the plan are as follows: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control or all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems. 7) Prepare open space plans to identify and prioritize important environmental features such as wetlands, floodplains, steep slopes, and watersheds.*				
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County CEMP 2018	County	Emergency Management
Comment: *The County CEMP covers the municipal emergency management and the town abides by the guidance to increase resilience and community safety.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Public Health Plan	No	No	-	-	-
Comment:					
Other	Yes	No	Town of Elma Disaster Plan – updated annually	Local	Emergency Management
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Elma to oversee and track development.

Table 9.21-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	CEO
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Pre-approved and compliance with chapter 100 town code

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Elma and their current responsibilities which contribute to hazard mitigation.

Table 9.21-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The ultimate goal of this planning board is to ensure that the long-range planning and land use objectives of the community can be achieved. In New York State, through the state enabling legislation, municipal planning and land use controls are delegated to the local legislative body.
Zoning Board of Adjustments	Yes	The primary role of a zoning board is to review and decide cases where a relaxation of the ordinance is sought or where there is an alleged error in a zoning decision. The board seeks to correct all errors and reduce the potential hazards that might be caused by a misinterpretation of the local zoning ordinance.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Town of Elma Conservation Board - seeks to preserve the open space to reduce unnecessary development in the town that might pose risk to the community and wildlife.
Open Space Board/Committee	Yes	Town of Elma Conservation Board - seeks to preserve the open space to reduce unnecessary development in the town that might pose risk to the community and wildlife.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Highway Department maintains 40 miles of roads and repaves about 2.5 miles per year and patch the rest of the roads as needed. They also mow roadway shoulders, clear ditches, install culvert pipes, and repair guardrails.
Construction/Building/Code Enforcement Department	Yes	Responsibilities of the Town of Elma Building Department entail the Enforcement of Local and State Building codes in conjunction with Local Zoning enforcement encompassing approximately 36 square miles. All building permits are issued by this Department. Contractors Registration: Under Town Code 105 all contractors, peddlers and solicitors who work within the Town of Elma must be registered with the Town. An application is required with all proper insurances and coverages. The initial fee to register is $75.00 and $50.00 to renew every year thereafter. Fire Inspections: State law mandates that every Industrial, Commercial and Multiple Dwelling be inspected once per year. Property Maintenance: The Town Building Department is responsible for the enforcement of property maintenance under the State property maintenance code.
Emergency Management/Public Safety Department	Yes	OEM – updates of municipal emergency management plan and the abidance of the Federal Emergency Management regulations.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	The town uses CodeRED to notify residents about local emergencies or issue critical alerts.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW – road maintenance, culvert upgrades, ditch clearing.
Mutual aid agreements	Yes	Fire
Other	Yes	Emergency Planning Committee was started to develop, maintain, and update the Town of Elma Disaster Plan, to better prepare the Town of Elma, emergency responders, and to protect residents and their property during a disaster or a large scale emergency. The overall goal is to minimize the impact caused by an emergency in the Town of Elma. The town also established the Elma Community Emergency Response Team (Elma CERT) which is a group of citizens whose main goal is to educate the residents on how to prepare and take care of themselves and immediate neighbors for up to 72 hours during a large scale emergency or disaster. First Responders may not be able to help everyone within that time period.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer is identified as the Floodplain Administrator for the town. Duties and responsibilities of the FPA include: permit application review, using flood data, reviewing for alteration of watercourses, construction stage, inspections, stop-work orders, certificate of compliance, and information retaining.
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Management / Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	Yes	Town Engineer

Fiscal Capability

The table below summarizes financial resources available to the Town of Elma.

Table 9.21-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Elma.

Table 9.21-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Office of Emergency Management
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Town Website: http://www.elmanewyork.com/emergency_management_response.html

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Citizen boards or commissions that address issues related to hazard mitigation	Yes	CERT
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red System/Website
Warning systems for hazard events	Yes	Code Red System
Natural disaster/safety programs in place for schools	Yes	School Resource Officer (SRO)
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Elma.

Table 9.21-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.21-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.21.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Joseph Colern Jr., CEO

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Elma.

Table 9.21-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Elma	16	21	$52,116	9	4

Source: *FEMA 2020a, FEMA 2020b*
RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

Floodprone areas within the town include Winspear Road Flats. There are not any RiskMAP projects currently underway in the town. The Town of Elma's flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Building Department is responsible for floodplain management and the Code Enforcement Officer is the FPA. There are certified floodplain managers on staff in the town. The floodplain management staff would like additional assistance/training if available. NFIP administration services the town provides include permit review, town/planning boards, and an engineer. The Town of Elma determines if proposed development in an existing structure would qualify as a substantial improvement by reviewing the plan. The town explained that the barriers to running an effective NFIP program include plan reviews and board reviews. The town does not have any outstanding NFIP compliance violations that need to be addressed. Chapter 82 of the municipal code is the flood damage prevention ordinance and it is supported by Planning, Zoning, and Town Boards. The floodplain management program meets the minimum requirements. The most recent Community Assistance Contact (CAC) was on April 8, 2005 and the most recent Community Assistance Visit (CAV) was on March 29, 2012.

9.21.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Elma has identified the following routes and procedures to evacuate residents prior to and during an event.

- Jamison Road
- Rice Road
- Bullis Road
- Interstate 400 – Aurora Expressway

Sheltering

The Town of Elma has identified the following designated emergency shelters within the town.

Table 9.21-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Iroquois HS	2111 Girdle Rd	100	Yes	Yes	Yes	Unknown	-
Senior Center	3007 Bowen Road	100	Yes	Yes	Yes	Unknown	-
Jamison Rd FC	1071 Jamison Rd	100	Yes	Yes	Unknown	Unknown	-
Blossom FC	1000 N. Blossom Rd	100	Yes	Yes	Yes	Unknown	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Elma has identified the following sites suitable for placing temporary housing units.

Table 9.21-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Iroquois HS	2111 Girdle Rd	100	Parking Lot	Yes	Unknown
Senior Center	3007 Bowen Rd	100	Parking Lot	Yes	Unknown
Jamison Rd FC	1071 Jamison Rd	100	Parking Lot	Yes	Unknown
Blossom FC	1000 N Blossom Rd	100	Parking Lot	Yes	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Elma has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.21-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Jamison Rd FC	1071 Jamison Rd	100	Open Lot	Yes	Unknown

9.21.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.21-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.21-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	39	0	12	0	21	0	28	0	17	0	0	0
Multi-Family	1	0	1	0	0	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	276	0	248	0	242	0	288	0	366	0	0	0
Total Permits Issued	**316**	**0**	**261**	**0**	**263**	**0**	**317**	**0**	**383**	**0**	**0**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

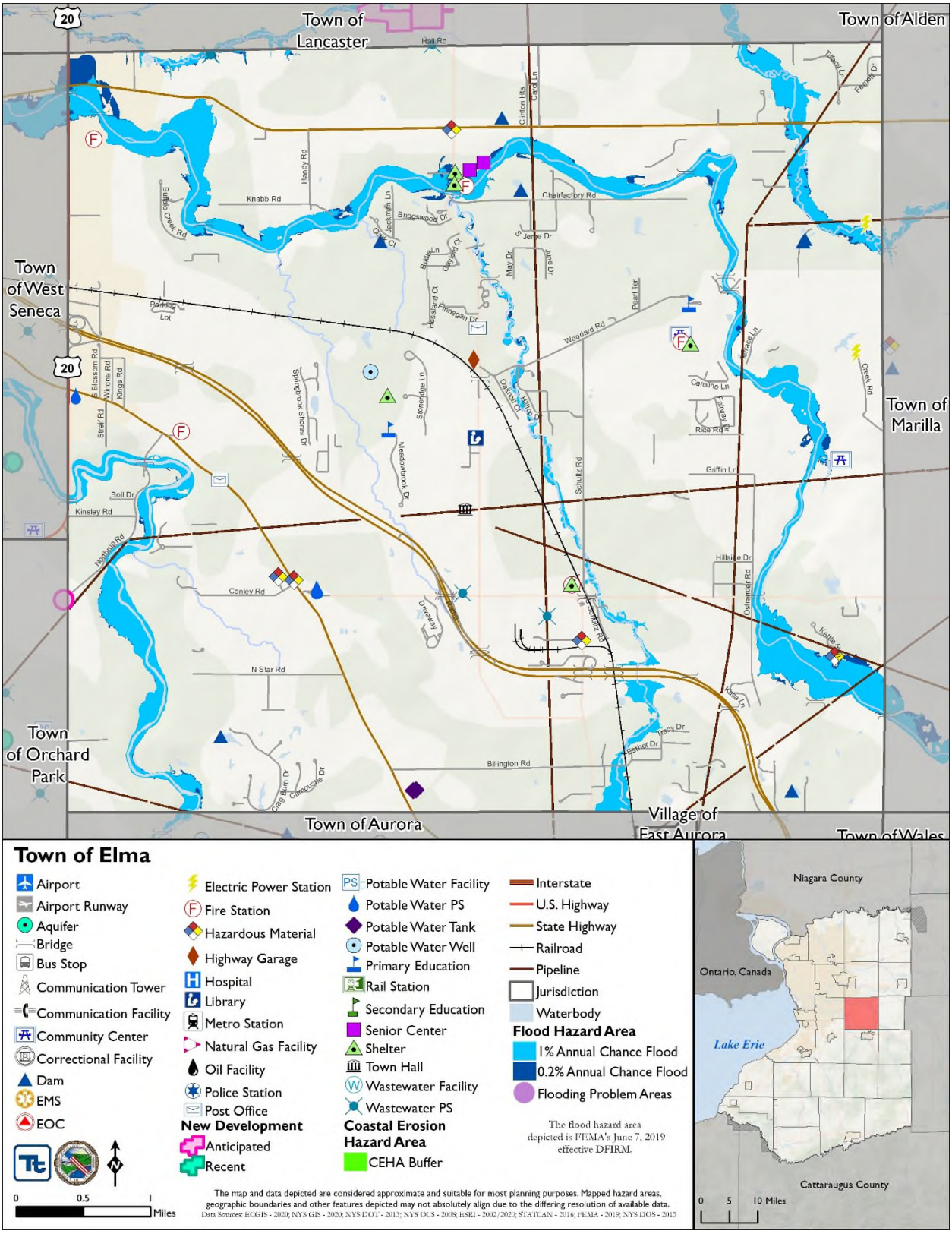
9.21.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Elma's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Elma has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

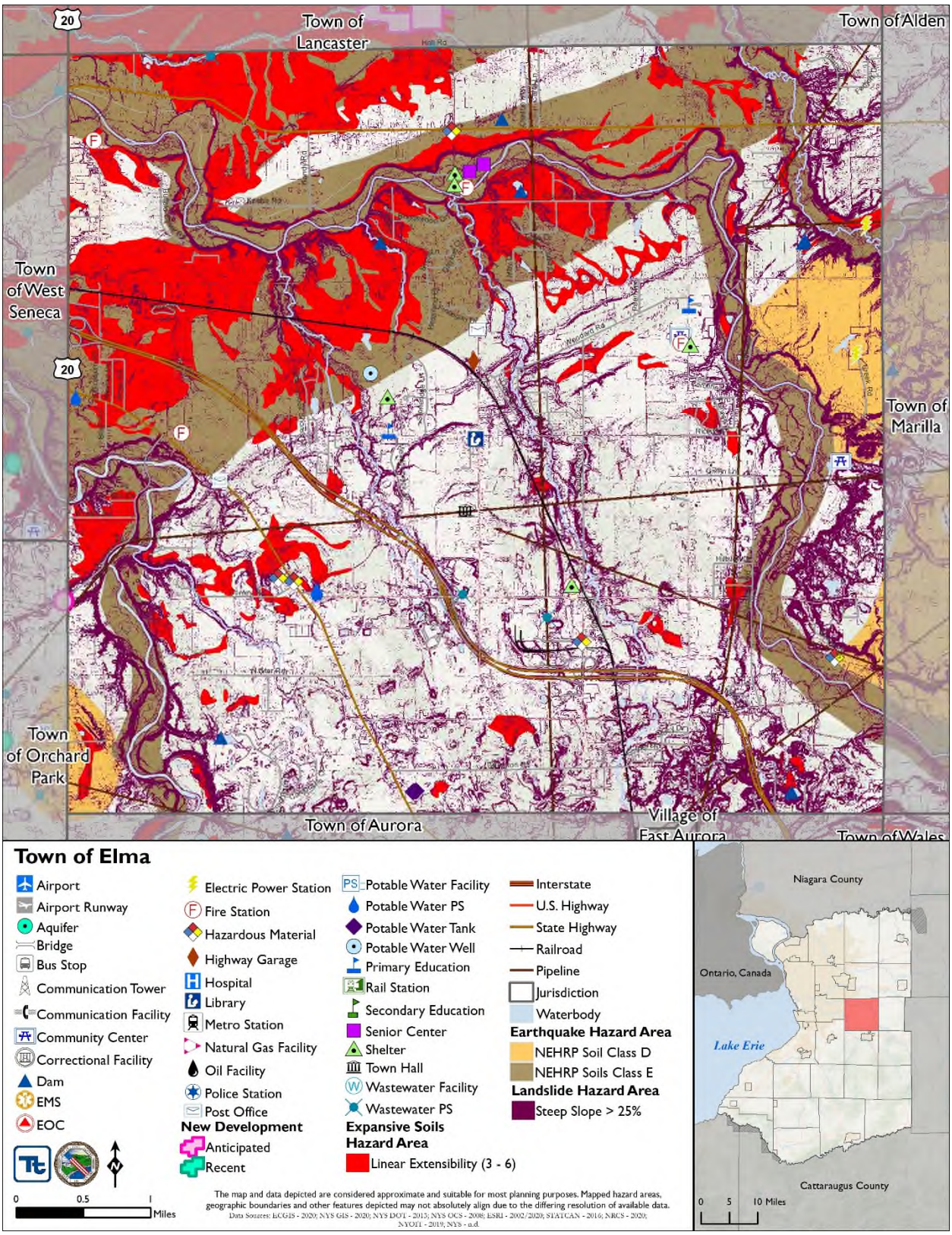
Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.21-1. Town of Elma Hazard Area Extent and Location Map 1



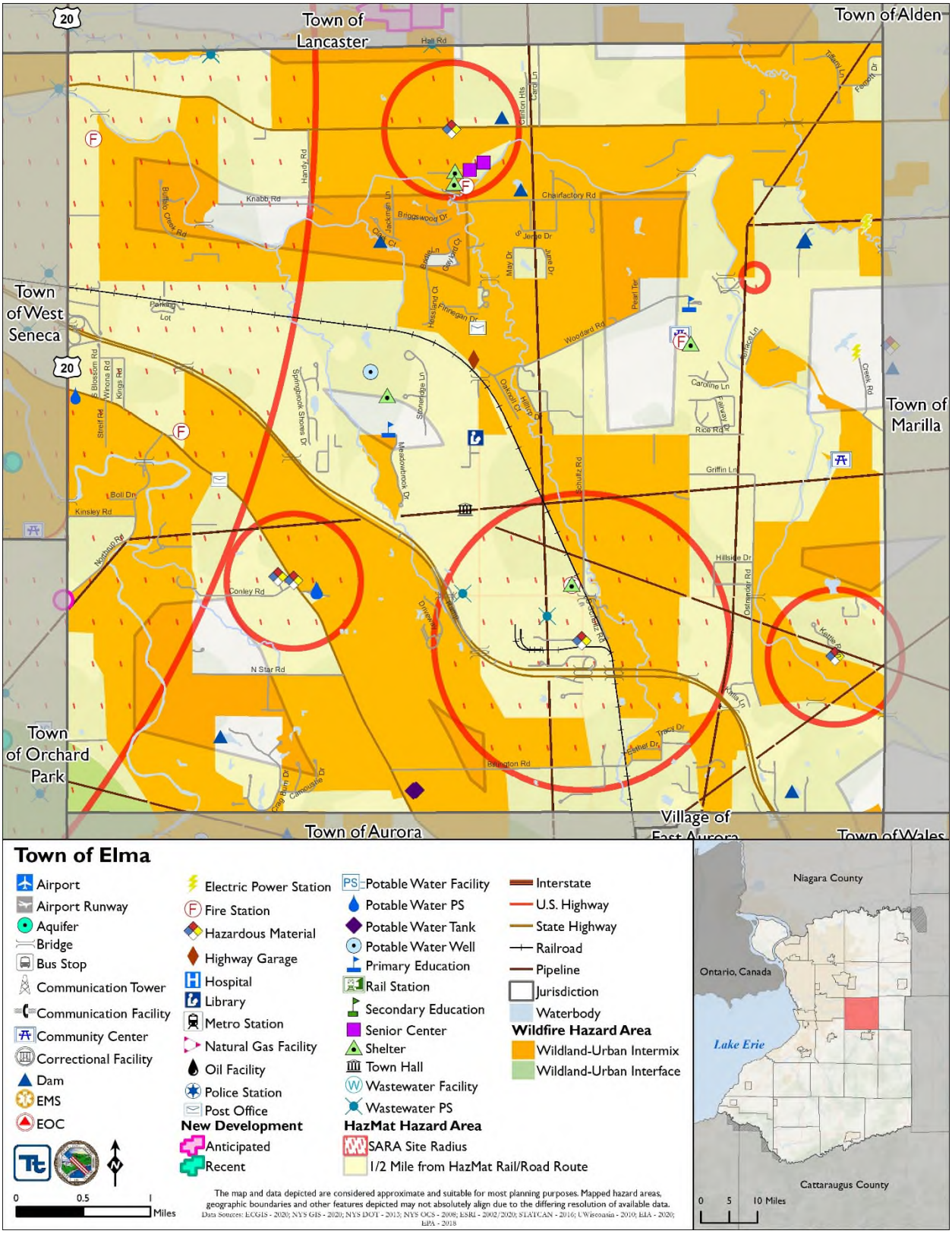
Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.21-2. Town of Elma Hazard Area Extent and Location Map 2



Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.21-3. Town of Elma Hazard Area Extent and Location Map 3



Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Elma's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.21-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.21-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	Town of Elma did not report any damages.
August 11-15, 2015	Flash Flood	Yes	Town of Elma did not report any damages.
October 28-29, 2015	High Wind	Yes	Town of Elma did not report any damages.
November 6, 2015	Thunderstorm Wind	Yes	Town of Elma did not report any damages.
November 12, 2015	High Wind	Yes	Town of Elma did not report any damages.
November 18, 2015	High Wind	Yes	Town of Elma did not report any damages.
January 11, 2017	High Wind	Yes	Town of Elma did not report any damages.
March 8, 2017	High Wind	Yes	Town of Elma did not report any damages.
March 13, 2017	Winter Storm	Yes	Town of Elma did not report any damages.
July 20, 2017	Tornado	Yes	Town of Elma did not report any damages.
August 4, 2017	Thunderstorm Wind	Yes	Town of Elma did not report any damages.
December 10-15, 2017	Lake-effect Snow	Yes	Town of Elma did not report any damages.
December 24-29, 2017	Lake-effect Snow	Yes	Town of Elma did not report any damages.
January 2, 2018	Blizzard	Yes	Town of Elma did not report any damages.
October 6, 2018	Lightning	Yes	Town of Elma did not report any damages.
February 24, 2019	High Wind	Yes	Town of Elma did not report any damages.
February 24, 2019	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Town of Elma did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Town of Elma did not report any damages.
November 27, 2019	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
January 12, 2020	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
January 18, 2020	Lakeshore Flooding	Yes	Town of Elma did not report any damages.
2020-21	COVID 19	Yes	Multiple business closures, social distancing, required mask mandate and self-quarantine. Many municipal services were terminated as a result and reduced funding had a major negative impact on the town.

Notes:
EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Elma's risk assessment results and data used to determine the hazard ranking.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Elma. The Town of Elma has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town had the following comments:

- Severe Winter storms are a threat but the municipality has a high capability to address them so will re rank high to medium.
- The Municipality has not had significant threat to utility failure and will re rank from high to medium.

Table 9.21-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Medium	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	Medium	Medium	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.21-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Elma Fire Station	Fire Station		X	No

Source: 2021 GIS

Identified Issues

After review of the Town of Elma's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Elma has identified the following vulnerabilities within their community:

- Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority.
- Concern with occupant safety and continual operation of building during significant utility interruption.
- The town has an outdated floodplain management ordinance.
- The Donald Lischer Pond Dam, Rowley Dam, NYSEG – Stolle Road Substation, Bulls Road Substation, National Fuel Gas Supply- Porterville, and Speedway 9969 are in the earthquake hazard area.
- The Briggs Dam, Donald Lischer Pond Dam, Bulls Road Electric power station, R. Conley LLC, Speedway 9969 and Elma Post Office are located in the wildfire hazard area.
- Several critical facilities in the Town of Elma may be at risk of being exposed to hazardous materials incidents**.**
- The Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam are located on steep slopes and may be at risk of landslides.
- The Donald Lischer Pond Dam and Bulls Road Electric Power Station may be at risk of experiencing damages caused by expansive soils.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.21.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.21-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Creek Flood Water and Sediment Deposit Monitoring for periodic survey and assessment of established drainage districts for maintenance needs such as sediment and debris removal	Flooding	OEM	Creek levels monitored by multiple town departments during high water events	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as Action 2022-Town of Elma-001 2. See wording in mitigation table below 3.
2	Survey and assess municipal and fire service buildings for storm preparedness and seismic hazard identification and minimization	Storms and Seismic Events	OEM	Concern with occupant safety and continual operation of building during significant utility interruption	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as Action 2022-Town of Elma-002 2. See wording in mitigation table below 3.
3	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Elma Building Department	Outdated floodplain management ordinance	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as Action 2022-Town of Elma-003 2. See wording in mitigation table below 3.
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Elma Building Department	Outdated floodplain management ordinance	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as Action 2022-Town of Elma-003 2. See wording in mitigation table below 3.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Elma has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Elma participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.21-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X	X		X			
Expansive Soils				X			X			
Extreme Temperature										
Flood	X	X		X	X	X			X	
Hazardous Materials				X			X			
Landslide				X			X			
Pandemic										
Severe Storm	X			X	X					
Severe Winter Storm										
Utility Failure										
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.21-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Elma would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Elma-001	Creek levels monitored by multiple town departments during high water events	1,2	Flood, Severe Storm	**Problem**: Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority. **Solution**: The town will conduct a thorough assessment of the existing stormwater capacities of the municipality as well as the creek conditions. While dredging has for a while been the primary solution to mitigating drainage clogging, this is not a sustainable solution. Thus, the town will develop a management plan for streams and stormwater and increase existing stormwater drainage capacity across the town, i.e. increasing culvert size, ditch size, stream bed widening, etc. These measures would be implemented based on plan guidance. This mitigation action is solely for the assessment and development of a water and stormwater management plan.	No	None	5 years	OEM	$100,000	Flood Mitigation	HMGP, WQIP	High	LPR	PR
2022-Town of Elma - 002	Storm and seismic preparedness for municipal and fire service buildings	1,2,3,4	Severe Storms, Earthquake	**Problem**: Concern with occupant safety and continual operation of building during significant utility interruption. **Solution**: Survey and assess municipal and fire service	Yes	None	5 years	OEM	Low	Utility Failure	Municipal Budget	High	EAP	PR

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				buildings for storm preparedness and seismic hazard identification. Conduct construction and retrofitting as needed.										
2022-Town of Elma - 003	Update the Floodplain Management Ordinance	1,2,3	Flood	**Problem**: The town has an outdated floodplain management ordinance. **Solution**: Update/revise floodplain management ordinances to comply with latest FEMA regulations to include the required 2' freeboard and be consistent with potential new FIRMs	No	None	3 years	Elma Building Department	Low	Flood	Municipal Budget	High	LPR	PR
2022-Town of Elma - 004	Elma Fire Station Flood Mitigation and Updating	1,2	Flood	**Problem**: The Elma Fire Station is in the 0.2% annual chance flood event and experiences flooding. **Solution:** The town shall work with the fire station operator to conduct a thorough assessment of the existing flooding vulnerabilities of the site and determine whether retrofitting and other mitigation measures might be adequate to address existing concerns. If not, the facility might need to relocate. Otherwise, the town would further, conduct additional needs assessment to determine other space and resources needed to expand facility capacity. This includes, additional fire station space for trucks, emergency water tanks/ fuel tanks, generators, storm lights, and shelter facilities.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Elma - 005	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	3,4	Earthquake	**Problem**: The Donald Lischer Pond Dam, Rowley Dam, NYSEG – Stolle Road Substation, Bulls Road Substation, National Fuel Gas Supply- Porterville, and Speedway 9969 are in the earthquake hazard area. **Solution**: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes. Once identified, the town will seek funding to implement the appropriate projects.	Yes	None	Within 6 months for outreach	Town of Elma Town Board	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of Elma - 006	Work with the private facility owners to protect the facilities from wildfires	3,4	Wildfire	**Problem:** The Briggs Dam, Donald Lischer Pond Dam, Bulls Road Electric power station, R. Conley LLC, Speedway 9969 and Elma Post Office are located in the wildfire hazard area. **Solution:** Work with property owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities from wildfire events.	Yes	None	Within 6 months for outreach	Town Board	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PR
2022-Town of Elma - 007	Protect the critical facilities in the Town of Elma from HazMat incidents	3,4	Hazardous Materials Incidents	**Problem:** Several critical facilities along the railroad in the Town of Elma may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are	Yes	None	Within 6 months for outreach	Town Board	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				evacuated from the buildings due to a hazmat release.										
2022-Town of Elma - 008	Work with the Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam facility owners from landslides	3,4	Landslide	**Problem:** The Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam are located on steep slopes and may be at risk of landslides. **Solution:** Work with the facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect it from landslides.	Yes	None	Within 6 months for outreach	Town Board	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential landslide damage	Town Budget	High	EAP	PI
2022-Town of Elma - 009	Work with the Donald Lischer Pond Dam and Bulls Road Electric Power Station facility owners to protect the facilities from the risk of expansive soils	3,4	Expansive Soils	**Problem:** The Donald Lischer Pond Dam and Bulls Road Electric Power Station may be at risk of experiencing damages caused by expansive soils. **Solution:** Work with the facility owners to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.	Yes	None	Within 6 months for outreach	Town of Elma	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022-Town of Elma - 010	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect	No	No	Within 3 years	Town NFIP Administrator	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Table 9.21-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:
Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.21-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Elma-001	Creek levels monitored by multiple town departments during high water events	1	1	1	1	1	1	-1	1	1	0	1	1	1	1	11	High
2022- Town of Elma -002	Storm and seismic preparedness for municipal and fire service buildings	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022- Town of Elma -003	Update the Floodplain Management Ordinance	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -004	Elma Fire Station Flood Mitigation and Updating	1	1	1	1	1	1	-1	1	1	0	0	1	1	1	10	High
2022- Town of Elma -005	Work with private facility owners to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -006	Work with the private facility owners to protect the facilities from wildfires	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -007	Protect the critical facilities in the Town of Elma from HazMat incidents	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -008	Work with the Charles Wick Pond Dam and Crag Burn Golf Course Pond Dam facility owners from landslides	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022- Town of Elma -009	Work with the Donald Lischer Pond Dam and Bulls Road Electric Power Station facility owners to protect the facilities from the risk of expansive soils	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Elma -010	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.21.9 Action Worksheets

The following action worksheets have been developed by the Town of Elma to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Creek and Stormwater Management Assessment and Plan		
Project Number:	2022-Town of Elma-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storms		
Description of the Problem:	Creeks and drains within the town are getting overwhelmed due to sediment and debris during heavy rain events. Many of the existing stormwater infrastructure is undersized and under capacity and, with global warming and increasing magnitude of hazard events, the town has identified stormwater rightsizing as a top priority.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would need to conduct a thorough assessment of the existing stormwater capacities of the municipality as well as the creek conditions. While dredging has for a while been the primary solution to mitigating drainage clogging, this is not a sustainable solution. Thus, the town would need to develop a management plan for streams and stormwater and increase existing stormwater drainage capacity across the town, i.e. increasing culvert size, ditch size, stream bed widening, etc. These measures would be implemented based on plan guidance. This mitigation action is solely for the assessment and development of a water and stormwater management plan.		
Is this project related to a Critical Facility?	Yes ☐	No X	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No X	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Flood Reduction
Useful Life:	50 years	**Goals Met:**	All
Estimated Cost:	$100,000	**Mitigation Action Type:**	Local Plans and Regulations
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	HMGP, WQIP
Responsible Organization:	DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
	Action	**Estimated Cost**	**Evaluation**
Alternatives:	No Action	$0	Problem continues.
	Cap Any Flooding stormwater and streams	High	Not feasible and expensive
	Stormwater and Stream Management	High	Best Option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Creek and Stormwater Management Assessment and Plan	
Project Number:	2022-Town of Elma-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	1	This project is technically feasible
Political	1	There is no political opposition
Legal	1	There are no legal issues
Fiscal	-1	The town needs resources
Environmental	1	This has positive environmental impact
Social	1	Has positive social impact
Administrative	0	Town Board
Multi-Hazard	1	Yes – Flood and Severe Storm
Timeline	1	Feasible
Agency Champion	1	Town DPW
Other Community Objectives	1	community safety
Total	11	
Priority (High/Med/Low)	High	

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Elma Fire Station Flood Mitigation and Updating		
Project Number:	2022- Town of Elma -004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Elma Fire Station is in the 0.2% annual chance flood event and experiences flooding. In the case of a flood, the facility is potentially vulnerable to flooding. Additionally, the facility is outdated and has limited capacity in terms of expansion of emergency services for the community.		
Action or Project Intended for Implementation			
Description of the Solution:	The town shall work with the fire station operator to conduct a thorough assessment of the existing flooding vulnerabilities of the site and determine whether retrofitting and other mitigation measures might be adequate to address existing concerns. If not, the facility might need to relocate. Otherwise, the town would further, conduct additional needs assessment to determine other space and resources needed to expand facility capacity. This includes, additional fire station space for trucks, emergency water tanks/ fuel tanks, generators, storm lights, and shelter facilities.		
Is this project related to a Critical Facility?	Yes X	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes X	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Flood mitigation and hazard preparation.
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$100,000-$500,000	**Mitigation Action Type:**	Structural and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	HMGP, Fire Management Assistance Grant Program, Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP)
Responsible Organization:	Town of Elma Office of Emergency Management/ Fire Station	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation and Emergency Preparedness
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Close Existing Facility	Low	Capacity Decreases and existing issue continues
	Retrofit and Upgrade Existing Facility	High	Best option in the long run
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Elma Fire Station Flood Mitigation and Updating	
Project Number:	2022- Town of Elma -004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is cost effective
Technical	1	This project is technically feasible
Political	1	There are no political issues
Legal	1	There are no legal issues identified
Fiscal	-1	The project needs external funding
Environmental	1	The project has a positive environmental impact
Social	1	The project has a positive social impact
Administrative	0	There is administrative support
Multi-Hazard	0	This addresses a single hazard
Timeline	1	The timeline is feasible
Agency Champion	1	Town OEM
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	

Attachment: 60-Section-9.21-Elma-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.22 Town of Evans

This section presents the jurisdictional annex for the Town of Evans. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Evans's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.22.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Evans's hazard mitigation plan primary and alternate points of contact. The Town of Evans followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: Planning & Community Development, Code Enforcement, Engineering. The Director of Planning & Community Development represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.22-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: William Smith, Director of Planning & Community Development Address: 8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-0945 Email: wsmith@townofevans.org	Name/Title: Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer Address:8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-5753 Email: cbaskerville@townofevans.org
NFIP Floodplain Administrator	
Name/Title: Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer Address:8787 Erie Rd., Angola, NY 14006 Phone Number: 716-549-5753 Email: cbaskerville@townofevans.org	
Additional Contributors	
Name/Title: Dave Johnson, Town Engineer Method of Participation: Provided Data and Information	

9.22.2 Municipal Profile

The Town of Evans is 41.5 square miles and is bounded on the north by the Town of Hamburg, on the east by the Town of Eden, on the south by the Town of Brant and on the west by Lake Erie. The town has a long and rich history as a waterfront and railroad community. In 1804, the first white settler to the town arrived on the west side of Eight-Mile Creek near its confluence with Lake Erie and opened a tavern, the Frontier House. The town incorporated in 1821 and derived its name from David E. Evans, an agent of the Holland Land Company and nephew of land agent Joseph Ellicott (Town of Evans website, accessed 2020). Immigrants

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

came to the town after the War of 1812. Later in the century, proximity to Lake Erie spurred the development of seasonal residences. While Evans Center remained the community's main hub, Evans Station, to the south, steadily developed due to construction of the Buffalo and State Line Railroad. As the railroad stimulated more growth a post office was founded and this area eventually incorporated as the separate Village of Angola (Town of Evans & Village of Angola Comprehensive Plan, 2019).

According to the U.S. Census, the 2010 population for the Town of Evans was 14,229. The estimated 2019 population was 13,782, a 3.1 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.2 percent of the population is 5 years of age or younger and 21.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.22.3 Jurisdictional Capability Assessment and Integration

The Town of Evans performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Town of Evans's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Evans. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.22-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	2020 NYS Building Standards	local	Building Dept./Town of Evans
Comments: NYS Uniform and Energy Code 2020; The fact that a building or structure exists in violation of the applicable provisions of the New York State Uniform Fire Prevention and Building Construction Code or of an earlier Town building code, as the case may be, or of any local law of the Town of Evans, when found as other violations in addition to conditions deemed to be in violation of this chapter, may be considered in determining whether a building or structure is hazardous, dangerous or unsafe.					
Zoning Code	Yes	Yes	Chapter 200, Evans Town Code	local	Planning Dept./Town of Evans

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The purpose of this chapter and the intent of the legislative authority in its adoption is to promote and protect to the fullest extent permissible the environment of the Town and its public health, safety, convenience, comfort, prosperity and the general welfare by regulating the use of buildings, other structures and land for residences, open space, public facilities, business, services, industry or other purposes; by regulating and restricting the bulk, height, design, lot coverage and location of structures; by regulating and limiting population density; and, for the aforesaid purposes, to divide the land within the limits of the Town into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan; and to provide procedures for the administration and amendment of said chapter.					
Subdivision Ordinance	Yes	Yes	Chapter 178, Evans Town Code	local	Planning Dept./Town of Evans
Comment: It is declared to be the policy of the Planning Board and Town Board to consider the subdivision of land and the subsequent development of the subdivided plat as subject to control by the Town for the orderly, planned, efficient, physical and economic development of the town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace, that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Master Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for open spaces for parks and playgrounds.					
Stormwater Management Ordinance	Yes	Yes	Chapter 170 and Chapter 200. Article XII of Evans Town Code	local	Engineering (CPL) and Building Dept./Town of Evans
Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Evans through the regulation of nonstormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for MS4s.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	2019 Evans-Angola Comprehensive Plan	Local	Planning Dept./Town of Evans
Comment: See Comprehensive Plan, below					
Site Plan Review	Yes	Yes	Chapter 200-42, Evans Town Code	Local	Planning Dept./Town of Evans
Comment: The content of the site plan shall be approved by the Building Inspector prior to filing. The approved submission shall be filed with the Town Clerk, who, upon payment of the required fees, shall transmit it to the Building Inspector for distribution to such officials and agencies as he may deem appropriate for their review, report and recommendation. The site plan shall include or be accompanied by the following information, prepared by a licensed engineer, architect, landscape architect, surveyor or attorney as appropriate. The number of copies shall be determined by the Building Inspector.					
Environmental Protection Ordinance	Yes	Yes	State Environmental Quality Review Act	local	Planning Dept./Town of Evans
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 113, Evans Town Code	Local	Code Enforcement Officer
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. • It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement					

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 170 and Chapter 200. Article XII of Evans Town Code	local	Engineering (CPL) and Building Dept./Town of Evans
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Town of Evans/ Village of Angola Comprehensive Plan Update January 14, 2019	Local	Planning Dept./Town of Evans
Comment: Goals/Objectives to reduce vulnerability: 1) To preserve and enhance the character of the Town and Village through high quality design, responsible stewardship and application of sustainability principles. 2) Support infrastructure that balances growth and development with environmental quality, specifically as related to stormwater, utilities, renewable energy and agricultural preservation. 3) Protect water quality and, prevent shoreline erosion, and protect sensitive habitats. Actions to reduce vulnerability: 1) Prepare an engineering study to address infrastructure issues and deficiencies, especially related to stormwater and drainage concerns in the Town and Village. 2) Prevent nutrient runoff and excessive phosphorus build-up from fertilizer use; promote stormwater retention and treatment practices to remove nutrients and minimize erosion; ensure proper setbacks from waterbodies and buffer areas. 3) Develop a conservation zoning overlay that provides a regulating framework to protect sensitive environmental features. 4) Develop and implement a green streets- green site policy to encourage the use of a natural systems approach to help address current stormwater and flooding concerns, manage stormwater, reduce flows, improve water quality and enhance watershed health.					
Capital Improvement Plan	Yes	No	Ongoing	Local	Finance Office
Comment: Within Annual Budget					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	Yes	Chapter 113, Evans Town Code	local	Building Dept./Town of Evans
Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	No	Stormwater Management Program Plan May 1, 2015 – April 30, 2017	local	Supervisor, Planning

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Goals/Objectives to reduce vulnerability: 1) To reduce the discharge of pollutants to the maximum extent practicable. Actions to reduce vulnerability: 1) Prepare public education posters that can be placed within municipal buildings, libraries, and schools. 2) Implement enforcement action per the Local Law to prohibit illicit discharges, activities and connections to separate storm sewer system.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	2013 Local Waterfront Revitalization Program (currently being updated) Waterfront Ordinance, 2011	Local	Building Dept./Town of Evans
Comment: Goals/Objectives to reduce vulnerability: 1) The preservation, enhancement and utilization of the natural and man-made resources of the waterfront area of the Town occur in a coordinated and comprehensive manner to ensure a proper balance between the protection of natural resources and the need to accommodate growth and economic development. 2) To prevent the beneficial use of waterfront resources while preventing the loss and degradation of living waterfront resources and wildlife; adverse impacts to historic structures; diminution of open space areas or public access to the waterfront; disruption of natural waterfront processes; impairment of scenic, cultural or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; and permanent adverse changes to ecological systems. Actions to reduce vulnerability: 1) Ensure that development occurs where adequate public infrastructure is available to reduce health and pollution hazards (LWRP Policy 5). 2) Minimize flooding and erosion hazards through nonstructural means, carefully selected, long-term structural measures and the appropriate siting of structures (LWRP Policies 11, 12, 13, 14, 16, 17).					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	Yes	Yes	2002 Regional Farmland Protection Plan and 2009 Sowing the Seeds of Southtowns Agri-Business.	local	Planning and Community Development
Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.					
Other (this could include a tourism plan, business	Yes	No	Lake Erie Beach Neighborhood Revitalization Strategy, 2010	Local	Supervisor

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
development plan, etc.)					
Comment: Goals/Objectives to reduce vulnerability: 1) Formulate strategies to eliminate structures presently located on problematic sites limited by access or vulnerable to environmental impacts such as flooding or erosion. 2) Utilize storm water management techniques to reduce flooding within the Lake Erie Beach Neighborhood. 3) Ensure storm water management is considered for all new construction to reduce or eliminate storm water runoff impacts upon existing development. Actions to reduce vulnerability: 1) Acquire available properties along Muddy Creek and Fern Brook as they become available as a means to protect the natural rights of way and prevent new housing from developing in the floodplains. 2) Employ progressive storm water management techniques to combat persistent flooding. 3) Develop a comprehensive Storm Water Management Plan for Lake Erie Beach and surrounding neighborhoods and add techniques to zoning code. 4) Use bio-retention storage areas to collect and filter water. 5) Reduce and disconnect impervious areas such as parking lots to reduce volume and velocity of runoff. 6) New development should be prohibited from located within the adjacent floodplain and each proposed project should be strictly reviewed for flooding impacts in adjacent neighborhoods. 7) Trails in flood prone areas should be crushed gravel and stone construction.					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2017 Town of Evans Disaster Preparedness Plan	Local	Fire, Emergency, Police
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Winter Storm Recovery and Preparing for the Next Storm, 2014	Local	Supervisor
Comment: Goals/Objectives to reduce vulnerability: 1) To prevent loss of life to humans and animals and damage to structures from winter storms. Actions to reduce vulnerability: 1) Provides maintenance procedures for farm structures to prevent collapse from a winter storm.					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Evans to oversee and track development.

Table 9.22-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Building Departments

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Yes, floodplain permits are tracked.
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town still maintains are large amount of vacant and buildable land.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Evans and their current responsibilities which contribute to hazard mitigation.

Table 9.22-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Division Provides: Application assistance for: • Site Plan Review • Rezoning • Major and Minor Subdivisions • Special Use Permits • Local Waterfront Revitalization Program (LWRP) Consistency Review • Telecommunication Towers • Commercial, Agricultural and Residential Windmills General Assistance with: • Zoning and Development issues • The New York State Environmental Quality Review (SEQR) Process • The Town of Evans Comprehensive Plan • Development in the Local Waterfront Revitalization Area • Agricultural Protection • Town of Evans Stormwater Management
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals is a seasoned board comprised of members with varied background and experience. The Zoning Board of Appeals is charged with addressing the requests by residents to either obtain an interpretation of the zoning ordinance or zoning map designation; appeal to a type of property use for something other than what is allowed; appeal for variance to a zoning ordinance; which is generally due to the size or location of a proposed new structure.
Planning Department	Yes	The role of planning in the Town of Evans has diversified to include issues related to long-term Comprehensive planning and zoning, as well as the day-to-day issues associated with growth and development. The Town has adopted a Comprehensive Plan, a Local Waterfront Revitalization Program and an Agricultural Protection Plan, and the implementation of the recommendations contained in these documents.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Commission makes recommendations to the Towns Board regarding open space conservation program, and conservation priorities for the Town of Evans.
Open Space Board/Committee	No	-

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Economic Development Commission/Committee	Yes	The Evans Town Board formed the Economic Development Advisory Committee in May 2002, to assist with development issues and implementation of the Master Plan. The Committee currently consists of 12-members from various professions such as: banking; legal; real estate; industrial development; local government; small business; and, health and human services. EDAC, a recommending committee, has been actively engaged in local economic development matters, working to enhance development opportunities in the Town of Evans. Most recently, EDAC has been involved in advancing the Residential Tax Enhancement Project as well as the Lake Erie Beach Neighborhood Revitalization Strategy.
Public Works/Highway Department	Yes	The main mission of the Highway Department is the maintenance and improvement of a network of approximately 140 lane miles of town highways for the safe operation of the motoring public. In recent years, the Department has taken on the additional task of new road construction. The Highway Superintendent is the custodian of the right-of-way. In addition to road maintenance, within the borders of the right-of-way, the department maintains drainage and the removal of brush and grass cutting. Recently, the Highway Department has added the service of residential brush pickup for town residents and the community. The department is accountable to keep four bridges in repair. During the winter months, the department is responsible for snow removal and ice control not only to the Town of Evans' 140 lane miles of town road, but also an additional 70 lane miles of County of Erie highways.
Construction/Building/Code Enforcement Department	Yes	It is the mission of the Code Enforcement Department of the Town of Evans to work in partnership with the Evans Town Board, Planning Division, Director of Community Development and the Police Department to promote and maintain a safe and desirable living and working environment. We help maintain or improve the quality of our community by administering a fair and unbiased enforcement program to correct violations of the Building Codes of New York, Municipal Codes, and land use requirements.
Emergency Management/Public Safety Department	Yes	Police Department
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED Emergency Alerts
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Responsibility of the Highway Department (see above)
Mutual aid agreements	Yes	-
Other	Yes	Climate Smart Committee Task Force
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Town Engineer

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	Town Engineer, Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Engineering
Emergency Manager	Yes	-
Grant writer(s)	Yes	Planning Department
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Evans.

Table 9.22-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Evans.

Table 9.22-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Managed by the Supervisor's Office.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Personnel skilled or trained in website development	Yes	The Town Clerk currently manages website; however, the Town is in process of hiring a new communications person to handle website.
Hazard mitigation information available on your website	Yes	Available on the Planning and Building Dept pages.
Social media for hazard mitigation education and outreach	Yes	The town regularly uses its social media pages to communicate with residents about potential hazards.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Various Committees, including Drainage Committee that works to address flooding issues.
Other programs already in place that could be used to communicate hazard-related information	Yes	The town has developed an online Flood Reporting Systems connected to the town's website.
Warning systems for hazard events	Yes	See above
Natural disaster/safety programs in place for schools	Yes	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Evans.

Table 9.22-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	In Process	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	-
NYSDEC Climate Smart Community	In Process	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.22-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

**Strong* *Capacity exists and is in use*

Moderate *Capacity may exist; but is not used or could use some improvement*

Weak *Capacity does not exist or could use substantial improvement*

9.22.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Corey Baskerville, Supervising Code Enforcement Officer & MS4 Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Evans.

Table 9.22-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Evans	106	100	$450,489	24	71

Source: *FEMA, 2019*

Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*

RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The town has identified areas within the Fern Brook and Muddy Creek Watersheds in the Lake Erie Beach and Grandview neighborhoods as flood prone areas within the town. Ice jams are frequent on Big Sister Creek in the Evans Center Neighborhood. There are numerous property owners within the town that are interested in flood mitigation projects for their properties and the town keeps this list to provide support. However, there have been no properties that have been mitigated by either elevation or acquisition. There are currently no RiskMAP projects being undertaken within the town. The town also notes that the flood hazard maps available to the town do not accurately address flood risk because they do not account for ice jam flooding.

Substantial Damage determinations are made by the Town Building Inspector, who determines a damage value threshold for the property.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The Town of Evans Building Department is responsible for floodplain management. While there are certified floodplain managers (CFM) within the town, assistance for staff with a full overview of the Flood Assistance Program has been requested to support the floodplain management efforts. Barriers to an effective NFIP program include the employment of qualified personnel. The town reviews all floodplain building permit applications with engineering guidance and support from a retained engineering consultant. The Town Building Inspector determines if proposed developments qualify as "substantial improvements." The Planning Board and Town Board both consider floodplains and take flood risk into account when developing codes and reviewing site plans.

There are currently no outstanding compliance issues within the town. The most recent Community Assistance Visit (CAV) was completed on March 16, 2020.

Chapter 113 of the Town of Evans Town Code details the local Flood Damage Prevention Ordinance, last amended on April 17, 2019. The floodplain management program meets minimum requirements. The town is in the process of joining the Community Rating System (CRS) program.

9.22.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Evans has identified the following routes and procedures to evacuate residents prior to and during an event.

- Any evacuation would be directed from town roads to county roads and finally to state roads (Routes 5 and 20) that are accessible. The NYS Thruway would be considered if necessary and possible. NYS detour routes would be used if necessary. Evacuation procedures and response plans are kept at the Police Department. These plans would be coordinated with NITTEC (Niagara International Transportation Technology Coalition) as well as other support local, county, and state agencies.

Sheltering

The Town of Evans has identified the following designated emergency shelters within the Town.

Table 9.22-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Highland VFC	1 George Nablo, Derby	250	Yes	Yes	Yes	Ambulance, basic first aid	Fire/Rescue
N Evans VFC	6980 Versailles, Derby	150	Yes	Yes	Yes	Basic first aid	Fire/Rescue
Evans Center VFC	8298 Erie Road, Angola	50	Yes	Yes	Yes	Ambulance – basic first aid	Fire/Rescue

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Lake Erie Beach VFC	9483 Lake Shore, Angola	150	Yes	Yes	Yes	Ambulance – basic first aid	Fire/Rescue

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Evans has identified the following sites suitable for placing temporary housing units.

Table 9.22-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify Permanent Housing Locations. See Mitigation Action #2022-T. Evans-001.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Evans has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.22-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify Permanent Housing Locations. See Mitigation Action #2022-T. Evans-001.					

9.22.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.22-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.22-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	11	1	11	0	11	0	8	0	13	2	9	0
Multi-Family	0	0	0	0	1	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	2	0	4	0	1	0	5	0	6	0	4	0
Total Permits Issued	**13**	**1**	**15**	**0**	**13**	**0**	**13**	**0**	**19**	**2**	**14**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Autozone Parts, Inc	Comm	1	6919 Erie Rd 206.07-2-19	Wildland-Urban Intermix Hazard Area, NEHRP Soil Class E and E Hazard Area, ½ Mile Buffer from HazMat Roadways	Auto Parts Store
Flexovit USA, Inc	Comm	2	1305 Eden Evans Center Rd 236.00-11-3.1	Unknown	Industrial
Cradle Beach Camp, Inc	Comm	1	8038 Lake Shore Rd 220.00-1-1	Unknown	Dormitory, Completed October 2017
Brandy Ownes	Comm	1	515 Herr Rd 250.08-5-1	Unknown	Store, Completed March 2018
The Four Brits, LLC	Comm	1	459 Herr Rd 250.07-3-5	Unknown	Bar/Restaurant, Completed August 2018
RTE Real Estate	Comm	3	7692 Southwestern Blvd 207.00-4-21.2	Unknown	Greenhouse, Completed June 2020
Robert Warren	Comm	3	9545 Hardpan Rd 251.00-2-1.112	Unknown	Storage Units
The Broadway Group, LLC	Comm	1	6889 Erie Rd 206.07-2-15	Unknown	Dollar General, Completed September 2019
Marguerite Hogg	Comm	4	8712 Erie Rd 235.00-2-3.11	Unknown	Storage Units, Completed December 2020
Angola Congregation of Jehovah's Witness	Comm	1	1100 Cain Rd	Unknown	Church, Construction in Progress
Derby Warehousing, LLC	Comm	1	1393 Wisconsin Rd 206.00-4-9.1	Unknown	Warehouse, Completed November 2019
1670 Southwestern Self Storage	Comm	6	1670 Eden Evans Center	Unknown	Storage Units, Completed November 2020

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
			Rd 221.00-3-16.112			
Erie Woods Apartments, LLC	Comm	3	6622 Erie Rd 193.13-2-17	Unknown		Apartment Units, Completed November 2017
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Identified						

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

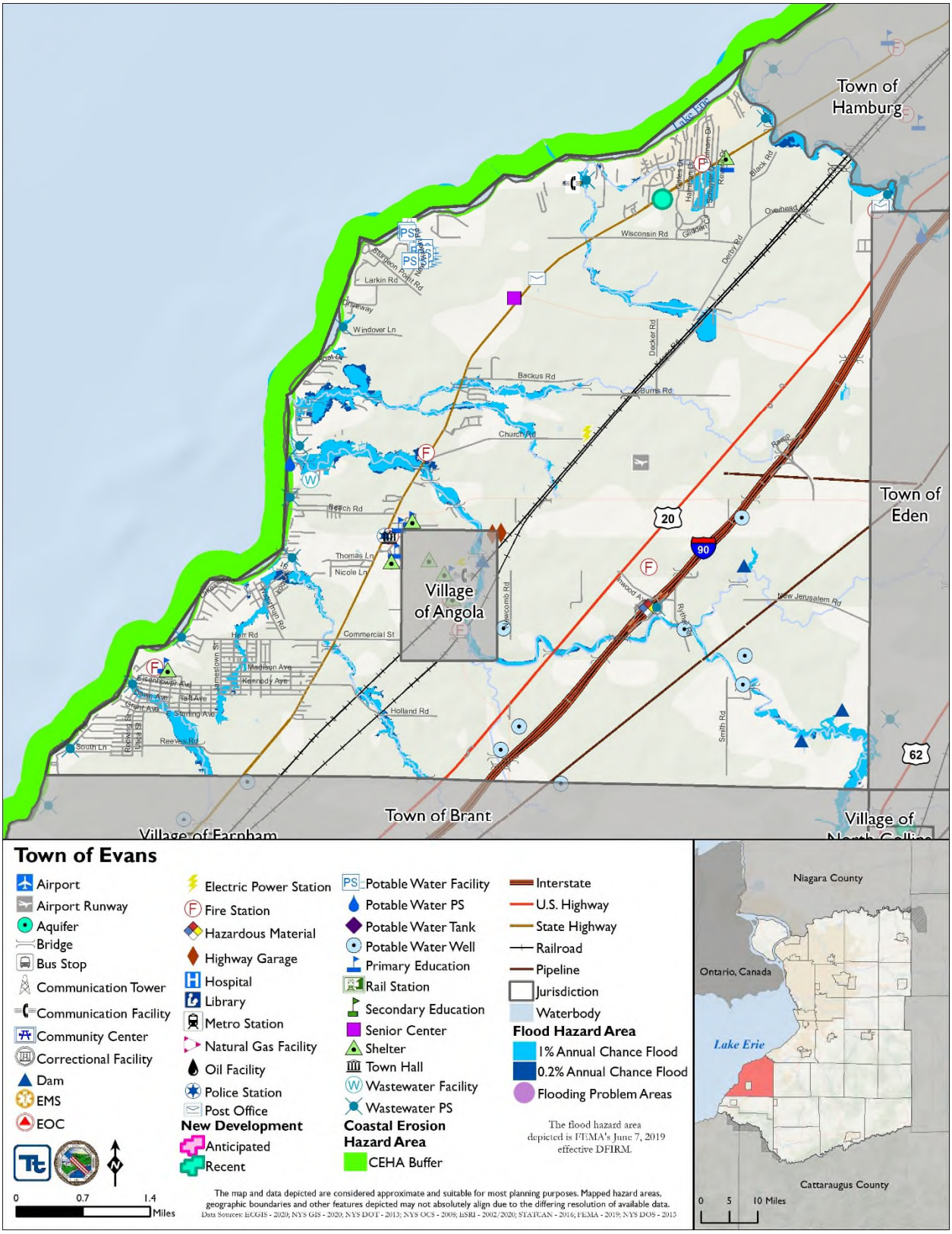
9.22.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Evans's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Evans has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

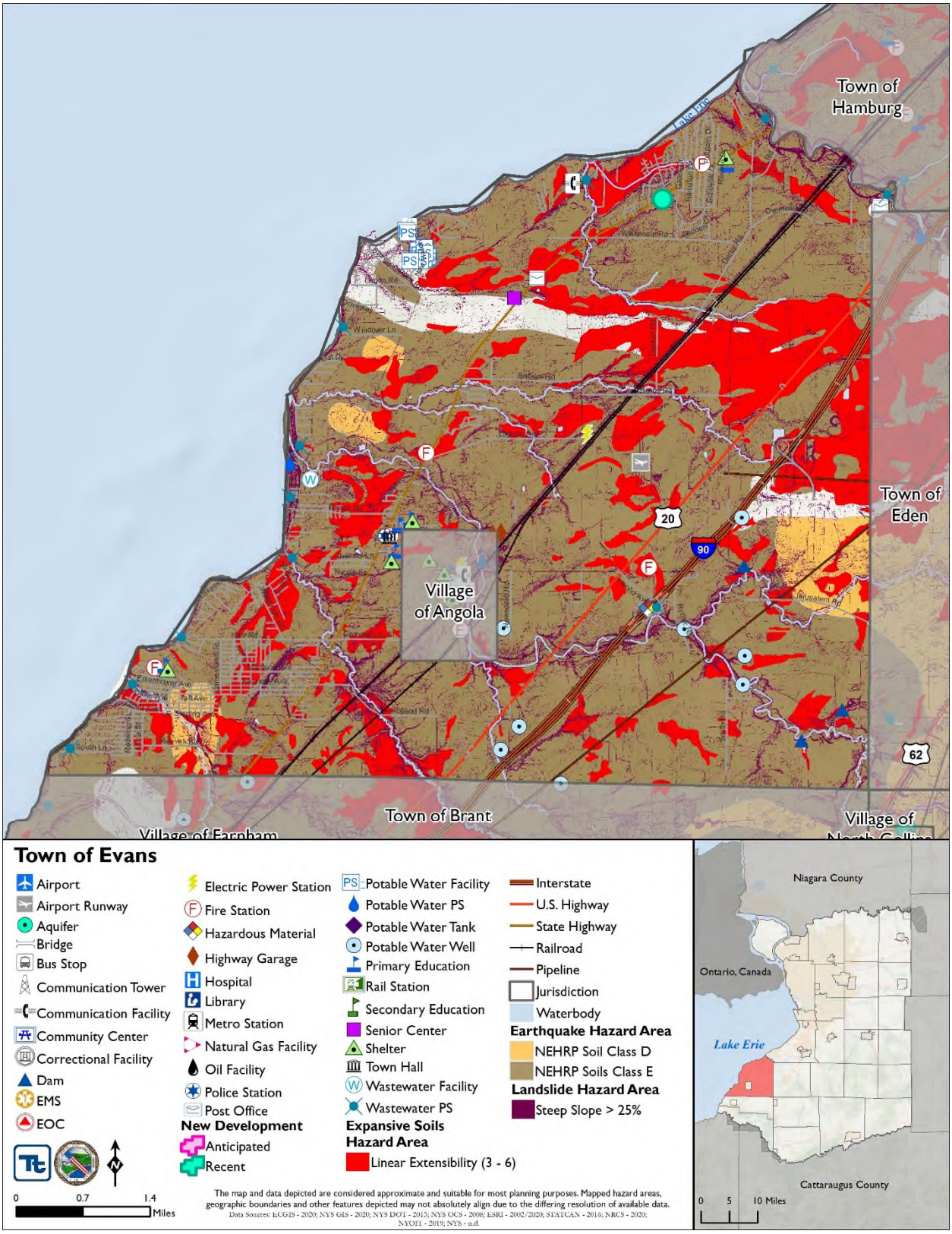
Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.22-1. Town of Evans Hazard Area Extent and Location Map 1



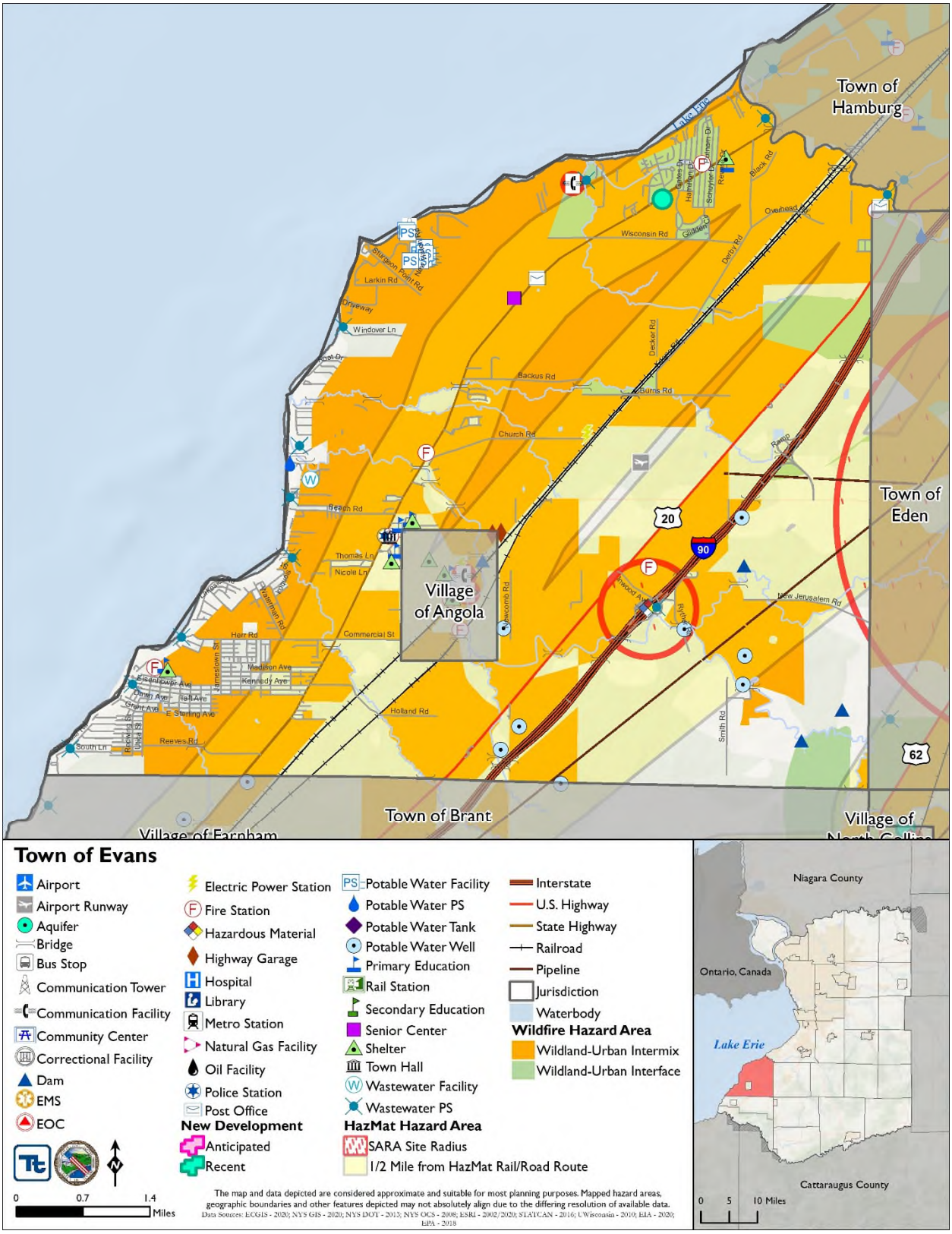
Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.22-2. Town of Evans Hazard Area Extent and Location Map 2



Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.22-3. Town of Evans Hazard Area Extent and Location Map 3



Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Evans's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.22-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.22-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	High Wind	No	A strong cold front, followed y strong winds impacted the coasts of Lake Erie and Ontario. Wind gusts were measured in excess of 60 mph.	In Evans Center, a tree was knocked down by the wind, cutting off a gas line to a home, then striking a car.
February 4, 2019	Flood	No	Record high temperatures occurred on February 4, resulting in almost total snow melt and ice break off on local rivers.	Route 5 was closed in Evans in both directions due to flooding of the Big Sister Creek.
October 27-November 1, 2019	Lakeshore Flooding and High Winds DR-4472-NY	Yes	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	Lakeshore flooding occurred as a result of the storm due to wave action and wave run-up, particularly in lower elevation areas along the Lake Erie shoreline. Losses included the following: • Damage to private property (seawalls, foundations, docks, etc.) in the amount of approximately $750,000. • Damage to Evans Town Park fence in the amount of in the amount of approximately $15,000 • Damage to Lake Erie Beach Park (bridge and retaining wall) in the amount of approximately $250,000 • Damage to Sturgeon Point Marina (breakwater, electrical, and revetment) in the amount of approximately $2,850,000. • More than 500 NYSEG customers lost power in Evans and Angola.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 31-November 1, 2019	High Wind DR-4472-NY	Yes	See above	While high winds were also the cause of the above listed damage along the shoreline, both emergency and town wide debris removal from high winds (such as downed trees and limbs) was estimated at a cost of approximately $200,000 to the town.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Evans's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Evans. The Town of Evans has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- In recent years, there has been ongoing and significant erosion of both public and private property along the Lake Erie shoreline due to record high water levels combined with strong winds, wave action, wave run-up in creeks and streams, and recurring seiches. This includes both shoreline erosion as well as streambank erosion around the outlets of several Lake Erie tributaries located in the Town of Evans. This coastal erosion has also been occurring around a number of public parks, impacting the quality of life for residents and local tourism economy.
- Historically, the frequency and intensity of earthquakes in the town has been extremely low. The town is not aware of any new and imminent threats that would warrant the high risk ranking, therefore it has been decreased to medium.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- An increase in the frequency of localized flooding has occurred throughout the town as a result of heavy rainfalls and inadequate stormwater infrastructure in certain areas. The most problematic in recent years has been the Fern Brook and Muddy Creek watersheds in the southern portion of the town, such as the Lake Erie Beach neighborhood. An increase in coastal flooding has also occurred due to high water levels and extreme winds resulting in wave action and wave-run up along several tributaries.
- Historically, the frequency and intensity of wildfires in the town has been extremely low. The town is not aware of any new and imminent threats that would warrant the high risk ranking, therefore it has been decreased to medium.

Table 9.22-15. Hazard Ranking Input

Coastal Erosion*	Cyber Attack	Earthquake*	Expansive Soils	Extreme Temperature	Flood*	Hazardous Materials
High	Medium	Medium	Medium	Medium	High	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire*
Low	High	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.22-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Lake Bay Grove Wastewater Pump Station	Water	Yes	Yes	2022-T. Evans-002
Point Breeze #1 Wastewater Pump Station	Water	No	Yes	2022-T. Evans-002
Point Breeze #2 Wastewater Pump Station	Water	No	Yes	2022-T. Evans-002

Source: Effective DFIRM

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the Town of Evans's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Evans has identified the following vulnerabilities within their community:

- There has been significant erosion of both public and private property along the Lake Erie shoreline due to record high water levels combined with strong winds and recurring seiches. This includes both shoreline erosion as well as streambank erosion around the outlets of several Lake Erie tributaries located in the Town of Evans, such as Muddy Creek.
- Extreme wind storms have increased in magnitude and frequency causing significant damage along the Lake Erie shoreline as well as throughout the town. Shoreline damage in the form of coastal erosion has occurred from more extreme winds and subsequent wave action as well as wave run-up along several tributaries. Extreme wind damage has also occurred throughout the entire town in the form of downed trees and general property damage.
- An increase in the frequency of localized flooding has occurred throughout the town as a result of heavy rainfalls and inadequate stormwater infrastructure in certain areas. The most problematic in recent years has been the Fern Brook and Muddy Creek watersheds in the southern portion of the town, such as the Lake Erie Beach neighborhood. An increase in coastal flooding has also occurred due to high water levels and extreme winds resulting in wave action and wave-run up along several tributaries.
- There has been an increase in ice jams in recent years resulting in localized flooding along Big Sister Creek.
- An increase in wave action and wave run-up along the shoreline and several Lake Erie tributaries in the town has led to significant damage to the lakefront properties (including public facilities) as well as acceleration of streambank erosion issues.
- While not necessarily an increase in frequency, there has been an increase in the overall intensity of winter storms in terms of both heavy snowfall and high winds.
- Flood-prone areas include:
    - Localized flooding throughout the Muddy Creek watershed in the Lake Erie Beach neighborhood.
    - Coastal flooding and erosion due to wave-run up at the mouth of Muddy Creek.
    - Localized flooding throughout the Fern Brook watershed in the Lake Erie Beach and Grandview neighborhoods.
    - Localized flooding around the Pike Creek watershed in the Derby neighborhood.
    - Ice jamming and upstream flooding occurring on Big Sister Creek near Evans Center.
    - Flooding and erosion of Lake Erie coastal neighborhoods such as Shore Meadows, Lake Erie Beach, Grandview Bay, and Angola on the Lake
    - Flooding and erosion Lake Erie coastal public facilities such as Sturgeon Point Marina, Evans Town Park, Lake Erie Beach Park (town-owned), Wendt Beach County Park and Bennet Beach County Park.

9.22.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.22-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Creeks and stream clean out	Flooding	LEBVFC and Highway Dept.	Help low area not flood	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-003 2. The town is working with Erie County Soil and Water to identify areas of local creeks and streams in need of clearing. The town is also embarking on a comprehensive drainage study of the Fern Brook and Muddy Creek watersheds, which will also include recommendations for stream clearing and debris removal. Responsible parties are Planning, Engineering and Highway Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Program to update public about disasters	All Hazards	LEBVFC	Help get word out on what to do in a disaster	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-004 2. Town is working with both online and print materials to spread information about flood mitigation and to quickly notify residents of potential flood issues/events. Responsible parties are Planning, Community Development, Code Enforcement, Fire and Police Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-005 2. Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-006 2. Town is working to address new pending FIRMs which resulted in FEMA's recent Coastal Mapping of Great Lakes Communities to include wave run-up.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-007 2. Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
6	Join the Community Rating System (CRS)	Flooding	Building Dept.	Not Identified	In Progress	Cost	-	1. Include in 2022 HMP as 2022-T. Evans-008 2. The town has been working with NYSDEC Western Flood Hub representative and Erie County Dept of Env and Planning to address any outstanding violations (complete), and to now register, build resources, and develop an initial ranking in the CRS program. Responsible parties are Planning, Code Enforcement and Engineering Depts.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Evans has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

Mitigation Action	Responsible Party / Lead Agency	Comments/Details
Shoreline Management Solutions at Lake Erie Beach	Planning, Engineering and Parks Depts.	In-progress – The goal of the Plan is to identify innovative strategies and sustainable shoreline management practices, including both nature-based and structural alternatives. Funded in part by the NYSDEC and town.
Mitigation Enhancements to Sturgeon Point Marina Breakwater	Planning, Engineering and Parks Depts.	In-progress – Town is currently working on repair and design of mitigation measures to help ensure the long-term stability of the western Sturgeon Point Marina Breakwater which protects the public harbor. This is also a project under review with FEMA from the October 31, 2019 storm. Partially funded by, NYSDOS, ESD and the town.
Townwide Drainage Study	Planning and Engineering Depts.	The town has developed a scope of work and applied for funding for a town-wide drainage study. The initial focus will be on the Fern Brook and Muddy Creek watersheds which historically have been the most problematic. Funding application currently submitted to FEMA.
Online Flood Reporting System	Planning and Engineering Depts.	The town has created an online tool for flood reporting, text notifications, and educational materials on preparedness and mitigation. Includes GIS mapping of reported flooding issues and known hazards. Partially funded by the Lake Erie Watershed Protection Alliance (LEWPA).
Revisions to Drainage Code	Planning, Engineering and Code Enforcement Depts.	The town has completed a first draft of a revision to Section 200. Article XII. Stormwater Management of the Evans Town Code in order to help address drainage issues associated with impacts of new development on drainage issues.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Evans participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

The table below indicates the range of proposed mitigation action categories.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.22-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	X	X	X		X	X	X	X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X		X	X			X	X		X
Severe Winter Storm	X		X	X			X	X		X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.22-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Evans would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.22-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Evans-001	Permanent and Temporary Housing	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the county to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	No	No	Short	Town of Evans, Erie County	Low-Medium	High, ensures locations for alternative housing during and after hazards	Municipal Budget, NYSDHSES	High	LRP	ES
2022-T. Evans-002	Wastewater Pump Station Flood Mitigation	1, 2, 3	Flood	**Problem**: The Lake Bay Grove Wastewater Pump Stations is located within the 1% SFHA (100-year floodplain), and the Point Breeze #1 and #2 Pump Stations are located within the 0.2% SFHA (500-year floodplain). **Solution:** The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include: •Elevation of facility	Yes	No	Short	Town of Evans DPW	Medium-High	High, reduces flooding at critical facilities	FMA, CDBG	High	SIP	SP

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2021

Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				•Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-T. Evans-003	Creeks and Stream Clean Out	1, 2	Flood, Severe Storm Severe Winter Storm	**Problem**: Creeks and streams within the town become infiltrated with debris during and after storm events and cause additional flooding and damages. **Solution**: The town is working with Erie County Soil and Water to identify areas of local creeks and streams in need of clearing. The town is also embarking on a comprehensive drainage study of the Fern Brook and Muddy Creek watersheds, which will also include recommendations for stream clearing and debris removal. Responsible parties are Planning, Engineering and Highway Depts.	No	No	Short	Town of Evans, Erie County SWCD	Medium	High, reduces flooding	FMA, Municipal Budget, NYSDEC	High	NSP	NR
2022-T. Evans-004	Disaster Public Information Campaign	1, 2, 3	All Hazards	**Problem**: The town does not have a consolidated program or site to provide disaster information to residents. **Solution**: Town is working with both online and print materials to spread information about flood mitigation and to quickly notify residents of potential flood issues/events. Responsible parties are Planning, Community Development, Code Enforcement, Fire and Police Depts. There are currently 200 residents signed up for online alerts. The town will add information to the newsletter about alerts and safety during hazard events.	No	No	Short	Planning, Community Development, Code Enforcement, Fire and Police Depts	Low	High, ensures life safety of residents	Municipal Budget	High	EAP	PI

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Evans-005	Increase Floodplain Management Capabilities	1, 2	Flood	**Problem**: The town wants to increase staff to enforce NFIP regulations and floodplain management ordinances. **Solution**: Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.	No	No	Short	Code Enforcement and Engineering	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-006	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1, 2, 3	Flood, Coastal Erosion	**Problem**: As FEMA releases new information and FIRMS, the town needs to update their ordinances. **Solution**: Town is working to address new pending FIRMS which resulted in FEMA's recent Coastal Mapping of Great Lakes Communities to include wave run-up. Once FIRMS are updates, Fern Brook will be updated after the completion of an H&H study.	No	No	Short	Building Department	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-007	CFM Certifications	1, 2, 3	Flood	**Problem**: The town does not have a CFM on staff. **Solution**: Town is working to improve in-house floodplain management capabilities. Currently utilizing the engineering consultant but training Code Enforcement Officers to fill this role. Responsible parties are Code Enforcement and Engineering Depts.	No	No	Short	Building Department, Engineer	Low	High, increases town capabilities	Municipal Budget	High	LPR	PR
2022-T. Evans-008	Join the Community Rating System (CRS)	1, 2, 3	Flood	**Problem**: The town does not participate in the CRS. The town has been working with NYSDEC Western Flood Hub representative and Erie County Dept of Env and Planning to address any outstanding violations (complete). **Solution**: The town will now register, build resources, and develop an initial ranking in the CRS program.	No	No	Short	Building Department, Engineer	Low	High, increases town capabilities, reduces costs of flood insurance for residents	Municipal Budget	High	LPR	PR

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.22-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Responsible parties are Planning, Code Enforcement and Engineering Depts.										
2022-T. Evans-009	Repetitive Loss Outreach	1, 2, 3	Flood	**Problem:** There are 24 Repetitive Loss properties within the town; and 74 NFIP policy holders living within the 1% flood boundary (100 year floodplain). **Solution:** The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	Short	Building Department, Engineering	Low to conduct outreach	High	Municipal Budget	High	EAP	PI
2022-T. Evans-010	Drainage Study	1, 2, 3	Coastal Erosion, Flood, Severe Storm, Severe Winter Storm	**Problem:** The town is in the process of completing a drainage study to address flooding concerns during storms and potential damages. **Solution:** Upon completion of the study, the town will work to seek funding to implement recommendations. Recommendations include paving 24 roads in the Lake Erie Beach Area, and revitalization of the area. The town will also address loss of trees from storms by improving vegetation and adding green infrastructure solutions where drainage has become an increasing issue.	No	No	Short	Building Department, Engineering	High	High, reduces flooding and damages	FMA, HMA, HMGP, CDBG	High	LPR, SIP, NSP	PI, SP, NR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2024

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.22-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Evans-001	Permanent and Temporary Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-T. Evans-002	Wastewater Pump Station Flood Mitigation	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	110	High
2022-T. Evans-003	Creeks and Stream Clean Out	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2022-T. Evans-004	Disaster Public Information Campaign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-T. Evans-005	Increase Floodplain Management Capabilities	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-006	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-T. Evans-007	CFM Certifications	1	1	1	1	1	1	1	1	1	1	0	1	1	1	14	High
2022-T. Evans-008	Join the Community Rating System (CRS)	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-009	Repetitive Loss Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-T. Evans-010	Drainage Study	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.22.9 Action Worksheets

The following action worksheets have been developed by the Town of Evans to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Wastewater Pump Station Flood Mitigation		
Project Number:	2022-T. Evans-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Lake Bay Grove Wastewater Pump Stations is located within the 1% SFHA (100-year floodplain), and the Point Breeze #1 and #2 Pump Stations are located within the 0.2% SFHA (500-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	High, reduces flooding at critical facilities
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	Medium-High	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	1-2 years	**Potential Funding Sources:**	FMA, CDBG
Responsible Organization:	Town of Evans DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate pump stations	$500,000	Not cost effective
	Decommission pump stations	N/A	Not feasible, remaining stations cannot handle capacity needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Wastewater Pump Station Flood Mitigation	
Project Number:	2022-T. Evans-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at critical facilities
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	Town supports project
Legal	1	
Fiscal	-1	Town will seek funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Drainage Study		
Project Number:	2022-T. Evans-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Coastal Erosion, Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The town is in the process of completing a drainage study to address flooding concerns during storms and potential damages.		
Action or Project Intended for Implementation			
Description of the Solution:	Upon completion of the study, the town will work to seek funding to implement recommendations. Recommendations include paving 24 roads in the Lake Erie Beach Area, and revitalization of the area. The town will also address loss of trees from storms by improving vegetation and adding green infrastructure solutions where drainage has become an increasing issue.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces flooding and damages
Useful Life:	30 years	**Goals Met:**	1, 2, 3
Estimated Cost:	High	**Mitigation Action Type:**	Local Plans and Regulation, Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on Funding
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FMA, HMA, HMGP, CDBG
Responsible Organization:	Building Department, Engineering	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	$250,000	May not solve drainage issues
	Build retention walls	$250,000	Will not solve drainage issues, town relies on tourism at beach

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Drainage Study	
Project Number:	2022-T. Evans-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flooding to homes
Property Protection	1	Protects lakefront property
Cost-Effectiveness	1	
Technical	1	
Political	1	Town supports
Legal	1	
Fiscal	-1	Will need to seek funding
Environmental	0	
Social	1	Residents support
Administrative	1	
Multi-Hazard	1	Flood, winter storms, coastal erosion
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 61-Section-9.22-Evans-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.23 Village of Farnham

This section presents the jurisdictional annex for the Village of Farnham. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Farnham's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.23.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Farnham's hazard mitigation plan primary and alternate points of contact. The Village of Farnham followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Mayor's Office, Clerk, and Department of Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.23-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Jere R. Hoisington, Mayor Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhammayor@roadrunner.com	Name/Title: Jackie Hoisington, Clerk Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhamclerk@farnham.brantny.com
NFIP Floodplain Administrator	
Name/Title: Ellsworth Nolan, DPW Supervisor Address: 526 Commercial St, Farnham, NY 14061 Phone Number: 716-549-0890 Email: Farnhamclerk@farnham.brantny.com	

9.23.2 Municipal Profile

The Village of Farnham is a semi-rural community that is located about 25 miles southwest of downtown Buffalo. The village is one square mile in size and is located wholly within the Town of Brant. The Village of Farnham is located in the western part of the Town of Brant, north of the Cattaraugus Reservation and southeast of Evangola State Park. The village incorporated in 1892 and is named after Leroy Farnham, a local landowner and merchant (Village of Farnham website, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Farnham was 382. The estimated 2019 population was 459, a 20.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 7.0 percent of the population is 5 years of age or younger and 12.0 percent is

65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.23.3 Jurisdictional Capability Assessment and Integration

The Village of Farnham performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.23.3). The Village of Farnham's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Farnham. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.23-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL No1-2007, section 1-19	Local	Code Enforcement
Comments: NYS Uniform and Energy Code 2020					
Zoning Code	Yes	Yes	101 – Zoning, 05/13/1989	Local	Code Enforcement
Comment: None					
Subdivision Ordinance	Yes	Yes	101-24, 05/13/1989	Local	Code Enforcement and Planning Board
Comment: None					
Stormwater Management Ordinance	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	No	Zoning 05/13/1989, Section 101	Local	Planning
• Comment: None					
Environmental Protection Ordinance	No	No	Chapter 86	Local	Code Enforcement
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	-	Local	-
Comment: None					
Municipal Separate Storm Sewer System (MS4)	Yes	No	Not Indicated	State	NYSDOT
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment: None					
Capital Improvement Plan	No	No	-	-	-

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	No	No	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	Yes	No	Not Indicated	Local	Village Emergency Management
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Farnham to oversee and track development.

Table 9.23-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Farnham and their current responsibilities which contribute to hazard mitigation.

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.23-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	No Comment
Zoning Board of Adjustments	Yes	No Comment
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	No Comment
Construction/Building/Code Enforcement Department	Yes	No Comment
Emergency Management/Public Safety Department	Yes	No Comment
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Exterior Fire Siren System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW maintains drainage within village
Mutual aid agreements	Yes	Fire and EMS Services
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	DPW Supervisor
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	Yes	Mayor
Resilience Officer	No	-

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Farnham.

Table 9.23-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Farnham.

Table 9.23-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	https://www.brantny.com/Farnham.php
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Farnham.

Table 9.23-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.23-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.23.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Ellsworth Nolan, DPW Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Farnham.

Table 9.23-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Farnham	1	5	$20,817	3	0

Source: *FEMA 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The village did not indicate any areas prone to flooding within the jurisdictions. There are no current RiskMAP projects underway and the village does not maintain a list of property owners interested in flood mitigation. There have been no mitigated properties in the village through wither elevation or acquisition. According to FEMA, there are no SFHAs within the village at time of publication.

NFIP Compliance

The Village Department of Public Works is responsible for floodplain management. The Floodplain Management Program for the village satisfies NFIP regulations. There are no Certified Floodplain Managers within the village, and the village does not need any assistance or trainings to support the floodplain management program. The Village Planning, Board, Zoning Board, and Building Inspector determine is proposed developments are substantial improvements. There are no outstanding compliance issues and the last Community Assistance Contact (CAC) was on June 20, 2007.

9.23.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Farnham has identified the following routes and procedures to evacuate residents prior to and during an event.

- Routes 5 and 20

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Commercial Street (Route 249)

Sheltering

The Village of Farnham has identified the following designated emergency shelters within the Village.

Table 9.23-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Village Hall	Commercial Street	100	Yes	Yes	Yes	Fire/EMS	Kitchen/Generator

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Farnham has identified the following sites suitable for placing temporary housing units.

Table 9.23-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Park	Commercial Street	5	Park Land	Water, electric, septic	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Farnham has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.23-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Village Park	Detroit Street	5	Vacant Lot	Water, electric, Septic	None

9.23.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.23-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.23-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	0	0	0	0	0	0	1	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	6	0	8	0	10	0	1	0	3	0	4	0
Total Permits Issued	**6**	**0**	**8**	**0**	**10**	**0**	**1**	**0**	**4**	**0**	**5**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Indicated					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

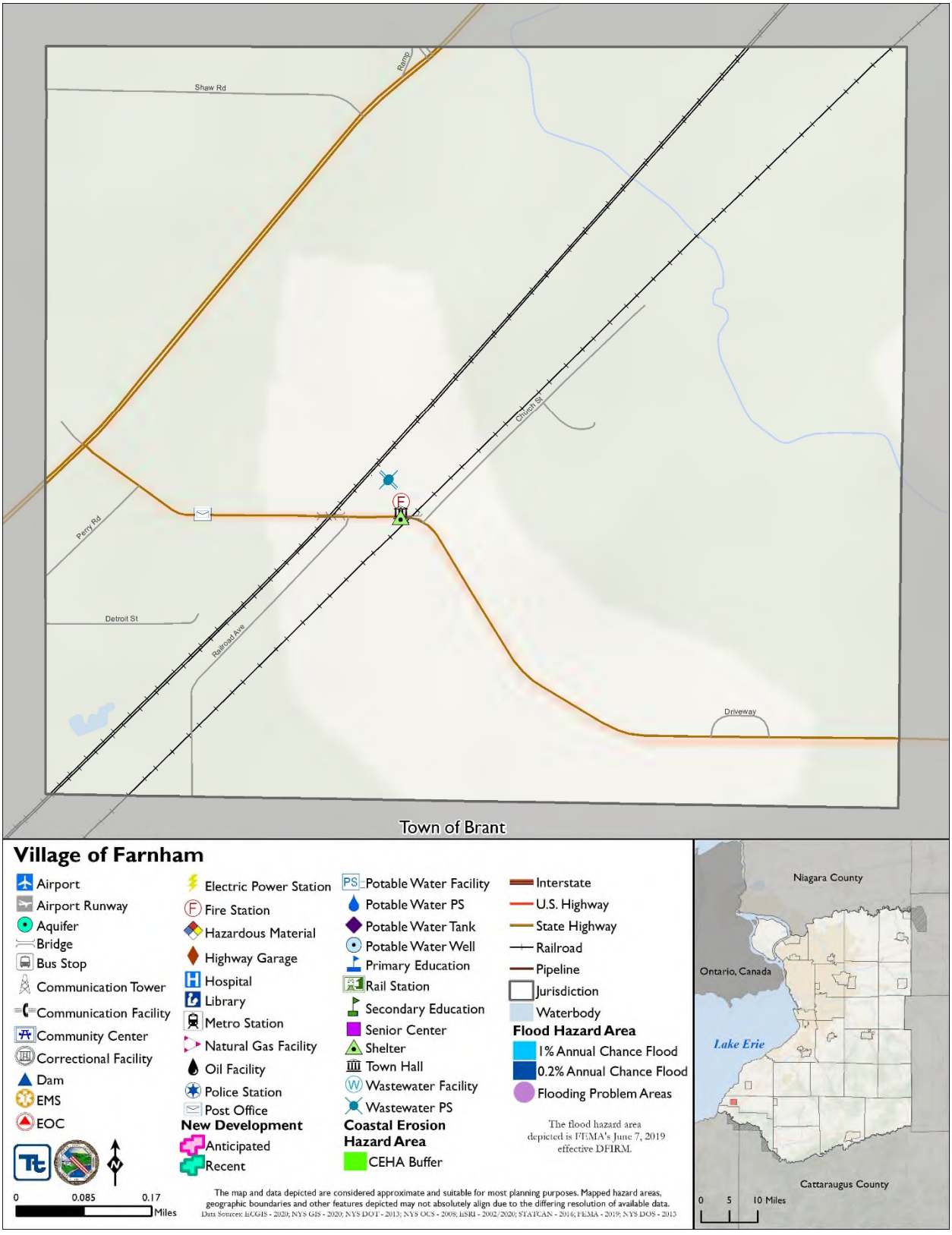
9.23.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Farnham's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Farnham has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

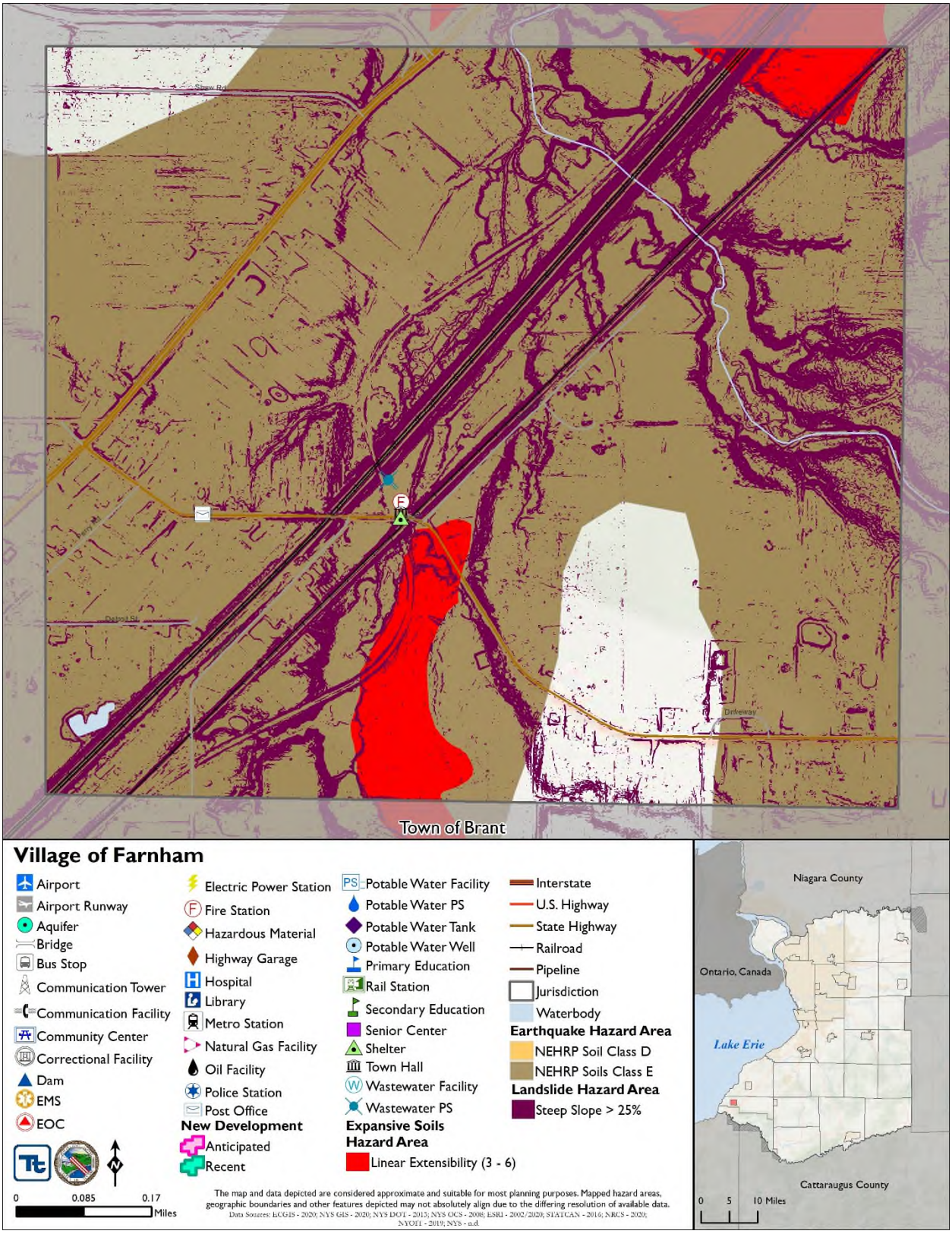
Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.23-1. Village of Farnham Hazard Area Extent and Location Map 1



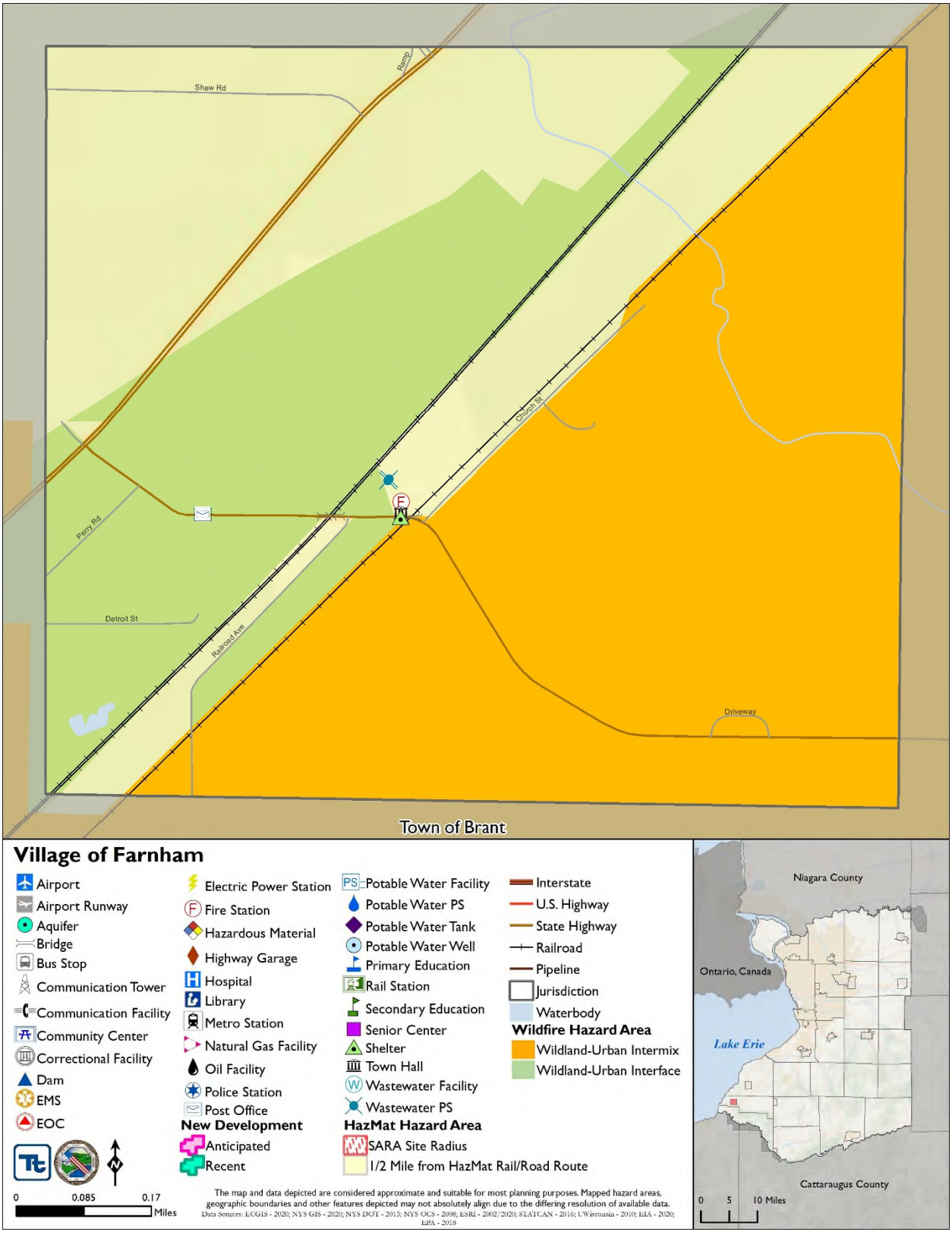
Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.23-2. Village of Farnham Hazard Area Extent and Location Map 2



Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.23-3. Village of Farnham Hazard Area Extent and Location Map 3



Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Farnham's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.23-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.23-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	No municipal damages reported
August 11-15, 2015	Flash Flood	No	No municipal damages reported
October 28-29, 2015	High Wind	No	No municipal damages reported
November 6, 2015	Thunderstorm Wind	No	No municipal damages reported
November 12, 2015	High Wind	No	No municipal damages reported
November 18, 2015	High Wind	No	No municipal damages reported
January 11, 2017	High Wind	No	No municipal damages reported
March 8, 2017	High Wind	No	No municipal damages reported
March 13, 2017	Winter Storm	No	No municipal damages reported
July 20, 2017	Tornado	No	No municipal damages reported
August 4, 2017	Thunderstorm Wind	No	No municipal damages reported
December 10-15, 2017	Lake-effect Snow	No	No municipal damages reported
December 24-29, 2017	Lake-effect Snow	No	No municipal damages reported
January 2, 2018	Blizzard	No	No municipal damages reported
October 6, 2018	Lightning	No	No municipal damages reported
February 24, 2019	High Wind	No	No municipal damages reported
February 24, 2019	Lakeshore Flooding	No	No municipal damages reported
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	No municipal damages reported
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	No municipal damages reported
November 27, 2019	Lakeshore Flooding	No	No municipal damages reported
January 12, 2020	Lakeshore Flooding	No	No municipal damages reported
January 18, 2020	Lakeshore Flooding	No	No municipal damages reported

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Farnham's risk assessment results and data used to determine the hazard ranking.

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Farnham. The Village of Farnham has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.23-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.23-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: Effective DFIRM

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the Village of Farnham's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Farnham has identified the following vulnerabilities within their community:

- HazMat situation due to Village Hall (emergency Shelter) and Fire/EMS equipment being situated between two sets of railroad tracks. Increased traffic on railways make the village susceptible to "lock out" event as a result of spill or derailment.

9.23.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.23-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)	Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
The Village of Farnham had no projects identified as part of the 2015 HMP.							

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Farnham has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Farnham participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.23-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake										
Expansive Soils										
Extreme Temperature										
Flood										
Hazardous Materials	X	X			X				X	X
Landslide										
Pandemic										
Severe Storm	X	X			X			X		
Severe Winter Storm	X	X			X			X		
Utility Failure	X	X			X			X		
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.23-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Farnham would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.23-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.23-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Farnham-001	Tree Trimming and Maintenance	1, 2	Severe Storm, Severe Winter Storm, Utility Failure	**Problem**: During storm events, downed trees can cause road closures and property damages. **Solution**: The village will develop a maintenance program to monitor dead trees and remove branches before and after storm events to reduce property damages and power outages.	No	No	Ongoing once established	Village of Farnham DPW	Medium	High	Municipal Budget, HMGP	High	LPR, NSP	PR, NRP
2022-V. Farnham-002	Village Hall Vulnerability Study	1, 2	Hazardous Materials	**Problem**: Village Hall (emergency Shelter) and Fire/EMS equipment is situated between 2 sets of railroad tracks. Increased traffic on railways make us susceptible to "lock out" event as a result of spill or derailment. **Solution**: The village will conduct a vulnerability assessment of the Village Hall and Fire/EMS building to determine risk posed by the location proximity to the railroads and the possibility of "lock outs." If determined to pose increased risk, the village will seek to relocate the Village Hall and Fire/EMS equipment away from the risk to train and hazmat transportation accidents to ensure operations of government and emergency services during hazards.	Yes	No	Short	Village of Farnham	Low to conduct study, High to relocate building	High, ensures continuity of operations	Municipal Budget, HMGP	High	LPR, SIP	PR, SP, ES
2022-V. Farnham-003	Critical Facility Vegetation Management	1, 2	Wildfire	**Problem:** The Village Hall, fire station, and wastewater pump station are near wooded areas. In the case of the pump station and Village Hall, trees from the nearby wooded areas actually touch the structures. This puts these critical facilities at risk of burning during a wildfire/brush fire affecting those wooded areas. **Solution:** The village will assess the vegetation around each critical facility and manage that vegetation as necessary to reduce the risk of fire	Yes	Yes	Within 6 months	Village of Farnham DPW	Low	High	Municipal Budget	High	NSP	PR

Table 9.23-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				spreading from the wooded areas to the structures.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2051

- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NRP) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.23-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Farnham-001	Tree Trimming and Maintenance	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
2022-V. Farnham-002	Village Hall Vulnerability Study	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-V. Farnham-003	Critical Facility Vegetation Management	1	1	1	1	1	1	1	0	0	1	0	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.23.9 Action Worksheets

The following action worksheets have been developed by the Village of Farnham to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Action Worksheet			
Project Name:	Tree Trimming and Maintenance		
Project Number:	2022-V. Farnham-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm, Utility Failure		
Description of the Problem:	During storm events, downed trees can cause road closures and property damages.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will develop a maintenance program to monitor dead trees and remove branches before and after storm events to reduce property damages and power outages.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Medium	**Mitigation Action Type:**	Local Plans and Regulations, Natural Systems Protections
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	Ongoing once established.	**Potential Funding Sources:**	Municipal Budget, HMGP
Responsible Organization:	Village of Farnham DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Ask residents to alert village to dangerous trees.	$1,000	Reactive. Likely to miss most trees.
	Remove all trees along areas with powerlines and property	N/A	Not feasible/environmentally damaging

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Tree Trimming and Maintenance	
Project Number:	2022-V. Farnham-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces power outages
Property Protection	1	Reduces property damages from falling trees
Cost-Effectiveness	1	
Technical	1	DPW
Political	1	
Legal	1	
Fiscal	1	Ongoing as part of DPW Capabilities
Environmental	0	Risk for over-trimming
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Severe Winter Storm, Utility Failure
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Village Hall Vulnerability Study		
Project Number:	2022-V. Farnham-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Hazardous Materials		
Description of the Problem:	Village Hall (emergency Shelter) and Fire/EMS equipment is situated between 2 sets of railroad tracks. Increased traffic on railways make us susceptible to "lock out" event as a result of spill or derailment.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will conduct a vulnerability assessment of the Village Hall and Fire/EMS building to determine risk posed by the location proximity to the railroads and the possibility of "lock outs." If determined to pose increased risk, the village will seek to relocate the Village Hall and Fire/EMS equipment away from the risk to train and hazmat transportation accidents to ensure operations of government and emergency services during hazards.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures continuity of operations
Useful Life:	N/A	**Goals Met:**	1, 2
Estimated Cost:	Low to conduct study, High to relocate building	**Mitigation Action Type:**	Local Plans and Regulations, Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	1-2 years	**Potential Funding Sources:**	Municipal Budget, HMGP
Responsible Organization:	Village of Farnham	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Reroute railroad	N/A	Not feasible
	Decommission railroad	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Village Hall Vulnerability Study	
Project Number:	2022-V. Farnham-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures operation of Fire/EMS
Property Protection	1	Reduces hazmat exposure at village hall
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	Village will seek funding if need to relocate
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Hazardous materials
Timeline	1	
Agency Champion	1	Mayor
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet				
Project Name:	Critical Facility Vegetation Management			
Project Number:	2022-V. Farnham-003			
Risk / Vulnerability				
Hazard(s) of Concern:	Wildfire			
Description of the Problem:	The Village Hall, fire station, and wastewater pump station are near wooded areas. In the case of the pump station and Village Hall, trees from the nearby wooded areas actually touch the structures. This puts these critical facilities at risk of burning during a wildfire/brush fire affecting those wooded areas.			
Action or Project Intended for Implementation				
Description of the Solution:	The village will assess the vegetation around each critical facility and manage that vegetation as necessary to reduce the risk of fire spreading from the wooded areas to the structures.			
Is this project related to a Critical Facility?		Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?		Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)				
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High	
Useful Life:	N/A	**Goals Met:**	1, 2	
Estimated Cost:	Low	**Mitigation Action Type:**	Natural Systems Protection	
Plan for Implementation				
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 6 months	
Estimated Time Required for Project Implementation:	One month from initiation	**Potential Funding Sources:**	Municipal Budget	
Responsible Organization:	Village of Farnham DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning	
Three Alternatives Considered (including No Action)				
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**	
	No Action	$0	Risk of wildfire/brush fire remains	
	Relocate critical facilities	High	Cost prohibitive	
	Remove all trees near critical facilities	Low	Greater damage to the environment than targeted vegetation management around the facilities	
Progress Report (for plan maintenance)				
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Critical Facility Vegetation Management	
Project Number:	2022-V. Farnham-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 62-Section-9.23-Farnham-V-121021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.24 Village of Gowanda

This section presents the jurisdictional annex for the Village of Gowanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Gowanda's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.24.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Gowanda's hazard mitigation plan primary and alternate points of contact. The Village of Gowanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: the Mayor, Deputy Mayor, and Disaster Coordinator. The Deputy Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.24-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Carol Sheibley. Deputy Mayor Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-532-3494 Email: csheib@verizon.net	Name/Title: Nicholas Crassi, Disaster Coordinator Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-640-2707 Email: racernick07@earthlink.net
NFIP Floodplain Administrator	
Name/Title: David Smith, Mayor Address: 27 East Main Street Gowanda, NY 14070 Phone Number: 716-532-3353 Email: gowandamayor@gmail.com	

9.24.2 Municipal Profile

The name "Gowanda" is derived from the Seneca Indian phrase meaning "a valley among the hills" referring to the village's location below the Zoar Valley gorge along the Cattaraugus Creek. Gowanda is unique in that it is situated in both Cattaraugus and Erie counties. The village is approximately 30 miles from downtown Buffalo. The Cattaraugus Reservation is located northwest of the village. To the north and east is the Town of Collins and to the south is the Town of Persia in Cattaraugus County.

After the Revolutionary War, the American government secured land treaties with the Iroquois nations in western New York. The majority of the nations had been allies of the British, and they were forced to cede most of their lands in New York after the British defeat. Gowanda's first white settler purchased 707 acres on both sides of

the creek from the Holland Land Company. The village incorporated in 1848 (Village of Farnham website, accessed 2020).

Throughout the years, Gowanda has regularly experienced flooding. In August 2009, a large flash devastated much of the village. One man drowned, and houses and cars were washed away. A total of two fatalities were caused directly from the flooding. Gowanda's water reservoir at Point Peter Road was completely destroyed, leaving the village without water. The village experienced another flood, resulting in a state of emergency, when two waterways, Cattaraugus Creek and Thatcher Brook, flooded their banks in May 201. (Wikipedia Village of Farnham, accessed 2020).

According to the U.S. Census, the 2010 population for the Village of Gowanda was 975. The estimated 2019 population was 1,043, a 7.0 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 9.5 percent of the population is 5 years of age or younger and 18.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.24.3 Jurisdictional Capability Assessment and Integration

The Village of Gowanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.24.3). The Village of Gowanda's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Gowanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.24-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 26	Local	CEO

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Zoning Code	Yes	Yes	Chapter 30	Local	CEO
Comment: None					
Subdivision Ordinance	Yes	Yes	Chapter 31	Local	Planning Board
Comment: None					
Stormwater Management Ordinance	Yes	Yes	Site Plan	Local	Building Department
Comment: None					
Post-Disaster Recovery Ordinance	Yes	No	N/A	Local	Village
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: None					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 31	Local	Building Department
Comment: The following site plan provisions are intended to secure compliance with the requirements and standards set forth in this chapter and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location and dimension of buildings. It further is to assure that the development and redevelopment of land within the village is appropriate and compatible with the development of surrounding land and consistent with the approved Master Plan.					
Environmental Protection Ordinance	Yes	Yes	Chapter 31	Local	Building Department
Comment: None					
Flood Damage Prevention Ordinance	Yes	Local and State	Flood Damage Protection LL#1 of 2019	Local	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)
Comment: Relevant goals include to minimize expenditure of public money for costly flood control projects, minimize the need for rescue and relief efforts associated with flooding, and minimize damage to facilities and utilities located in areas of special flood hazard.					
Municipal Separate Storm Sewer System (MS4)	No	-	-	-	-
Comment: None					
Emergency Management Ordinance	Yes	Yes	Emergency Management	Local	OEM
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan	Local	Village Administration
Comment: None					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	Floodplain Plan	Local	Village Administration
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment:					
Open Space Plan	No	-	-	-	-
Comment:					
Urban Water Management Plan	No	-	-	-	-
Comment:					
Habitat Conservation Plan	No	-	-	-	-
Comment:					
Economic Development Plan	Yes	No	Economic Development Plan	Local	Village Administration
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency management Plan	Local	OEM
Comment: None					
Strategic Recovery Planning Report	Yes	-	Strategic Recovery Planning Report	Local	Administration
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Yes	Threat & Hazard Identification & Risk Assessment (THIRA)	Local	OEM
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Post-Disaster Recovery Plan	Local	OEM
Comment: None					
Continuity of Operations Plan	Yes	No	Chapter 2	Local	OEM
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Gowanda to oversee and track development.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.24-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Village Code
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Village Code
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No,	A buildable land analysis is noted in Section 4 (County Profile)

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Gowanda and their current responsibilities which contribute to hazard mitigation.

Table 9.24-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Village Board of Trustees
Zoning Board of Adjustments	Yes	Village Board of Trustees
Planning Department	Yes	Village Board of Trustees
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Village Highway Department maintains, operates and manages the following: • 11.79 miles of village streets • 30 miles of storm sewers • 20.3 acres of park land • 5 municipal parking lots totaling 5.5 acres • Equipment maintenance garage • 30 miles of sidewalk (sidewalks plowed by the Village, maintained by homeowner)
Construction/Building/Code Enforcement Department	Yes	The Code Enforcement Officer administers and enforces all the provisions of the Uniform Code and local law within the Village of Gowanda.
Emergency Management/Public Safety Department	Yes	OEM
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRed/911
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Water Development Work underway
Mutual aid agreements	Yes	County
Other	No	-
Technical/Staffing Capability		

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Engineer
Professionals trained in conducting damage assessments	Yes	Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	County Training
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Gowanda.

Table 9.24-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Village Board
Capital improvements project funding	Yes – Village Board
Authority to levy taxes for specific purposes	Yes – Village Board
User fees for water, sewer, gas or electric service	Yes – Village Board
Impact fees for homebuyers or developers of new development/homes	Yes – Village Board
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – Village Board
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes – Village Board
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Village Board

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Gowanda.

Table 9.24-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Emergency Management
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red/911
Natural disaster/safety programs in place for schools	Yes	Internal training
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Gowanda.

Table 9.24-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.24-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.24.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Smith, Mayor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Gowanda.

Table 9.24-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Gowanda	80	135	$2,332,781	46	70

Source:
Notes:
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The Village of Gowanda identified two flood-prone areas within the community – Thatcher Brook and Grannis. The village does not maintain a list of property owners interested in flood mitigation. There are RiskMAP projects currently underway within the village. Substantial Damage Determinations are made using FEMA Codes. At present, six homes within the Village of Gowanda have been mitigated through elevation or acquisition. Flood hazard maps for the community adequately address the flood risk within the village.

The local department responsible for floodplain management within the Village of Gowanda is Code Enforcement and there are no certified floodplain managers on staff. The village indicated that it has access to resources to determine possible future flooding conditions from climate change.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The Village of Gowanda indicated that its staff need assistance or training to support its floodplain management program. Cattaraugus County provides NFIP administration services for the village. The village uses Village Code to determine whether proposed development on an existing structure qualifies as a substantial improvement. The village did not identify any barriers to running an effective NFIP program in the community.

NFIP Compliance

The Village of Gowanda's last Community Assistance Visit took place on April 23, 2008. The last Community Assistance Contact took place on November 2, 2009.

The flood damage prevention ordinance of the Village of Gowanda can be found under Chapter 34 – 2019 update. The village indicated that its floodplain management program meets or exceeds the minimum requirements. Other local ordinances, plans, or programs that support floodplain management and meeting the NFIP requirements include the 205 Study.

9.24.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Gowanda has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 62
- Route 39
- Aldrich Street
- Broadway Road

Sheltering

The Village of Gowanda has identified the following designated emergency shelters within the Village.

Table 9.24-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Gowanda High School	Village	As needed	Optional	Yes	Yes	As Needed	Food
Gowanda Elementary School	Village	As needed	Optional	Yes	Yes	As needed	Food
Gowanda Fire Hall	230 Aldrich Street	As needed	Optional	Yes	Yes	As needed	Food

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Gowanda has identified the following sites suitable for placing temporary housing units.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.24-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The Village of Gowanda did not identify any areas suitable for placing temporary housing units but will work with the county to identify appropriate locations (2022-Village of Gowanda-013).					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Gowanda has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.24-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The Village of Gowanda did not identify any areas suitable for relocating homes outside of the floodplain. A buildable land analysis is noted in Section 4 (County Profile). The village will work with the county to identify appropriate locations (2022-Village of Gowanda-013).					

9.24.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.24-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.24-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Identified					

SFHA *Special Flood Hazard Area (1% flood event)*

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

** Only location-specific hazard zones or vulnerabilities identified.*

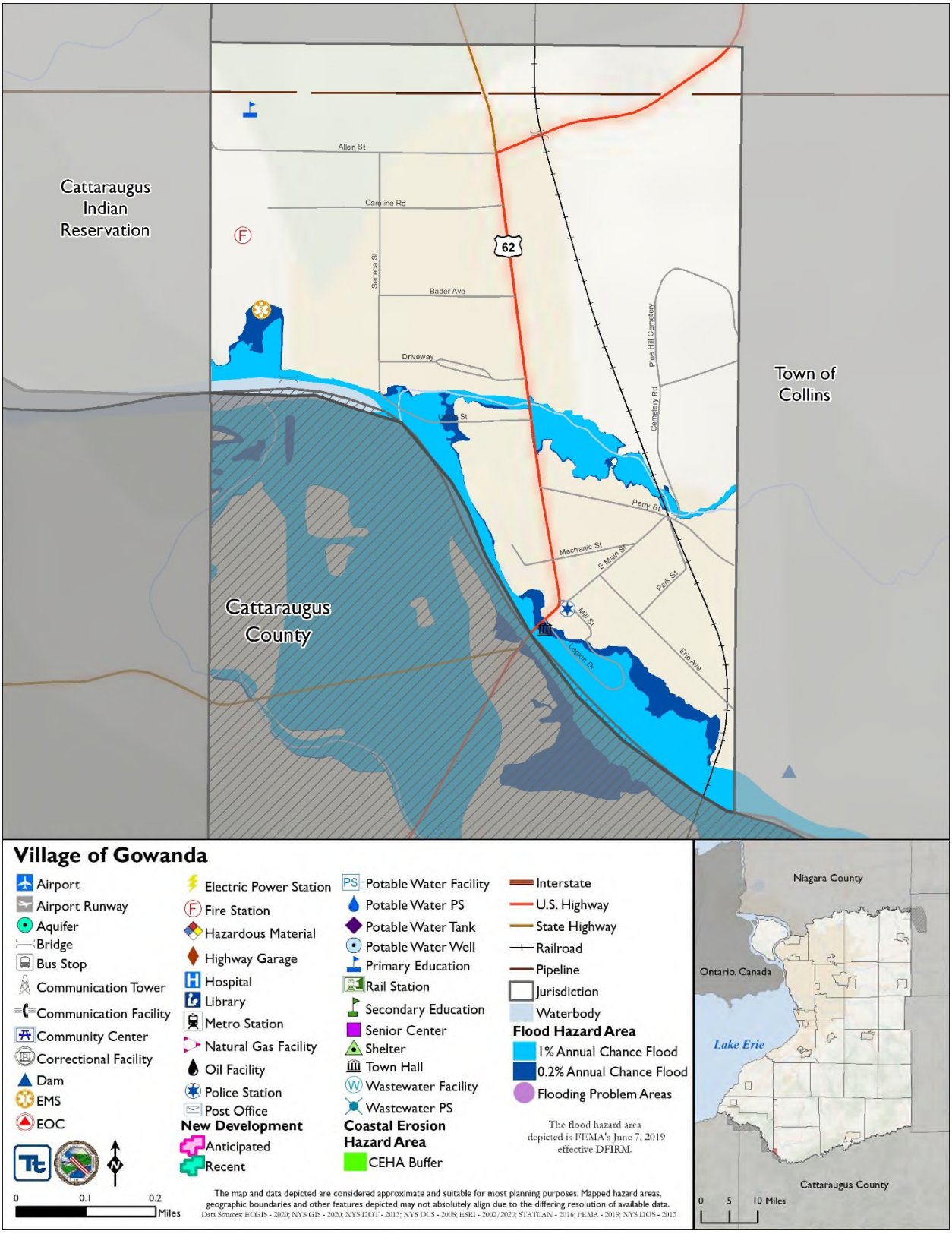
9.24.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Gowanda's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Gowanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

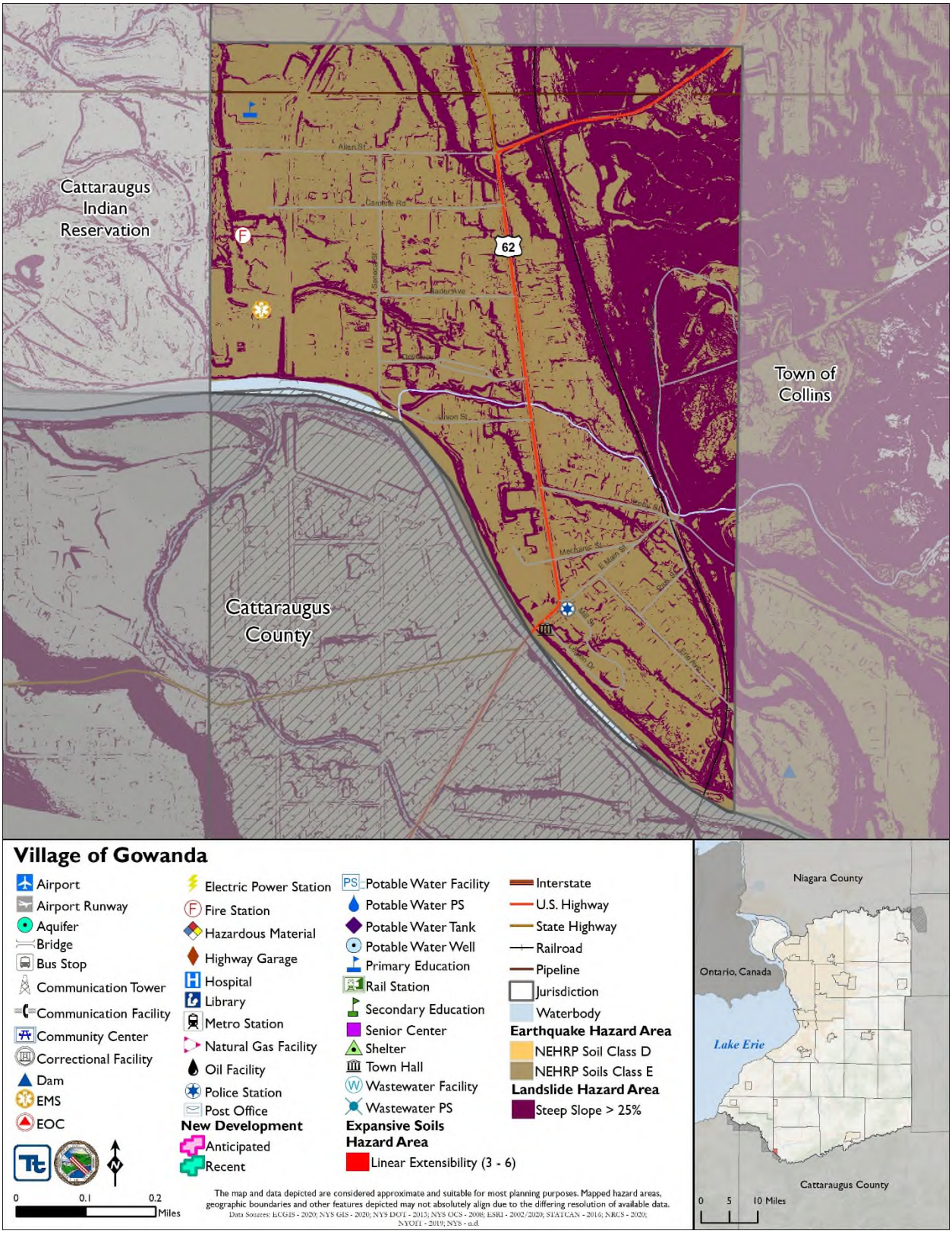
Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.24-1. Village of Gowanda Hazard Area Extent and Location Map 1



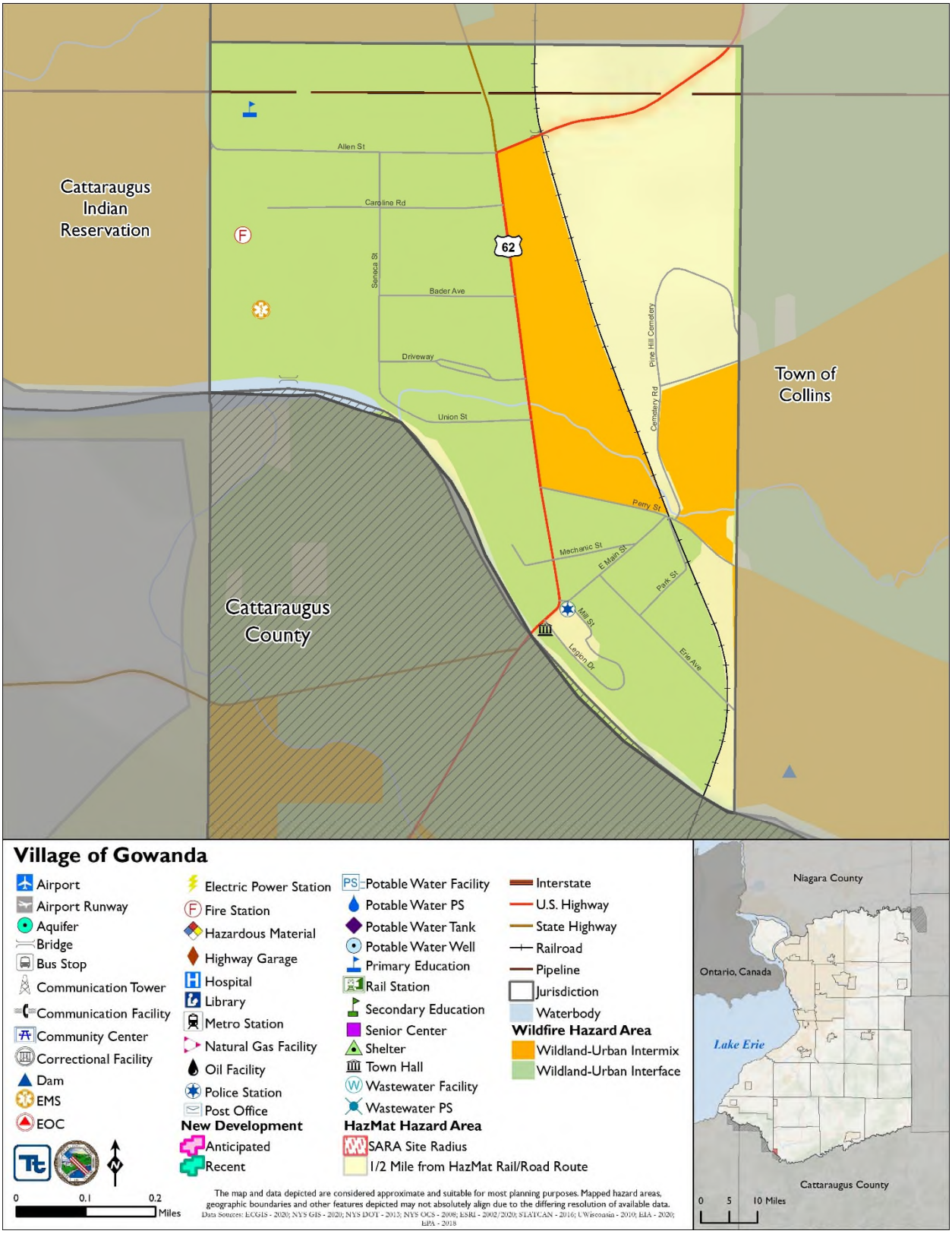
Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.24-2. Village of Gowanda Hazard Area Extent and Location Map 2



Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.24-3. Village of Gowanda Hazard Area Extent and Location Map 3



Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Gowanda's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.24-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.24-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report damages.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Gowanda's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Gowanda. The Village of Gowanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.24-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.24-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Verizon CO (VZ-NY62848)	Hazmat	X	-	2022-Village of Gowanda-001
Gowanda Free Library	Library	X	-	2022-Village of Gowanda-001
Emmanuel Lutheran Church	Religious	X	-	2022-Village of Gowanda-001
First Baptist Church	Religious	X	-	2022-Village of Gowanda-001
Free Methodist Church	Religious	X	-	2022-Village of Gowanda-001
St Mary's Episcopal Church	Religious	X	-	2022-Village of Gowanda-001
United Methodist Church	Religious	X	-	2022-Village of Gowanda-001

Source: FEMA DFIRM

Identified Issues

After review of the Village of Gowanda's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Gowanda has identified the following vulnerabilities within their community:

- The village has numerous critical facilities in the Special Flood Hazard Area.
- Flood prone areas require a warning system.
- The Gowanda water reservoir on Point Peter Rd is prone to landslides along its banks.
- Allen Springs and Thatcher Brook have stream bank erosion issues. These could be solved through seeding, rip rap, and stream bank stabilization.
- The village requires an emergency warning system which would include the water and sewer facilities.
- The village requires an Emergency Operations Plan.
- Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding
- The village requires another trash rack on Thatcher Brook to prevent debris jams
- The following culverts in Gowanda have incurred damages and require to be upsized:
    - Grannis Brook
        - Union Street
        - Buffalo Street
        - Rail Road Bridge

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

        - Cemetery Hill culvert
    - Thatcher Brook
        - Chaple Street Bridge
- The Gowanda Historic Hollywood Theater at 39 West Main Street is a non-profit cultural asset that is also commonly used for outreach on hazards and emergency management education events. The corner of the building rests in the floodplain and the structure has been impacted by flooding in the past.

9.24.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.24-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
#1	Participate with the USACE Section 205 Flood Mitigation Feasibility Study of Thatcher Brook	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
#2	Implement the Thatcher Brook Mitigation Plan after the Section 205 Flood Mitigation Feasibility Study	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
#3	Implementation of the actions identified in the Village of Gowanda Flood Mitigation Plan	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
#4	Implementation of actions identified in the Thatcher Brook Watershed Management Plan	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
#5	Floodproof/ Elevate/ Acquire homes in the flood prone areas (approximately 500 structures)	Flooding	Village of Gowanda Code Enforcement	Not Identified	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. No longer a priority

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
#6	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Gowanda Water & Sewer Dept. Village of Gowanda	Not Identified	Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Gowanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Gowanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.24-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X									X
Cyber Attack	X									X
Earthquake	X									X
Expansive Soils	X									X
Extreme Temperature	X									X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X									X
Landslide	X	X	X			X		X		X
Pandemic	X									X
Severe Storm	X	X	X			X		X	X	X
Severe Winter Storm	X		X					X		X
Utility Failure	X		X					X		X
Wildfire	X									X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.24-19 summarizes the comprehensive-range of specific mitigation initiatives the Village of Gowanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.24-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Gowanda-001	Critical Facilities Outreach	1, 3	Flood	**Problem**: The village has numerous critical facilities in the Special Flood Hazard Area. These facilities are not municipally owned: • Verizon CO (VZ-NY62848) • Gowanda Free Library • Emmanuel Lutheran Church • First Baptist Church • Free Methodist Church • St Mary's Episcopal Church • United Methodist Church **Solution**: The FPA will conduct outreach to facility managers to discuss flood exposure and potential mitigation actions.	Yes	None	Within 6 months	FPA	Staff time	Facility managers educated on flood exposure and potential mitigation actions	Village budget	High	EAP	PI
2022-Village of Gowanda-002	Flood Warning System	1, 3	Flood	**Problem**: Flood prone areas require a warning system. **Solution**: The village will evaluate areas that need a flood warning system constructed and construct the system where necessary. The system will place specific emphasis on warnings for water and sewer facilities. The System	No	None	2 years	FPA, OEM	$7 million	Warning system established	HMGP, NWS, USGS, village budget	High	SIP	ES

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				will also be able to be used to distribute warnings regarding other emergency events.										
2022-Village of Gowanda-003	Flood Risk Management Feasibility Study	2	Flood	**Problem**: Flooding is a regional problem and natural watercourses need to kept clear of debris to reduce flooding. **Solution**: Continue to support USACE Flood Risk management Feasibility Study in the Village of Gowanda, and Towns of Perrysburg, Persia, and Dayton, as well as Erie County and the Town of Collins. The project includes debris removal in waterways.	No	None	Within 5 years	USACE, FPA	High	Flooding risk reduced	HMGP, village budget	High	NSP	NR
2022-Village of Gowanda-004	Landslide study	2	Landslide	**Problem**: The Gowanda water reservoir on Point Peter Road is prone to landslides along its banks. **Solution**: Study slide conditions in the Village of Gowanda near the Gowanda water reservoir on Point Peter Road and conduct bank stabilization.	No	None	Within 5 years	Engineer	Medium	Landslide risk reduced	HMGP, BRIC, village budget	High	SIP, NSP	PP, NR
2022-Village of Gowanda-005	Establish Tree Maintenance Program	1	Severe Storm, Severe Winter Storm, Utility Failure	**Problem**: Falling tree branches can result in property damage and utility failure. **Solution**: The village will establish a tree maintenance program to reduce the	No	None	Within 1 year	DPW	Low	Reduction in tree damage, power outages	Village budget	High	NSP	NR

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				likelihood of falling tree branches.										
2022-Village of Gowanda-006	Stream Bank Erosion Mitigation	2	Severe Storm, Flood, Landslide	**Problem:** Allen Springs and Thatcher Brook have stream bank erosion issues. **Solution:** The village will work with SWCD to identify locations to mitigate stream bank erosion through seeding, rip rap, and stream bank stabilization. The village will secure necessary permits and complete the identified mitigation actions.	No	May require permitting	Within 5 years	SWCD, DPW	Medium	Reduction in streambank erosion and potential collapses which could result in landslide and flooding concerns	HMGP, BRIC, village budget	High	NSP	NR
2022-Village of Gowanda-007	Emergency Operations Plan	1, 2, 3	All hazards	**Problem:** The village lacks an emergency operations plan. **Solution:** The village will write and adopt an emergency operations plan. The plan will be integrated with the proposed flood warning system.	No	None	Within 1 year	OEM	Staff time	Plan established	Village budget	High	LPR	ES
2022-Village of Gowanda-008	Stormwater Improvements	1, 2	Flood, Severe Storm	**Problem:** Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding. **Solution:** The Village Engineer will design the necessary stormwater improvements and new features. The DPW will install the stormwater	No	None anticipated	Within 5 years	Engineer, DPW	High	Increased drainage, reduction in flooding	HMGP, BRIC, CHIPS, village budget	High	SIP	SP

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				system components designed by the Engineer.										
2022-Village of Gowanda-009	Thatcher Brook Trash Rack	2	Flood, Severe Storm	**Problem:** Thatcher Brook is prone debris jams which increases flood risk. The Brook has one trash rack which is effective at reducing the debris. Additional mitigation is needed. **Solution:** The village will work to gain the necessary permitting and install a second trash rack on Thatcher Brook.	No	May require permitting	Within 5 years	Engineer	Medium	Reduction in debris jam and flood risk	HMGP, BRIC, village budget	High	SIP, NSP	PP, NR
2022-Village of Gowanda-010	Culvert Upgrades	1	Flood, Severe Storm	**Problem:** The following culverts in Gowanda have incurred damages and require to be upsized: • Grannis Brook o Union Street o Buffalo Street o Rail Road Bridge o Cemetery Hill culvert • Thatcher Brook o Chaple Street Bridge **Solution:** The village will make the necessary upgrades to the identified culverts.	No	May require permitting over Thatcher Brook	Within 5 years	Public Works	$5,000 per culvert on average	Reduction in culvert damages and flood risk	HMGP, BRIC, CHIPS, village budget	High	SIP	SP
2022-Village of Gowanda-011	Gowanda Historic Hollywood Theater	1, 3	Flood	**Problem:** The Gowanda Historic Hollywood Theater at 39 W. Main Street is a non-profit cultural asset that is also commonly used for outreach on hazards and emergency management	No	None	Within 2 years	Village, County, Facility manager	Medium	Facility protected from flood damages	HMGP, FMA, BRIC, county and village budgets	High	SIP	PP

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				education events. The corner of the building rests in the floodplain and the structure has been impacted by flooding in the past. **Solution:** The village will work with Cattaraugus County to assist the Gowanda Historic Hollywood Theater as it works to identify potential mitigation actions and carry them out. The most likely actions would involve floodproofing the facility.										
2022-Village of Gowanda-012	Repetitive Loss Properties	1, 2	Flood, Severe Storm	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The village has 46 repetitive loss properties. **Solution:** Conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement	No	None	3 years	NFIP Floodplain Administrator, supported by homeowners	$6 Million	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP

Table 9.24-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				acquisition/purchase/ moving/ elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).										
2022-Village of Gowanda -013	Temporary and Permanent Housing	1	All hazards	**Problem:** The village has not identified appropriate locations for the placement of temporary and permanent housing. **Solution:** The village will work with the county to identify appropriate locations for temporary and permanent housing.	No	None	Within 6 months	Village administration, county	Staff time	Temporary and permanent housing locations identified	County and village budgets	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Table 9.24-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Gowanda-001	Critical Facilities Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-Village of Gowanda-002	Flood Warning System	1	1	1	0	1	1	0	1	1	1	0	1	1	1	11	High
2022-Village of Gowanda-003	Flood Risk Management Feasibility Study	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-004	Landslide study	1	1	1	0	1	1	0	1	1	1	0	0	1	1	10	High
2022-Village of Gowanda-005	Establish Tree Maintenance Program	0	1	1	1	1	1	0	0	1	1	0	1	1	1	10	High
2022-Village of Gowanda-006	Stream Bank Erosion Mitigation	0	1	1	1	1	0	0	1	1	1	1	0	1	1	10	High
2022-Village of Gowanda-007	Emergency Operations Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Village of Gowanda-008	Stormwater Improvements	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-009	Thatcher Brook Trash Rack	0	1	1	1	1	0	0	1	1	1	0	0	1	1	9	High
2022-Village of Gowanda-010	Culvert Upgrades	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2022-Village of Gowanda-011	Gowanda Historic Hollywood Theater	0	1	1	1	1	0	0	1	1	1	0	1	1	1	10	High
2022-Village of Gowanda-012	Repetitive Loss Properties	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2022-Village of Gowanda-013	Temporary and Permanent Housing	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.24.9 Action Worksheets

The following action worksheets have been developed by the Village of Gowanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Flood Warning System		
Project Number:	2022-V. Gowanda-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Currently, the Village of Gowanda does not have a method to identify flood levels and distribute warnings to prepare the population for flooding events.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will evaluate areas that need a flood warning system constructed and construct the system where necessary. The system will place specific emphasis on warnings for water and sewer facilities. The Thatcher Brook Diversion Channel is currently in design phase. The System will also be able to be used to distribute warnings regarding other emergency events.		
Is this project related to a Critical Facility or Lifeline?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
Level of Protection:	Flood warning system	**Estimated Benefits (losses avoided):**	Increased flood warning with better quality data
Useful Life:	15 years	**Goals Met:**	1, 3
Estimated Cost:	$7 Million	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6-12 months
Estimated Time Required for Project Implementation:	Three years	**Potential Funding Sources:**	HMGP, NWS, USGS, Municipal budget
Responsible Organization:	NFIP Floodplain Administrator, OEM	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Rely on the NWS updates	$0	Do not provide real-time information, delay in information could impact the village on responding properly
	Conduct manual readings by emergency personnel	Staff time	Inaccurate and time consuming

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Flood Warning System	
Project Number:	2022-V. Gowanda-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Provides improved flood warning
Property Protection	1	Provides the opportunity to move movable property prior to a flood
Cost-Effectiveness	1	
Technical	0	Requires technical support from USGS or NWS
Political	1	
Legal	1	The village has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood
Timeline	0	2 years
Agency Champion	1	NFIP Floodplain Administrator, OEM
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Stormwater Improvements		
Project Number:	2022-V. Gowanda-008		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Johnson Street, West Main Street, and Jamestown Street (near the railroad) requires stormwater drainage to be established to eliminate residential flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will design the necessary stormwater improvements and new features. The DPW will install the stormwater system components designed by the Engineer.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering study	**Estimated Benefits (losses avoided):**	Increased drainage, reduction in flooding
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	HMGP, BRIC, CHIPS, village budget
Responsible Organization:	Engineer, DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation, Stormwater management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Close roadways that experience flooding	Low	Loss of access

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Stormwater Improvements	
Project Number:	2022-V. Gowanda-008	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The village has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Engineer, DPW
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Thatcher Brook Trash Rack		
Project Number:	2022-Village of Gowanda-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Thatcher Brook is prone debris jams which increases flood risk. The Brook has one trash rack which is effective at reducing the debris. Additional mitigation is needed.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work to gain the necessary permitting and install a second trash rack on Thatcher Brook.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering study	**Estimated Benefits (losses avoided):**	Reduction in debris jam and flood risk
Useful Life:	20 years	**Goals Met:**	2
Estimated Cost:	High	**Mitigation Action Type:**	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	HMGP, BRIC, village budget
Responsible Organization:	Engineer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation, Stormwater management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Conduct debris clearing after every rainfall event	Medium	Limited staffing ability

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Thatcher Brook Trash Rack	
Project Number:	2022-Village of Gowanda-009	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	0	The village may require permitting to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Engineer
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Culvert Upgrades		
Project Number:	2022-Village of Gowanda-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The following culverts in Gowanda have incurred damages and require to be upsized: • Grannis Brook o Union Street o Buffalo Street o Rail Road Bridge o Cemetery Hill culvert • Thatcher Brook o Chaple Street Bridge		
Action or Project Intended for Implementation			
Description of the Solution:	The village will replace and upsize the repetitively damaged/undersized culverts in the village. The Thatcher Brook bridge/culvert may require permitting over Thatcher Brook. All permits will be secured prior to construction.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	At least a 5-year event; will be determined once project is complete	**Estimated Benefits (losses avoided):**	Reduction in culvert damages and flood risk
Useful Life:	30 years	**Goals Met:**	1
Estimated Cost:	$5,000 per culvert on average	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP, BRIC, CHIPS, village budget
Responsible Organization:	Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Remove roads	$20,000 per roadway	Roadways cannot be removed
	Relocate roads to another location	$50,000 per roadway	Roadways will still need to cross stream, costly

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Culvert Upgrades	
Project Number:	2022-Village of Gowanda-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	0	
Property Protection	1	Project will protect roadways from flooding, culvert damages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flood
Timeline	0	Within 5 years
Agency Champion	1	Public Works
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Village of Gowanda-012		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Village of Gowanda has 46 repetitive loss properties.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
Level of Protection:	1% annual chance flood event + freeboard *(in accordance with flood ordinance)*	**Estimated Benefits (losses avoided):**	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	**Goals Met:**	1, 2
Estimated Cost:	$6 Million	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6-12 months
Estimated Time Required for Project Implementation:	Three years	**Potential Funding Sources:**	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate homes	$500,000 per home	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
	Elevate roads	$500,000	Elevated roadways would not protect the homes from flood damages

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Village of Gowanda-012	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Families moved out of high-risk flood areas.
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	0	Project would remove families from the flood prone areas of the village.
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 63-Section-9.24-Gowanda-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.25 Town of Grand Island

This section presents the jurisdictional annex for the Town of Grand Island. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Grand Island's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Grand Island's hazard mitigation plan primary and alternate points of contact. The Town of Grand Island followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Highway Department and Supervisor's office. The Town Supervisor and Highway Superintendent represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.25-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: John Whitney, P.E., Town Supervisor Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number:716-773-9600 x616 Email: jwhitney@grand-island.ny.us	Name/Title: Richard Crawford, Highway Superintendent Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number: 716-773-9632 Email: dcrawford@grand-island.ny.us
NFIP Floodplain Administrator	
Name/Title: Robert Westfall, P.E., Town Engineer Address: 2255 Baseline Road, Grand Island, NY 14072 Phone Number: 716-773-9600 x639 Email: rwestfall@grand-island.ny.us	
Additional Contributors	
Name/Title: Ronald Milks, Code Enforcement Officer Method of Participation: Completed worksheets	

9.25.2 Municipal Profile

The Town of Grand Island is located between City of Buffalo and Niagara Falls, dividing the Niagara River in half upriver from the famous Falls. The town is in the northwestern corner of Erie County and is 33 square miles in size. The town shares an international border with Ontario, Canada, although no bridges cross the river from the town, which is traversed by Interstate 190 and NYS Route 324.

The town's original inhabitants were Seneca Indians. The town was founded in 1651 and became part of the British Colony of New York in 1764. New York State purchased Grand Island and other islands on the

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Niagara River in 1815. In 1825 Grand Island established a connection to the mainland by ferry. The town incorporated in 1852. In 1993, a federal lawsuit was filed by the Seneca Nation of Indians who sought to have Grand Island returned to native ownership, but the island remained part of the United States (Town of Grand Island Comprehensive Plan 1998). The town was once nominated to be the headquarters for the United Nations due to its location on a friendly international border, before New York City was ultimately chosen (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the Town of Grand Island was 20,374. The estimated 2019 population was 21,047, a 3.0 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.4 percent of the population is 5 years of age or younger and 17.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.25.3 Jurisdictional Capability Assessment and Integration

The Town of Grand Island performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.25.3). The Town of Grand Island's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Grand Island. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.25-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Local Law 1971, Construction Codes, Uniform, Chapter 125	Local	Code Enforcement/Building
Comment: This chapter shall provide for administration and enforcement of the New York State Uniform Fire Prevention and Building Code, the State Energy Code and such other laws as are applicable to the construction in the State of New York (collectively, "Uniform Code") in the Town of Grand Island. Consistent administration of the town's building code supports construction of hazard resistant buildings.					
Zoning Code	Yes	No	LL3-2004, Zoning, Chapter 407	Local	Code Enforcement/Building

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The purpose of the Zoning Code is to provide for the orderly growth of the Town of Grand Island. The Zoning Code sets requirements on the use of land and size, height, and bulk of uses. Specific areas have been designated for residential, business, and industrial growth to protect the overall character of the town, ensure the development of cohesive neighborhoods, and minimize conflicts among land uses. Specifically, the Zoning Code is developed to: • Implement the Town Comprehensive Plan, Grand Island Local Waterfront Revitalization Plan (LWRP), and the Ferry Village Master Plan. • Promote the health, safety, and general welfare of the public and provide safety from fire, flood, and other dangers. • Provide adequate light, air, and outdoor uses to include public, common, and private open space areas. • Prevent overcrowding of land and ensure structure and land use arrangements are aesthetically harmonious to surrounding areas and structures. • Avoid undue concentration of population or sparse, uncoordinated development. • Facilitate the adequate provision of transportation, water, sewer, school, parks, and other public services. • Protect the character and values of residential, institutional, public, business, and industrial uses and to ensure their orderly and beneficial development. • Regulate the location of buildings and intensity of uses in relation to streets to ensure minimal interference with and by traffic movements, reduce congestion on Town streets and improve public safety. • Preserve and protect significant natural features and vegetation, thereby preventing ecological damage and visual blight which occur when those features or vegetation are eliminated or substantially altered to serve development purposes only. Protects the town from flood danger. R-2 and R-3 Districts shall preserve and incorporate into the landscaping of the development, natural features including streams, drainageways, and existing trees. Site plans must include a drainage plan showing existing and finished grades, size and type of pipe, location of receivers, and stormwater management plan evaluating the impacts on the watershed; the best management practices employed to mitigate the impacts of stormwater. In all districts, no permanent structure shall be permitted within the setbacks from the ten-year flood stage edge of any stream or existing natural drainage channel, established on the Town Official Map.					
Subdivision Ordinance	Yes	No	Subdivision of Land, 1971, Chapter 327	Local	Code Enforcement/Building
Comment: It is declared to be the policy of the Town Board and the Town Planning Board to consider land subdivision plats as part of a plan for the orderly, efficient, and economical development of the Town of Grand Island. This means, among other things: • A. That land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health, or peril from fire, flood or other menace; • B. That proper provision shall be made for drainage, water supply, sewerage, other underground utilities, and other needed improvements; • C. That all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties. • D. That the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Master Plan, and shall be of such width, grade, and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and • E. That proper provision shall be made for open spaces for parks and playgrounds. •					
Stormwater Management Ordinance	Yes	Yes	LL # 5 of 2007, Article XXXV 407-195 through 407-201*	Local/State/Federal	Code Enforcement & Engineering
Comment: The purpose of this article is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. This article seeks to meet those purposes by achieving the following objectives: (1) Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02 or as amended or revised; (2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01 or as amended or revised; (3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; (4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; (5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and (6) Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	No	-	-	-

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	No	LL # 3 OF 2004, Zoning, Chapter 407	Local	Zoning/Engineering
Comment: The growth management framework is established in the Zoning Code.					
Site Plan Review	Yes	No	Zoning Chapter 407, Article XXIV Site Plan Review	Local	Zoning/Engineering and Planning Board
Comment: Site Plan review by the Planning Board and as administered by the Building Department includes assessment of hazard risk.					
Environmental Protection Ordinance	Yes	No	State Environmental Quality Review (SEQR) LL 8-0101	Local/State	Town Board/Town Engineer
Comment: The town includes SEQR review in the development review process.					
Flood Damage Prevention Ordinance	Yes	Yes	LL # 1 – 2019 Chapter 155, Flood Damage Prevention Ordinance	Local/State/Federal	FPA
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	MS4 General Permit GP-0-15-003, Chapter 267, Sewers, Article IX Storm Sewers	Local/State	Town Engineer
Comment: No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Grand Island Comprehensive Plan, 2018	Local	Town Board
Comment: The Comprehensive Plan includes the following Objectives: Determine the breadth and extent of available natural resources in the Town with an inventory of assets, including forested trees, wetlands, grasslands, shorelines, wildlife, and historical/cultural sites. 2. Prepare an inventory/map of open space in the Town. Create a plan for protection of selected natural areas with ecological significance. 3. Work with land trusts and property owners to protect natural areas. 4. Promote the conservation of trees by preparing an inventory of trees on Town-owned streets, parks, and public spaces. Create a management plan for care and maintenance of these trees. Educate residents and developers about the potential invasive species that threaten trees. 5. Capitalize on the economic potential of natural resources by encouraging uses that relate to and actively engage with them rather than isolating them, including recreation, ecotourism, cultural education/interpretation, and supporting business ventures. 6. Ensure that buffer areas are created and maintained around water bodies and water courses to protect water quality, reduce erosion, and preserve aquatic ecosystems. Develop and implement a program to monitor water quality. Community Values • Natural resources are our biggest asset • We are a unique island community • We're more than just a passthrough • Gateways make the first impression • We desire a true Town Center • Establish a more prominent identity • Future lies in diversity 37 Town of Grand Island : Bridging the Gap 4 Goals & Objectives 7. Adopt environmental practices and policies that promote the conservation of birds, wildlife, and wildlife habitat. 8. Encourage trails or other public access for any non-residential development that contain streams, wetlands, floodplains, or other features that are not developable due to environmental constraints. 9. Promote efforts that recognize the importance of environmental sustainability such as recycling, clean energy, controlling invasive/non-native species, fertilizer use, composting, etc. (Refer to local law #1 (2017) chapter 407-165.1) 10. Engage with local agencies and groups that promote environmental protection and restoration initiatives. 11. Promote stewardship of our natural resources through educational workshops, pamphlets, and outdoor events/activities. 12. Encourage renewable energy systems at an appropriate scale and density to decrease local utility loads and minimize carbon emissions. 13. Promote the use of energy-efficient systems, materials, and equipment for private development; consider a requirement for municipal buildings to reduce their carbon footprint. 14. Encourage agricultural ventures in appropriate areas of the Town to conserve rural landscapes and support local agricultural business opportunities. Promote practices that balance farm productivity with green space protection and sustainability. 15. Seek reductions in greenhouse gas emissions and the overall carbon footprint of the Town and identify potential mitigation measures, starting with municipal operations, processes, and facilities. 16. Encourage the development of a local Farmland Protection Plan to support agricultural businesses and farms on Grand Island. The intent is to create an environment in which the community and agriculture can coexist.					
Capital Improvement Plan	Yes	No	5 – year Capital Improvement Plan, June 2020	Local	Town Board, Accounting, Engineering
Comment: 5–year updated annually					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: -					
Stormwater Plan	No	No	-	-	-
Comment: * See Stormwater Management					
Open Space Plan	Yes	Yes	TGI Parks & Recreation Open Space Plan 8/10/1992	Local	Town Board/Parks & Rec
Comment: Proactive management of open space and recreation assets includes assessment of hazard risk and mitigates flood risk.					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	Town of Grand Island Local Waterfront Revitalization Program	Local	Town Board/Engineer/Planning Board
Comment: Key goals of the LWRP are 1) to prevent flooding and erosion damages. Current Flood Insurance Rate Maps and the Flood Damage Prevention should be consulted and supplemented by site specific studies to establish accurate floodplain boundaries. 2) Construction activities should be guided away from Spicer Creek Wetland and other wetland and island habitats to preserve sensitive fish and wildlife habitat. 3) Activities or development in the coastal area will be undertaken to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands, and bluffs.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	January 2020, Resource Guide for the Protection and Promotion of Agriculture and Farming	Local	Town Board/Zoning
Comment: This Resource Guide serves two functions for the Town – providing a framework for future regulatory and policy actions necessary to protect farming and agriculture, and to act as a resource document for new and existing farmers, providing financial, educational, and technical support and other pertinent information.					
Other (this could include a tourism plan, business development plan, etc.)	No	-		-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Grand Island to oversee and track development.

Table 9.25-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	File is maintained in Engineering (Floodplain Development)
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The level of buildout in the town is unknown

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Grand Island and their current responsibilities which contribute to hazard mitigation.

Table 9.25-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board. This board's mission is three-fold: • to recommend to the Town Board any laws, regulations or rules that relate to town planning and development, • to report to the Town Board on all matters referred to it, including all applications for site plan, sub-division, special use and zoning changes, • to make such investigations, maps, reports, and recommendations in connection with the planning and development of the town as it deems desirable.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		The Planning Board is an advisory board to the Town Board (Volunteer).
Zoning Board of Appeals	Yes	The Zoning Board of Appeals hears and decides appeals from, and reviews any order, requirement, decision, interpretation, or determination made by, the administrative official charged with the enforcement of any zoning ordinance or law. The ZBA considers hazard exposure in its deliberations on variances to the zoning code.
Planning Department	No	Contract engineer
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Board (CAB) reviews proposals or applications resulting in the use or development of any open space identified in the approved Town of Grand Island Open Space Plan. Recommendations that reasonably achieve the goal of maintaining, improving or otherwise enhancing the environmental quality of Grand Island are provided to the Town Board for consideration. The CAB also serves as a consultant to the Town Board on environmental matters.
Open Space Board/Committee	Yes	Conservation Advisory Board (see above)
Economic Development Commission/Committee	Yes	Economic Development Advisory Board. The mission of this board is to pro-actively develop Grand Island's business community. It is charged with helping existing businesses survive and prosper, identifying and attracting new businesses that are compatible with our environment, and working with economic development opportunities as they occur.
Public Works/Highway Department	Yes	The Grand Island Highway Department provides a wide variety of services including: • Issue permits for work to be performed in town Highway rights-of-way. For example: o Curb cuts o Driveway culvert permits o Road push or boring permits o Open road cuts o Power and telephone pole location permits and gas line permits. • Snow and ice removal on all town roads and roads owned by Erie County which are done under contract. • The upkeep of all town owned roads • Road sweeping on town roads, curbed areas mostly. • Roadside mowing of town roads. • Traffic control sign installation and maintenance. • Maintenance of roadside ditches. For example: o Roadside ditching o Installing driveway culverts-by permit o Installing pipe across the premises-by permit. • Fleet Maintenance for all town owned vehicles. Richard W. Crawford, Jr. – Superintendent
Construction/Building/Code Enforcement Department	Yes	Ron Milks, Department Head. The Building/Code Enforcement/Zoning Department is responsible for the enforcement of the New York State Commercial and Residential Building Codes and Fire Prevention inspections, within the Town of Grand Island, as well as the various portions of the Town Code. Building permits are issued, plans and specifications are reviewed, and various inspections are conducted. The Department assists the public, contractors, and design professionals in the understanding of the various code requirements as they apply to their projects. The Department prepares periodic reports, notices, and

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		related documents and performs required fire safety inspections of existing buildings and investigate complaints relating to code violations.
Emergency Management/Public Safety Department	Yes	Community Emergency Response Team. GIPD – Robert Rine, Officer in Charge
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department – Right – of – way maintenance, Engineering Department by contracts
Mutual aid agreements	Yes	The town maintains mutual agreements with other municipality's Fire, Police, Highway, Water/Wastewater operators
Other	Yes	Agricultural Advisory Board, Architectural Review Board, Historic Preservation Board, Parks and Recreation Committee and Traffic Safety Committee
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building: Ron Milks, Code Enforcement/Building inspector Engineering: Robert H. Westfall, P.E., Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Various within departments
Professionals trained in conducting damage assessments	Yes	Engineering & Building Departments
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department and GIS consultant
Scientist familiar with natural hazards	Yes	Various within community
NFIP Floodplain Administrator (FPA)	Yes	Town Engineer
Surveyor(s)	No	Hired professional service
Emergency Manager	No	-
Grant writer(s)	Yes	Rotella Grants
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Grand Island.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.25-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Town Board, Accountant and Engineer
Capital improvements project funding	Yes, Town Board, Accountant Engineering
Authority to levy taxes for specific purposes	Yes, Town Board, Assessor, Accounting
User fees for water, sewer, gas, or electric service	Yes, Town Board, Accountant and Engineer
Impact fees for homebuyers or developers of new development/homes	Yes, Town Board
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Town Board, Accountant
Incur debt through special tax bonds	Yes, Town Board, Accountant
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes, Town Board, Accountant and Engineer
Open Space Acquisition funding programs	Yes, Town Board, Accountant and Engineer
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, Town Board, Accountant and Engineer

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Grand Island.

Table 9.25-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Information on stormwater and wetlands is available on the town website.
Social media for hazard mitigation education and outreach	Yes	The Town of Grand Island uses Facebook as its social media
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Website/social Media
Natural disaster/safety programs in place for schools	No	-
Other	Yes	GIFD – Fire Prevention Programs

Community Classifications

The table below summarizes classifications for community programs available to the Town of Grand Island.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.25-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.25-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.25.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Robert Westfall, Town Engineer

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Grand Island.

Table 9.25-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Grand Island	46	30	$62,488	7	23

Source: FEMA, 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the Town of Grand Island that are prone to flooding include the shoreline of the Niagara River and various tributaries discharging to that river.

The town does not maintain a list of properties that have been damaged by flooding nor a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Engineering & Building Department is responsible for floodplain administration; however, there are no Certified Floodplain Managers on staff at the town. The town's floodplain management program is implemented in various ways, but most directly via site plan review and building permit approval process. The Town of Grand Island takes a proactive approach in managing its floodplain. The FPA and other staff speak with residents almost weekly about violations and measures to address them. The town assists residents in understanding requirements and procedures for development in the regulated floodplain, and provides residents with information about the SFHA for residents' use with other agencies (e.g., banks, lending institutions). The town also helps residents understand and meet requirements for accessory structures. When determining if proposed development on an existing structure qualifies as a substantial improvement, the FPA will estimate the value of new work versus the assessed value of the entire property.

The town's floodplain management program meets NFIP standards. The town's most recent Community Assistance Visit (CAV) was in June 2020, and there are no outstanding NFIP compliance violations to be addressed. Town staff would find refresher training on the requirements of the NFIP useful. The town does not participate in the Community Rating System, but does have numerous elevation certificates on file at the town office.

9.25.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Grand Island has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route I-190 is the only exit point from the island, therefore the town will coordinate with county and state agencies as needed for access along this critical roadway.

Sheltering

The Town of Grand Island has identified the following designated emergency shelters within the town.

Table 9.25-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Grand Island High	1100 Ransom Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Grand Island Middle	1100 Ransom Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Huth Road Elementary	1773 Huth Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Kaegabein Elementary	1690 Love Rd, Grand Island	Unknown	No	Yes	No	School nurse	None
Sidway School	2451 Baseline Rd, Grand Island	Unknown	No	Yes	No	School nurse	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Grand Island has identified the following sites suitable for placing temporary housing units.

Table 9.25-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Nike Base	3278 Whitehaven Rd, Grand Island	Unknown	Building	Water, electric, septic	Complies with Codes

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Grand Island has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.25-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
K.O.A.	2570 Grand Island Blvd, Grand Island	Unknown	Campground	Water, electric, septic	None
Branches of Niagara	2659 Whitehaven Rd, Grand Island	Unknown	Campground	Water, electric, septic	None
Cinderella Campground	2797 Grand Island Blvd Grand Island	Unknown	Campground	Water, electric, septic	None

9.25.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.25-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.25-13. Recent and Expected Future Development

Type of Development	2015**		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	N/A	N/A	25	0	54	0	64	0	48	0	31	1
Multi-Family	N/A	N/A	20	0	2	0	9	0	18	0	0	0
Other (commercial, mixed-use, etc.)	N/A	N/A	5	0	2	0	5	0	6	0	7	0
Total Permits Issued	**N/A**	**N/A**	**50**	**0**	**58**	**0**	**78**	**0**	**72**	**0**	**38**	**1**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Heron Pointe – Phase 1	Residential	232 units/20 buildings	101 Heron Pointe Pkwy	Expansive soils	Multi-unit apartments
Gun Creek Phase 1 & 2	Residential	45 buildings	101 Stonebridge Road	None identified	Single-family homes
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015**	2016	2017	2018	2019	2020
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

*** 2015 development data was not provided by the town.*

** Only location-specific hazard zones or vulnerabilities identified*

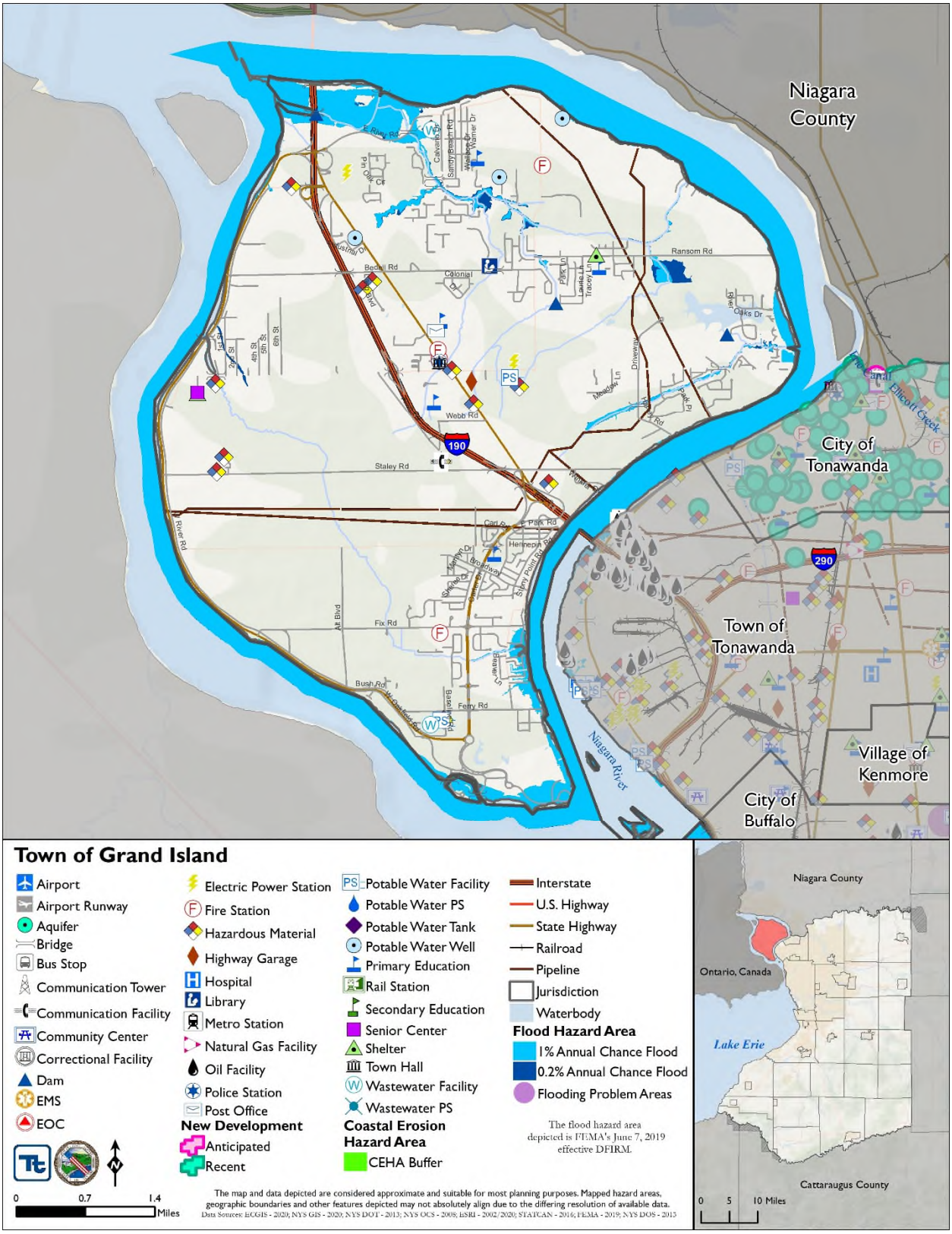
9.25.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Grand Island's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Grand Island has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

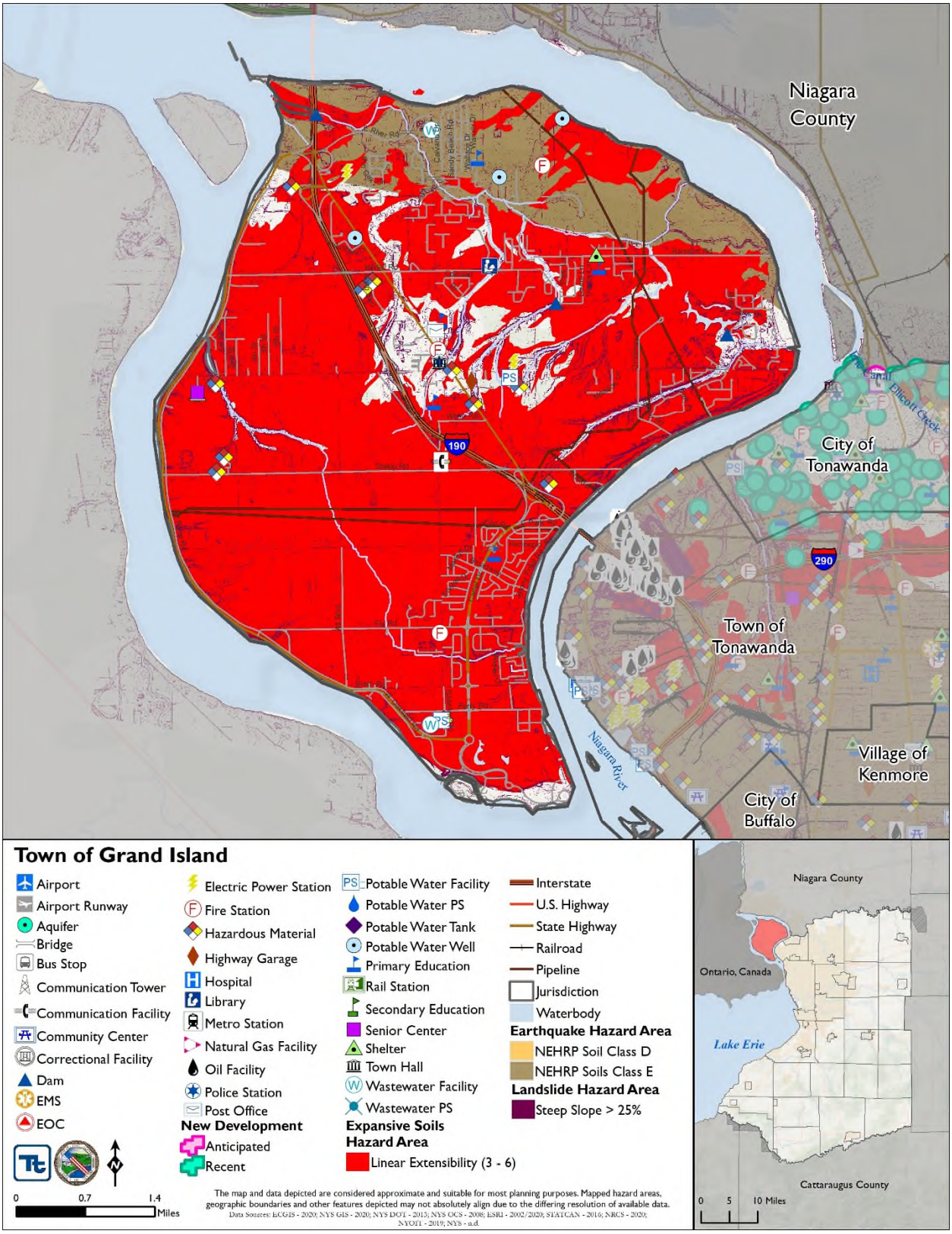
Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.25-1. Town of Grand Island Hazard Area Extent and Location Map 1



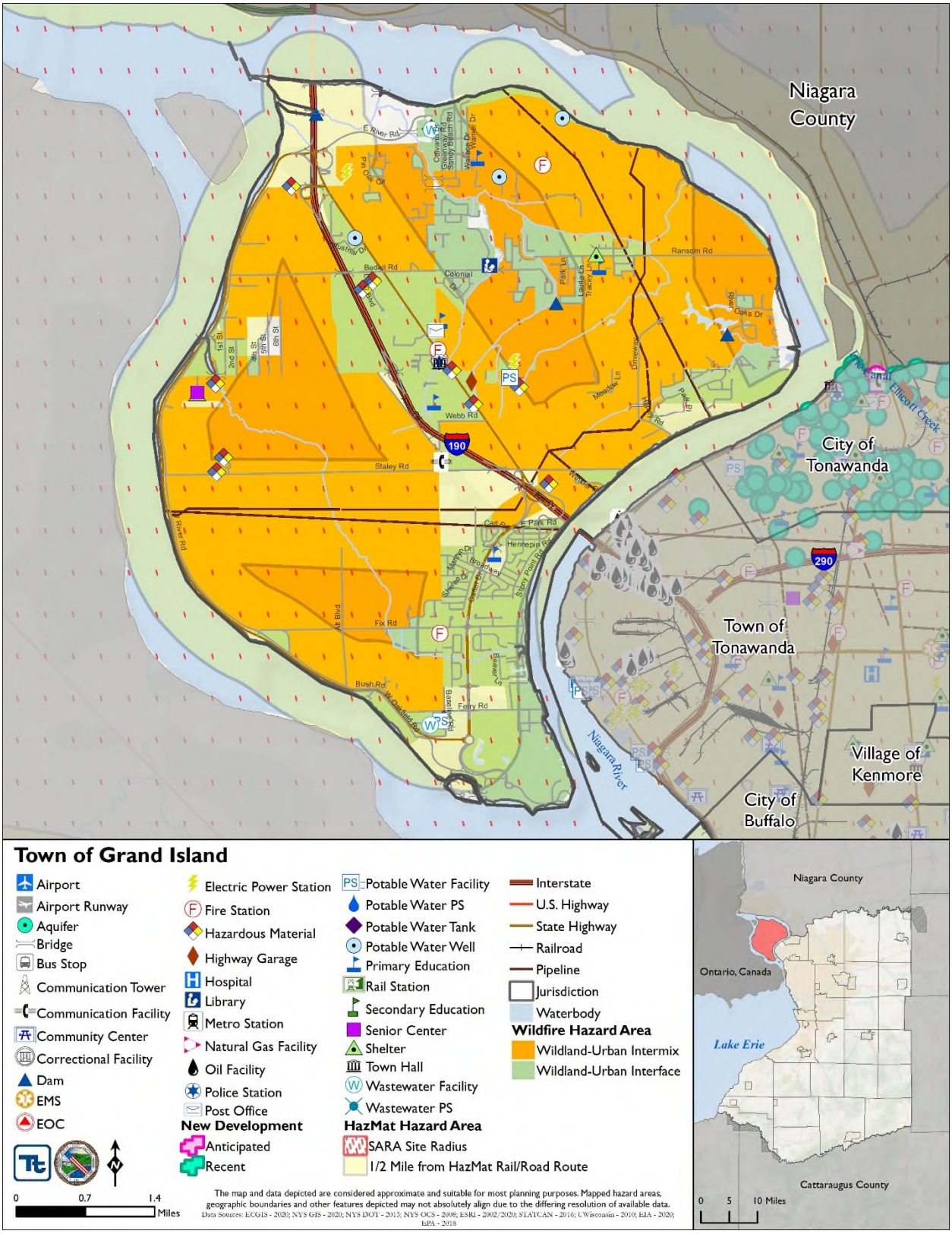
Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.25-2. Town of Grand Island Hazard Area Extent and Location Map 2



Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.25-3. Town of Grand Island Hazard Area Extent and Location Map 3



Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Grand Island's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.25-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.25-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
August 11-15, 2015	Flash Flood	No	Although the county was impacted the Town of Grand Island did not report damage.
October 28-29, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 12, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
November 18, 2015	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
January 11, 2017	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
March 8, 2017	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
March 13, 2017	Winter Storm	No	Although the county was impacted the Town of Grand Island did not report damage.
July 20, 2017	Tornado	No	Although the county was impacted the Town of Grand Island did not report damage.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted the Town of Grand Island did not report damage.
January 2, 2018	Blizzard	No	Although the county was impacted the Town of Grand Island did not report damage.
October 6, 2018	Lightning	No	Although the county was impacted the Town of Grand Island did not report damage.
February 24, 2019	High Wind	No	Although the county was impacted the Town of Grand Island did not report damage.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted the Town of Grand Island did not report damage.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted the Town of Grand Island did not report damage.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted the Town of Grand Island did not report damage.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Grand Island's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Grand Island. The Town of Grand Island has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the coastal erosion risk should be decreased from High to Medium, that the earthquake hazard risk should be decreased from Medium to Low and the Severe Storm risk should be decreased from High to Low. These changes reflect the town's risk assessment.

Table 9.25-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Medium	Medium	Low	High	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	Low	Medium	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.25-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Buckhorn Marsh Dam & Dike	Dam	X	X	2022-Town Grand Island-002

Source: FEMA 2021

Identified Issues

After review of the Town of Grand Island's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Grand Island has identified the following vulnerabilities within their community:

- The town's municipal building lacks backup emergency power. The phone system (VOIP) utilizes UPS to remain functional. In the event of a power outage, very little emergency operations capability would be possible during and after an emergency.
- The Buckhorn Marsh Dam & Dike is in the Special Flood Hazard Area.
- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The town contains repetitive loss flood properties
- Some homeowners are unaware of their exposure to flood risk
- The town was unable to identify capacity of emergency shelters and temporary housing locations.

9.25.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.25-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	East Park Outfall Reconstruction – replacing existing deteriorated storm sewer outfall at East Park and East River Roads	Erosion, Flooding	Prevent erosion and properly direct storm water to the Niagara River	Engineering Department	Complete	Cost	$ 106,000	1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Fix Road Drainage Improvements – installing 1500 linear feet of 18" diameter new storm sewer	Drainage, Flooding	alleviate drainage problems and flooding and to improve capacity in the 2300 block of Fix Road	Engineering Department	Complete	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Ferry Village Drainage Improvements- replacing severely deteriorated 140 linear feet of 24" diameter culvert pipe	Drainage, Flooding	Alleviate flooding and drainage problems to improve capacity on Elmwood Road	Engineering Department	Complete	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering and Water Resources	Complete	Cost	N/A	1. Discontinue 2. 3. Ordinance was recently updated.
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Grand Island has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Engineering Department repaired the stormwater pond on Amy Drive, including excavation of two silted ponds to reduce stormwater and repair backups.
- The Bedell Road drainage/culvert was replaced to improve hydraulics and carrying capacity.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Grand Island participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.25-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	-	X	-	-	-	-	X
Cyber Attack	-	X	-	-	X	-	-	-	-	X
Earthquake	-	X	-	-	X	-	-	-	-	X
Expansive Soils	-	X	-	-	X	-	-	-	-	X
Extreme Temperature	-	X	-	-	X	-	-	-	-	X
Flood	-	X	-	X	X	X	X	-	-	X
Hazardous Materials	-	X	-	-	X	-	-	-	-	X
Landslide	-	X	-	-	X	-	-	-	-	X
Pandemic	-	X	-	-	X	-	-	-	-	X
Severe Storm	-	X	-	-	X	-	-	-	-	X
Severe Winter Storm	-	X	-	-	X	-	-	-	-	X
Utility Failure	-	X	-	-	X	-	-	-	-	X
Wildfire	-	X	-	-	X	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.25-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Grand Island would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.25-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Grand Island-001	Floodplain Administrator to attend training on floodplain management	3	Flood	**Problem:** Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. **Solution:** Obtain/host training and certification for floodplain managers.	No	No	Within 3 years	FPA, Emergency Manager	$3,000	Certified floodplain managers trained Floodplain management improved.	County or municipal budget	High	EAP	PR
2022-Town Grand Island-002	Encourage protection of the Buckhorn Marsh Dam & Dike to the 0.2% annual chance flood event	1	Flood	**Problem**: The NYSDEC owned Buckhorn Marsh Dam & Dike is in the Special Flood Hazard Area. The dam provides important flood protection services. **Solution**: The town will contact New York State, owner of the Buckhorn Marsh Dam and Dike to protect it to the 500-year flood level. New York State will survey the dam to determine what protections are necessary and carry out the necessary upgrades. The NYSDEC will report findings to the town.	Yes	No	Within 3 years	Town Engineer, NYSDEC	TBD per engineering feasibility analysis	Ensure this critical facility continues to provide flood protection services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-Town Grand Island-003	Protect the town's municipal building from power outage	1	All Hazards, Utility Failure	**Problem**: The Town Municipal building lacks emergency power and is vulnerable to utility failure with potential disruption to service from this important facility. **Solution**: Town staff will conduct a feasibility analysis to determine the proper size backup	Yes	No	Within 3 years	Town Board, Emergency Manager	~$75,000 for a backup generator	Ensure this critical facility continues to provide government services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				generator to install at the municipal building. Town will install and maintain the generator.										
2022-Town Grand Island-004	Repetitive Loss Properties	1, 2, 3	Flood	**Problem**: There are seven Repetitive Loss Properties within the town. These properties will benefit from removal, acquisition or mitigation. **Solution:** The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	Within 3 years	Town Board, FPA, homeowners	Low to conduct Outreach	Provides an option to residents in the floodplain to protect themselves and their property	HMGP, BRIC, FMA, cost share with homeowners	High	SIP	PP
2022-Town Grand Island-005	Community flood risk outreach	3	Flood	**Problem:** Some homeowners are unaware of their exposure to flood risk, including potential location of structures within the Special Flood Hazard Area. **Solution:** The town will work to notify all property owners with residences within the floodplain of the risk of flooding. The town will provide guidance and contacts to property owners to help with property disposition.	No	No	Within 5 years	FPA	Staff time	Increase public awareness of risks posed by flooding.	Municipal budget	High	EAP	PR

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.25-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Grand Island-006	Determine capacity of Emergency Shelters and Temporary Housing locations	1	All Hazards	**Problem:** The town is not able to identify the capacity of emergency shelters and temporary housing locations **Solution:** The town will work with the county to identify the capacity of emergency shelters and temporary housing locations	No	No	Within 3 years	Town Board	Staff time	Ensure that emergency shelters and temporary housing locations provide adequate capacity to deal with post disaster demand	Municipal budget	High	LPR	ES, PR

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.25-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Grand Island-001	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-002	Protect the Buckhorn Marsh Dam & Dike to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-003	Protect the town's municipal building from power outage	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Grand Island-004	Repetitive Loss Properties	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Grand Island-005	Community flood risk outreach	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022-Town Grand Island-006	Determine capacity of Emergency Shelters and Temporary Housing locations	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.25.9 Action Worksheets

The following action worksheets have been developed by the Town of Grand Island to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Grand Island Action Worksheet			
Project Name:	Protect the town's municipal building from power outage		
Project Number:	2022-Town Grand Island-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Town Municipal building lacks emergency power and is vulnerable to utility failure leading to potential disruption of service at this important facility which houses emergency services such as police, water, and engineering services.		
Action or Project Intended for Implementation			
Description of the Solution:	Town staff will conduct a feasibility analysis to determine the proper size backup generator to install at the municipal building. Town staff will install and maintain the generator.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensure this critical facility continues to provide government services
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	~$75,000 for a backup generator	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program
Responsible Organization:	Town Board, Emergency Manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Develop a dedicated solar array	High	Variable power service, infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the town's municipal building from power outage	
Project Number:	2022-Town Grand Island-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided at the municipal building
Property Protection	1	Project will protect the municipal hall from utility failure risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	3 years
Agency Champion	1	Town Board, Emergency Manager
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Grand Island Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Town Grand Island-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	There are seven Repetitive Loss Properties within the town. These properties will benefit from removal, acquisition, or mitigation.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	0.2% annual chance flood	**Estimated Benefits (losses avoided):**	Provides an option to residents in the floodplain to protect themselves and their property
Useful Life:	20 years	**Goals Met:**	1,2,3
Estimated Cost:	Staff time	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, BRIC, FMA, cost share with homeowners
Responsible Organization:	Town Board, FPA, homeowners	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Forced evictions	Very High	infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Town Grand Island-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect residents who live in repetitive loss properties
Property Protection	1	Project will protect the homes from flood risk
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	3 year
Agency Champion	1	Town Board, FPA, homeowners
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 64-Section-9.25-Grand-Island-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.26 Town of Hamburg

This section presents the jurisdictional annex for the Town of Hamburg. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Hamburg's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Hamburg's hazard mitigation plan primary and alternate points of contact. The Town of Hamburg followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Management and Code Enforcement. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Sean Crotty, Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2811 Email: scrotty@thpdny.org	Name/Title: Nicholas Pikul, Deputy Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2835 Email: npikul@thpdny.org
NFIP Floodplain Administrator	
Name/Title: Roger Gibson, Supervising Code Enforcement Officer Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2210 Email: rgibson@townofhamburgny.com	

9.26.2 Municipal Profile

The Town of Hamburg is 41 square miles in size and is named after the German City of the same name. The town is on the county's western side and is one of the county's "Southtowns". The town includes the Villages of Hamburg and Blasdell. Hamburg is bounded by Lake Erie to the west, the Town of Lackawanna to the north, the Town of Orchard Park to the east, and the Town of Eden to the south. Eighteenmile Creek traverses the town.

The Town of Hamburg was formed from the larger town of Willink. In 1850, the town was further reduced to form the Towns of East Hamburg and West Seneca. The New York State Thruway (Interstate 90), U.S. Route 62, US 20, and NY Route 5 pass through the town. The first white landowner in the area was John Cummings, who built a grist mill in 1806. In 1852, the Erie Railroad was built through the area. In 1868 the Erie County

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Fair came to the town and has been there since that time. Weekly publication of the *Erie County Independent* began in 875 (Wikipedia, Town of Hamburg, accessed 2020). Polish and Italians immigrants began to arrive in the area around 1890 to work in the area's rapidly growing steel industry (Town of Hamburg website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of Hamburg was 44,974. The estimated 2019 population was 45,985, a 2.2 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.9 percent of the population is 5 years of age or younger and 19.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Jurisdictional Capability Assessment and Integration

The Town of Hamburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Town of Hamburg's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Hamburg. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.26-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	IBC2020 Hamburg Town Code Chapter 76	Local	Code Enforcement
Comments: It is the intent of this chapter to provide for the administration and enforcement of the provisions of all laws, codes, ordinances, regulations and orders applicable to: • The location, design, materials, construction, alteration, repair, equipment, maintenance, use, occupancy, removal and demolition of buildings, structures and appurtenances within the Town. • Fire prevention and fire safety regulations consistent with nationally recognized good practices for safeguarding of life and property from the dangers of fire and explosions arising from hazardous conditions in the use or occupancy of buildings or premises and from the storage and use of hazardous substances, materials and devices.					

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Zoning Code	Yes	Yes	Hamburg Town Code Chapter 280	Local	Code Enforcement
Comment: A Comprehensive Zoning Plan is hereby established for the area of the Town of Hamburg outside the Villages of Blasdell and Hamburg by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The Comprehensive Zoning Plan, set forth in the text and map which constitute this chapter, is adopted in order to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to enhance the environment by the conservation of certain open land areas with certain desirable or unique characteristics worthy of preservation; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; and to preserve and promote the attractiveness of the community.					
Subdivision Ordinance	Yes	Yes	Hamburg Town Code Chapter 230	Local	Planning Department
Comment: The public health, safety, morals and general welfare require harmonious, orderly and progressive development of land within towns of the state. In furtherance of this purpose, regulations of the subdivision of land by Town governing authorities is desired for the following purposes, among others: • To encourage the development of economically sound and stable communities. • To assure the provision of required streets, utilities and other facilities and service to new land developments. • To assure the adequate provision of safe and convenient traffic access and circulation, both vehicular and pedestrian, in new land developments. • To assure the provision of needed public open spaces and building sites in new land developments through the dedication or reservation of land for recreational educational and other public purposes. • To assure, in general, the wise development of new areas in harmony with the Master Plan of the town. • To assure coordination of intergovernmental public improvement plans of the town. • To assure coordination of intergovernmental public improvement plans and programs within the county. • To assure proper legal description, identification, monumentation and recording of real estate boundaries. • (9) To secure equitable handling of all subdivision plats by providing uniform standards and procedures, thus providing suitable sites for building purposes and human habitation.					
Stormwater Management Ordinance	Yes	Yes	Hamburg Town Code Chapter 280-351	Local	Engineering Department
Comment: No application for approval of a land development activity shall be reviewed until the appropriate board has received a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in this article and Chapter 226A.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Town of Hamburg Code Chapter 280-333	Local	Planning Department
Comment: All applications requiring a special use permit are also subject to site plan review and the requirements of this section. Applications only requiring site plan review may have some of the following requirements waived by the Town, based on the tower's location and size. Applications for microcells requiring site plan approval may have some of these requirements waived (many may not be applicable to these types of installations). • All applicants, after obtaining Town of Hamburg and other required approvals, must obtain a building permit from the Code Enforcement Officer of the Town of Hamburg. The Code Enforcement Officer is hereby authorized to issue building permits under this article if it is determined that an applicant has met the requirements established in this article. • B. Site plan applications will be processed by the Town of Hamburg Planning Board. The intent of site plan review is to evaluate site plans and require changes consistent with minimizing conflicts which may result between the site layout and design of proposed uses and natural site conditions and features and/or existing or planned adjacent uses. Site plan review is also responsible					

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
for ensuring that development comply with clearly calculated planning goals and policies as are provided in the Town of Hamburg's Comprehensive Plan and other area-specific planning documents.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Town of Hamburg Code Chapter 115	Local	Code Enforcement
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: • Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; • Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; • Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; • Control filling, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and • Qualify and maintain for participation in the National Flood Insurance Program. Meets state requirements – BFE+2 feet for all construction in the SFHA (residential and non-residential)					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	SPDES GP	NYS	NYS DEC
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Update in progress 2021	Local	Planning Department
Comment: The Town of Hamburg is preparing a new Comprehensive Plan, which will guide development and land use decisions here for the next 15 years.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	Stormwater Management Plan	NYS	NYS DEC
Comment: The Town stormwater management program is in compliance with the requirements of the Federal and State Phase II Stormwater Regulations.					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	Yes	Yes	Local Waterfront Revitalization Program, 2011	Local, Federal	Town Board
Comment: The LWRP includes policies to be used to determine an appropriate balance between economic growth and development and preservation that will permit the beneficial use of waterfront resources in the Town without undo impacts to Lake Erie or adjacent upland areas. Policies are related to Developed Waterfront areas, Natural Waterfront areas, Public Waterfront areas, and Working Waterfront areas.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Response/Recovery Planning					

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comprehensive Emergency Management Plan	Yes	Yes	Town of Hamburg/Erie County CEMP (In progress review)	Local/County	Emergency Management
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	Yes	Not Indicated	Local	Emergency Management
Comment: HIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the state's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.					
Post-Disaster Recovery Plan	Yes	Yes	Erie County CEMP	County	Emergency Management
Comment: Post Disaster Recovery is a section of the CEMP.					
Continuity of Operations Plan	Yes	Yes	Town of Hamburg/Erie County CEMP (In progress review)	Local/County	Emergency Management
Comment: The COOP states that all emergency response activities within the county will utilize the National Incident Management System (NIMS). This plan employs a MAC structure that includes a MACC coordinator, a Planning section (situation unit / resource unit / strategic foresight unit), a Logistics section, Joint Information Center (JIC) and agency/organization representatives.					
Public Health Plan	Yes	Yes	Erie County Plan	County	Emergency Management
Comment: Public Health Emergency Preparedness involves several county Departments.					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Hamburg to oversee and track development.

Table 9.26-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Inspection
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Underutilized Sites Study completed January 2018

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Hamburg and their current responsibilities which contribute to hazard mitigation.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.26-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board is responsible for decisions on land use planning in Hamburg and specifically subdivision and site plan review and approval, advice toward revisions of the Comprehensive Plan and the review and granting of special use permits. Approvals of the Planning Board are independent of those of the Town Board.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals – Approval of Variances
Planning Department	Yes	See Above
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The "Conservation Advisory Board" is a member of the New York State Association of Conservation Commissions, and is charged with doing environmental assessments on all new projects in the Town of Hamburg. The assessments are done in accordance with NYS SEQRA law. The assessments are provided to the Planning Board and the Town Board to guide them in their decisions. Other functions of the CAB are: • The preservation of open space/green space – including acquisitions by the DEC and Town. • Evaluation of wetlands and other natural resources. • Assisting the DEC, the Army Corps of Engineers and other agencies as necessary. • Advising the Town Board, Building Inspection and Engineering departments on environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Hamburg Community Development Department
Public Works/Highway Department	Yes	The Town of Hamburg Highway Department performs numerous secondary tasks, in addition to the primary responsibilities of Road Maintenance, Snow Removal, Drainage, and Brush/Rubbish Pickup. The department is responsible for maintenance of right-of-ways for safety and beautification purposes. This includes cutting brush and removal of trees where necessary. The department works with the Town Board to alleviate off road, backyard, and side yard problems when many residents are involved. We also regularly clean drop inlets as part of our drainage system maintenance. The department responds to notices of excavation given by the Underground Facilities Protective Organization, protecting underground lines from damage. The department maintains its own fleet of over 50 vehicles and a large tool inventory. The department's own mechanic shop conducts its own state vehicle inspections and 90% of its own vehicle repairs. Small engine repair, carpentry, and welding work is also completed by the department.
Construction/Building/Code Enforcement Department	Yes	Building Inspection Responsibilities: Enforce the New York State Uniform Fire Prevention and Building Code and the Town of Hamburg, Village of Hamburg and Village of Blasdell Zoning Codes. Reviews plans for building permits to ensure the plans, specifications and any other information that may be required is in compliance with all codes before issuing the proper permits Performs inspections on all building permits to ensure compliance with proper codes.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		Address complaints and alleged violations for validity and resolution per zoning codes and property maintenance compliance, if there is a violation and it is not corrected we will bring the property owner into court and the judge will decide the final disposition. Conducts fire inspections on commercial building and multiple unit apartment buildings to verify all smoke detectors and exit signs are functioning properly, fire extinguishers, sprinkler systems and fire suppression systems are inspected and exit ways are clear of debris. Receives and maintains storm water pollution Prevention Plan (SWPPP) reports for private subdivisions and commercial construction.
Emergency Management/Public Safety Department	Yes	The Town of Hamburg Public Safety Dispatch Center provides dispatching services to many agencies in the South Towns of Erie County, New York. The primary agencies served are the Police, Fire and EMS (Emergency Medical Services) units of the Town of Hamburg. This includes all of the Villages of Blasdell, and Hamburg. The Dispatch Center is the contact point for the Dog Control Officers throughout the Town of Hamburg. The Dispatch Center also answers all 911 hardwired telephone calls within the Town of Hamburg, and dispatches the Southtowns Hazmat Team, and the Town of Hamburg Water Rescue Unit. The Dispatch Center is also the afterhours contact point for many Town Agencies, including the Buildings and Grounds, and Town Highway Departments.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department (see above)
Mutual aid agreements	Yes	Highway agreements with the Village of Hamburg, Erie County DPW and NYS DOT. Emergency Services agreements as part of the Erie County Fire, Law Enforcement & Emergency Services Mutual Aid Agreements.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	Yes	Engineering Department
Professionals trained in conducting damage assessments	Yes	Engineering Department
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering Department/Planning Department
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Surveyor(s)	Yes	Engineering Department
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	Yes	Administration
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Hamburg.

Table 9.26-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Community Development
Capital improvements project funding	Yes, Finance
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	Yes, Town Board
Impact fees for homebuyers or developers of new development/homes	Yes, Community Development
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Hamburg.

Table 9.26-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	OEM
Personnel skilled or trained in website development	Yes	IT Department
Hazard mitigation information available on your website	Yes	IT Department
Social media for hazard mitigation education and outreach	Yes	OEM
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning and Zoning

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Other programs already in place that could be used to communicate hazard-related information	Yes	Community Development/ IDA
Warning systems for hazard events	Yes	OEM
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Hamburg.

Table 9.26-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A Not applicable

NP Not participating

- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.26-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.26.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Roger Gibson, Supervising Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Hamburg.

Table 9.26-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Hamburg	90	202	$1,824,818	66	37

Source: FEMA, 2019
Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Town of Hamburg is vulnerable to flooding, but does not maintain a lost of property owners that are interested in flood mitigation, nor a list of properties that have been damaged by flooding. There are currently no RiskMAP projects underway, however a property on Big Tree Road was previously mitigated against flood damages. Substantial Damage determinations are made by reviewing construction repair estimates, if the cost to repair is 50% or more of the market value, minus the land value. Flood Hazard maps adequately address the flood risk within the town.

NFIP Compliance

Town of Hamburg Code Enforcement is responsible for floodplain management, however there are no certified floodplain mangers on staff. Code Enforcement is responsible for plan reviews, permitting, and inspections. The Flood Damage Prevention Ordinance is located in Chapter 115 of the Town Code, and meets minimum requirements. The most recent Community Assistance Visit was in 2019. There are no outstanding compliance issues.

9.26.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Hamburg has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation routes are determined by NYSDOT via Predesignated Routes and are dependent on the event.

Sheltering

The Town of Hamburg has identified the following designated emergency shelters within the Town.

Table 9.26-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The Town will work with the county to identify and designate an Emergency Shelter. See Mitigation Action 2022-T. Hamburg-#001							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Hamburg has identified the following sites suitable for placing temporary housing units.

Table 9.26-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The Town will work with the county to identify temporary housing locations. See Mitigation Action 2022-T. Hamburg-#002					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Hamburg has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.26-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The Town will work with the county to identify and designate Permanent Housing Locations. See Mitigation Action 2022-T. Hamburg-#002					

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.26.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.26-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.26-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	51	0	56	0	92	0	106	0	76	0	85	0
Multi-Family	45	0	17	0	23	0	19	0	6	0	34	0
Other (commercial, mixed-use, etc.)	23	0	20	0	15	0	12	0	12	0	17	0
Total Permits Issued	**119**	**0**	**93**	**0**	**130**	**0**	**137**	**0**	**94**	**0**	**136**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Arthur Ct Town Homes	Townhomes		South Park Ave		Complete
Brookview Apts	Apts		Southwestern Blvd		Complete
Deer Springs Subdivision	Single Family Residential				Complete
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Fosterbrook Apts	Apts		Southwestern Blvd		
Pleasant Creek	Single Family				
Rolling Ridge Acres	Single Family				

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

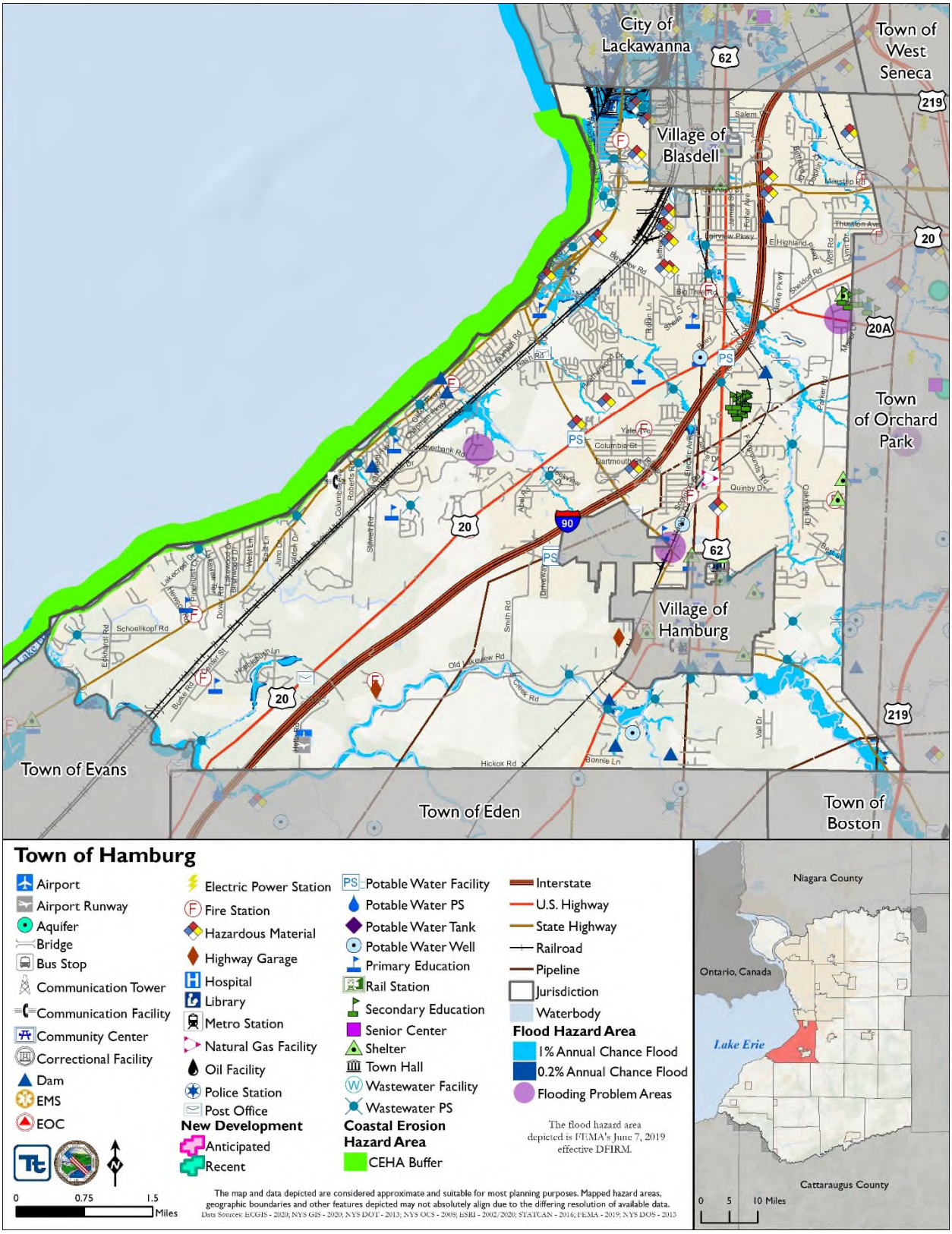
9.26.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Hamburg's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Hamburg has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

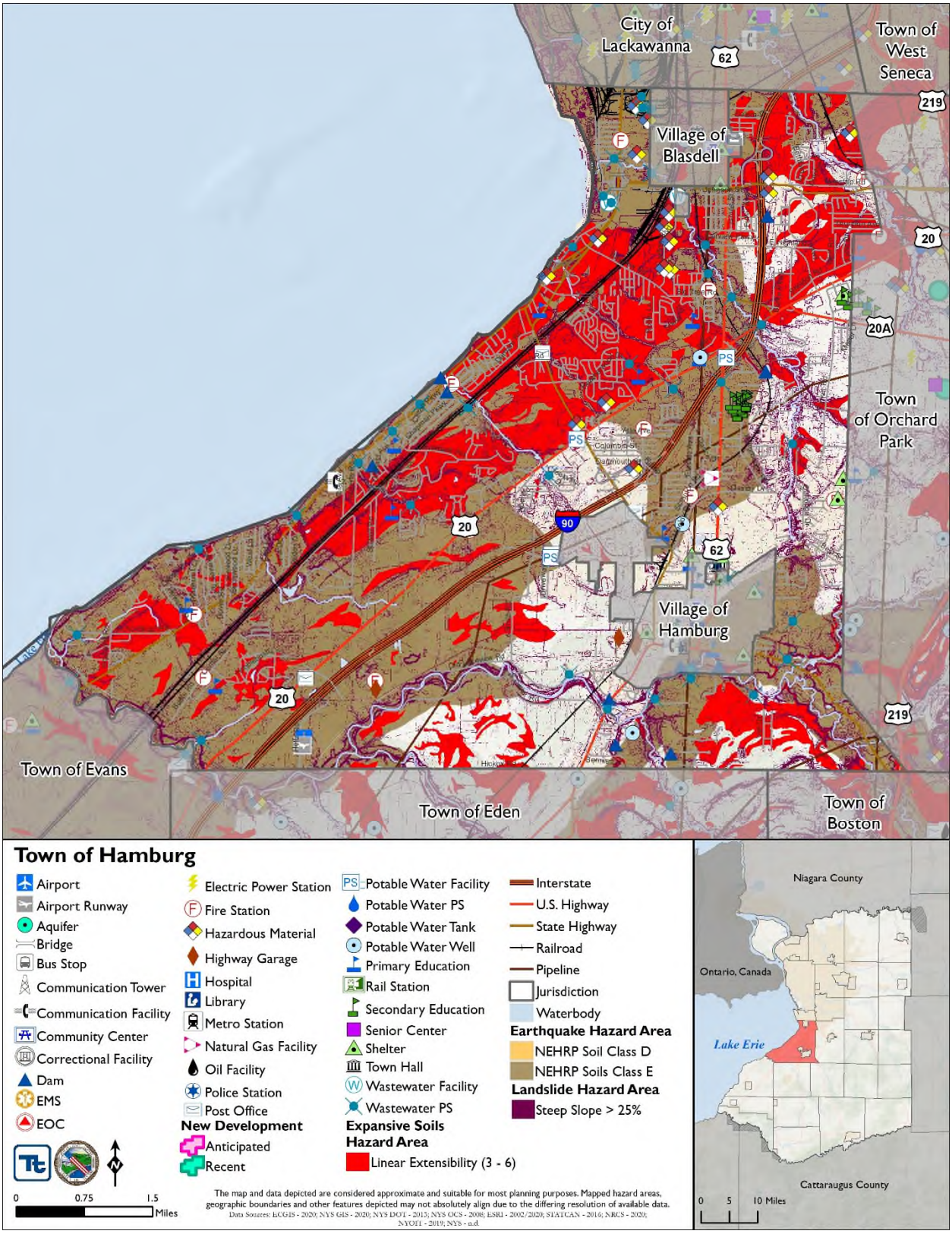
Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.26-1. Town of Hamburg Hazard Area Extent and Location Map 1



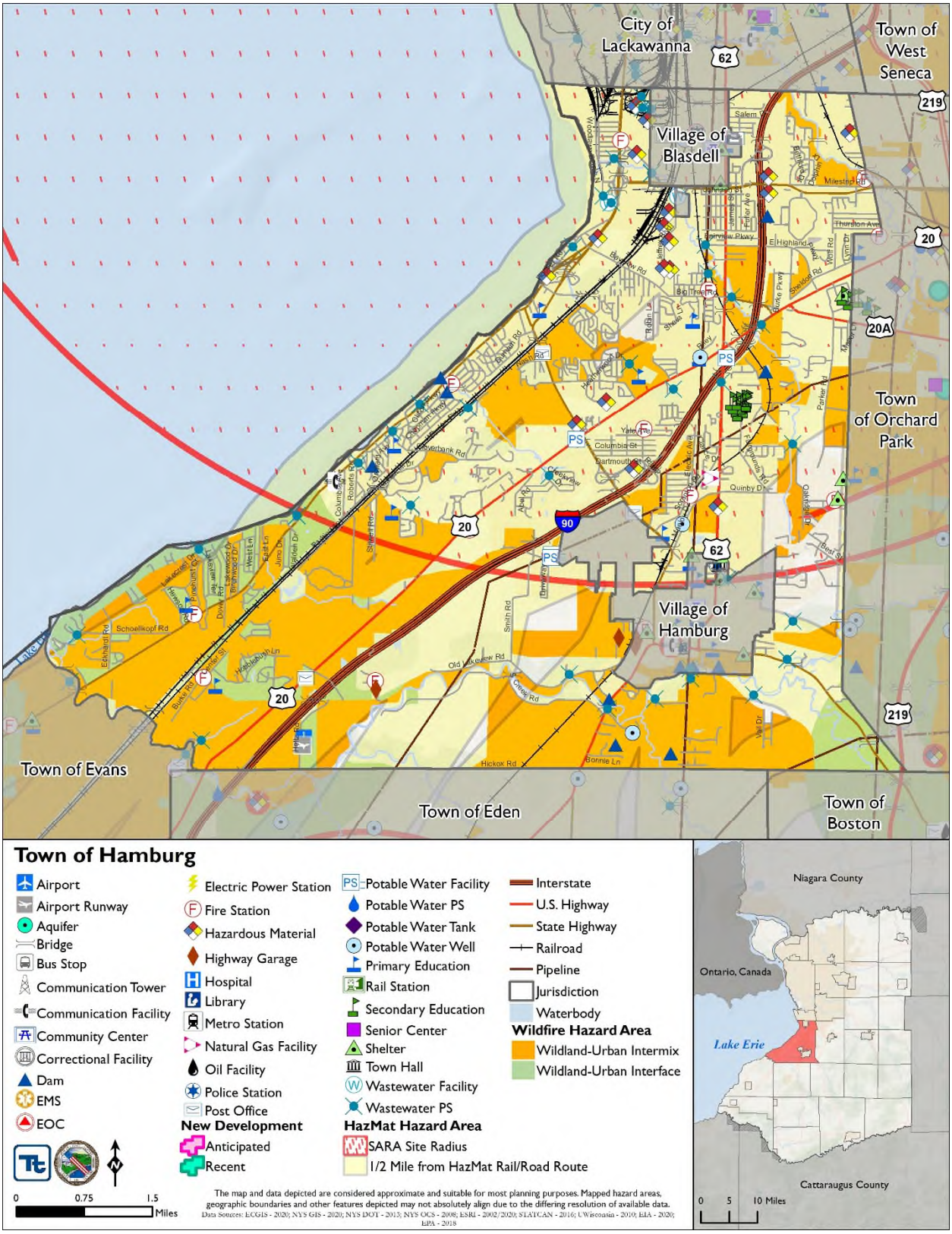
Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.26-2. Town of Hamburg Hazard Area Extent and Location Map 2



Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.26-3. Town of Hamburg Hazard Area Extent and Location Map 3



Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Hamburg's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.26-14 provides details regarding municipal-specific loss and damages the Town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.26-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 9, 2015	Lake Effect Snow	No	Lake effect snow moved across Lake Erie, creating blizzard-like conditions with zero visibility and wind gusts of 45 mph. A portion of the New York State Thruway was closed Friday morning, with rates of snow falling up to four inches per hour.	Estimated snowfall totals reached 19 inches in Hamburg.
January 1, 2016	Lake Effect Snow	No	Bands of lake effect snow developed over the course of New Year's Eve, with peak snowfall on New Year's Day reaching snowfall peaks of two inches per hour, and reports of thunder within the band.	Estimated snowfall totals reached 10 inches in Hamburg.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 9 inches of snow was reported in Hamburg.
February 12, 2016	Lake-Effect Snow	No	Lake effect snow bands formed across Lake Erie in the morning, and later off Lake Ontario bringing two inches of snow per hour. The snowfall was during the early morning commute and caused several accidents and slowed traffic.	An estimated 8 inches of snow was reported in Hamburg.
February 15, 2016	Winter Storm	No	A low pressure system moved across Pennsylvania into New York, bringing minor snow accumulations and half an inch of ice. Heaviest snowfalls were in Rochester (22 inches).	An estimated 10 inches of snow was reported in Hamburg.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or mere and school busses were unable to bring	Total snowfall report in Hamburg amounted to 23 inches.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	
March 8, 2017	High Wind	No	A deep low pressure system brought strong winds to the entire region with sustained winds up to 49 mph and gusts reaching 81 mph. Hundreds of thousands of people were without power in Monroe County, NY alone. Strong winds derailed 12 train cars in Batavia (Genesee County). Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the high winds.	Measured wind gusts reached 75 mph in Hamburg.
June 27, 2017	Hail	No	Thunderstorms in Orchard Park and West Seneca produced three-quarter inch hail.	Three-quarter inch (0.75) hail was reported in Hamburg.
July 20, 2017	Thunderstorm Wind/Tornado	No	A cluster of thunderstorms resulted in four tornadoes across Western NY.	A tornado began in Hamburg before moving across Orchard Park. Hundreds of car windows were blown out at the Hamburg Fairgrounds, where several buildings were damaged, including the Grandstand. Numerous trees were downed across the fairgrounds. An NWS storm survey confirmed an EF2 tornado touched down in Hamburg.
August 4, 2017	Thunderstorm Wind	No	Thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, winds partially tore the roof off a building. One inch hail was also reported.	Law enforcement reported trees down by thunderstorm winds in the Village of Hamburg.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 12 inches of snow were reported in Hamburg.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightening throughout the duration of the event.	An estimated 16 inches of snow were reported in Hamburg
December 29, 2017	Lake-Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 9inches of snow were reported in Hamburg.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Fifteen (15) inches of snow were reported in Hamburg.
October 27-November 1, 2019	Lakeshore Flooding and High Winds	DR-4472-NY	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	Hoover Beach in Hamburg became inundated from lakeshore flooding. Homes were flooded on Grand Island and along Route 5 near Hamburg. Water levels

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				reached 10.67 feet above low water. Rainfall totals reached 2.3 inches in Hamburg.
November 27, 2019	High Wind	No	A strong low pressure front followed by a cold front produced favorable conditions for high winds and storms across western NY. Water Levels in Lake Erie peaked at 9.56 feet above low water and remained above flood stage for four hours.	Peak wind speeds reached 66 mph in Hamburg.
January 12, 2020	High Wind	No	Wind gusts along the Lake Erie shore exceeded 65 mph, resulting in widespread damage in all lakeshore counties.	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg. Due to the seiche, water levels peaked in Buffalo at 9.85 feet above low water.
January 18, 2020	Lakeshore Flood	No	Heavy snowfalls and precipitation followed by a cold front resulted in a seiche on Lake Erie that caused lakeshore flooding throughout the county. Peak water levels on Lake Erie reached 8.18 feet above low water.	The seiche on Lake Erie resulted in flooding and the closure of Route 5 in Hamburg.
February 26, 2020	Lake-Effect Snow	No	A low-pressure system brought lake-effect snow across Lakes Erie and Ontario. Widespread snow accumulations of 1-2 feet of snow occurred east of Lake Erie, accompanied by strong wind gusts and lakeshore flooding. The biggest seiche of the month occurred during the event, brining the water level in Lake Erie to 7.5 feet above low water.	Sustained wind speeds reached 56 mph in Hamburg. Minor flooding along Route 5 was reported.
August 25, 2020	Thunderstorm Wind	No	A cold front generated scattered thunderstorms throughout the evening, increasing in intensity as they crossed Lake Ontario moving south into Buffalo.	Several trees were down onto Smith Road in Hamburg.

Notes:

EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Hamburg's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Hamburg. The Town of Hamburg has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Town of Hamburg indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.26-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	High	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.26-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
George Ricaby Co Dam #1	Dam	A	V	2022-T. Hamburg-004
Rogers Road PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003
Wanakah PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003
Woodlawn Beach PS	Wastewater Pump Station	A	-	2022-T. Hamburg-003

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Source: Effective DFIRM

Identified Issues

After review of the Town of Hamburg's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Hamburg has identified the following vulnerabilities within their community:

- A community of approximately 100 homes on Lake Erie at Hoover Beach are at extreme risk of flooding and freezing due high wave action and ice buildup.
- The town does not have any designated Emergency Shelter Locations.
- The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively.
- The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain).
- The George Ricaby Co Dam #1 is located within the 0.2% SFHA (500-year floodplain).
- High water from creek floods over golf course causing substantial damage to grounds causing financial impact on town.
- The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.
- Thurston Avenue experiences ongoing drainage problems causing road closures and damages during storm events.
- A blocked pipe at Twin Willows causes flooding and drainage issues during storm events.
- Flood-prone areas include:
    - 18 Mile Golf Course
    - Wanakah Heights
    - Thurston/Richmond Area
    - Eckhardt Rd at Boston State

9.26.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.26-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	18 Mile Creek Golf Course Flood Mitigation Project	Flooding	Town Engineering	High water from creek floods over golf course causing substantial damage to grounds causing financial impact on Town	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as 2022-T. Hamburg-005 2. 3.
-	Smith Road Box Culvert Replacement	Flooding	Town Engineering	Flooding 30 residential properties and roadway upstream of inadequate sized culvert	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Complete
-	Town-wide drainage study to assess infrastructure: To adequately measure the ability to handle storm water and drainage	Flooding	Town Engineering	Aging infrastructure	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Include in 2022 HMP as 2022-T. Hamburg-006 2. 3.
-	Installation of reinforced break wall along Hoover Beach neighborhood along Lake Erie	Coastal Flooding	Town Engineering	Not Identified	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Property was sold, discontinue.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to update and revise floodplain management practices as new regulations from FEMA are put in place.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Code Enforcement and Engineering	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to update and revise floodplain management ordinances as new FIRMs are released.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Join the Community Rating System (CRS)	Flooding	Town Engineering	Not Identified	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This is an ongoing capability of the Town to complete the necessary requirements to join the CRS system through the NFIP.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Hamburg has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Hamburg participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.26-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X									X
Cyber Attack	X									X
Earthquake	X									X
Expansive Soils	X									X
Extreme Temperature	X									X
Flood	X	X		X	X		X		X	X
Hazardous Materials	X									X
Landslide	X									X
Pandemic	X									X
Severe Storm	X	X							X	X
Severe Winter Storm	X	X							X	X
Utility Failure	X									X
Wildfire	X									X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.26-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Hamburg would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.26-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. Hamburg-001	Emergency Shelters	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Emergency Shelter Locations. **Solution**: The town will work with the county to identify and designate an Emergency Shelter that meets state and ADA compliance requirements.	No	No	Short	Town of Hamburg	Low	High, establishes shelter location	Municipal Budget	High	LRP	ES
2022-T. Hamburg-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem**: The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the County to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	No	No	Short	Town of Hamburg	Low	High, identifies alternative housing locations for damaged properties	Municipal Budget	High	LRP	ES
2022-T. Hamburg-003	Wastewater Pump Stations Flood Protections	1, 2	Flood	**Problem**: The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain). **Solution**: The town will conduct a feasibility assessment to determine	Yes	No	Short	Town of Hamburg DPW	Medium-High	High, reduces flooding at critical facilities	FMA, CDBG	High	SIP	SP

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.										
2022-T. Hamburg-004	George Ricaby Co Dam #1 Flood Protections	1, 2, 3	Flood	**Problem**: The George Ricaby Co Dam #1 is located within the 0.2% SFHA (500-year floodplain). **Solution**: The privately owned George Ricaby Co Dam #1 is classified as a Class D dam, posing no hazard to the town. The town will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The town will aid in any flood mitigation measures as determined by the owner as necessary.	Yes	No	6 months	Town of Hamburg	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-T. Hamburg-005	18 Mile Creek Golf Course Flood Mitigation	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: High water from creek floods over golf course causing substantial damage to grounds causing financial impact on town. **Solution**: The town will work with the owners of the 18 Mile Creek Golf course to conduct a flood vulnerability analysis to determine sources and causes of flooding. Based on the findings of the analysis, the town and owners will implement projects to reduce flooding on the	No	No	Short	Town of Hamburg DPW, 18 Mile Golf Course	Medium-High	High, reduces flooding and financial burden	FMA, CDBG	High	SIP	SP

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Course and to the town roads and nearby properties. Options include: sump pumps or drainage systems to redirect runoff, flood proofing barriers and adding vegetation to reduce runoff and damages.										
2022-T. Hamburg-006	Town and Village Drainage Study	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	**Problem**: The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events. **Solution**: The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.	No	No	3 years	Town of Hamburg, Village of Hamburg Engineering and DPW	Low to conduct study, High to implement	High, reduces roadway flooding and storm impacts	FMA, BRIC, HMGP	High	LPR, SIP	PR, SP
2022-T. Hamburg-007	Thurston Ave Drainage	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	**Problem:** Thurston Avenue experiences ongoing drainage problems causing road closures and damages during storm events. **Solution:** The Town of Hamburg Engineering Department will conduct a feasibility analysis of the roadway to assess the cause of the flooding issues and provide recommendations to improve drainage. The town will then implement the findings of the study, including upsizing and replacing culverts, installing sump pumps and drainage outlets, and other	No	No	Short	Town of Hamburg Engineering	High	High, reduces flooding and road closures	FMA, HMGP, Municipal Budget	High	SIP	SP

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.26-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				non-structural flood control methods as necessary.										
2022-T. Hamburg-008	Twin Willow Drainage	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	**Problem:** A blocked pipe at Twin Willows causes flooding and drainage issues during storm events. **Solution:** The Town of Hamburg Engineering Department will conduct a feasibility analysis of the roadway to assess the cause of the flooding issues and provide recommendations to improve drainage. The town will then implement the findings of the study, including upsizing and replacing culverts, installing sump pumps and drainage outlets, and other non-structural flood control methods as necessary.	No	No	Short	Town of Hamburg Engineering	High	High, reduces flooding and road closures	FMA, HMGP, Municipal Budget	High	SIP	SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.26-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. Hamburg-001	Emergency Shelters	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-002	Temporary and Permanent Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-003	Wastewater Pump Stations Flood Protections	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-T. Hamburg-004	George Ricaby Co Dam #1 Flood Protections	1	1	1	1	1	0	-1	1	1	1	0	1	1	1	10	High
2022-T. Hamburg-005	18 Mile Creek Golf Course Flood Mitigation	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-T. Hamburg-006	Town and Village Drainage Study	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-007	Thurston Ave Drainage	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-T. Hamburg-008	Twin Willow Drainage	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.26.9 Action Worksheets

The following action worksheets have been developed by the Town of Hamburg to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Wastewater Pump Stations Flood Protections		
Project Number:	2022-T. Hamburg-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Rogers Road, Wanakah, and Woodlawn Beach Wastewater Pump Stations are located within the 1% SFHA (100-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at each of the Wastewater Pump Stations to protect them to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	High, reduces flooding at critical facilities
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	Medium-High	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	1-2 years	**Potential Funding Sources:**	FMA, CDBG
Responsible Organization:	Town of Hamburg DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate pump stations	$500,000	Not cost effective
	Decommission pump stations	N/A	Not feasible, remaining stations cannot handle capacity needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Wastewater Pump Stations Flood Protections	
Project Number:	2022-T. Hamburg-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at critical facilities
Cost-Effectiveness	1	
Technical	1	DPW/Engineering
Political	1	Town supports project
Legal	1	
Fiscal	-1	Town will seek funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Town and Village Drainage Study		
Project Number:	2022-T. Hamburg-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces roadway flooding and storm impacts
Useful Life:	30 years	**Goals Met:**	1, 2, 3
Estimated Cost:	Low to conduct study, High to implement	**Mitigation Action Type:**	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FMA, BRIC, HMGP
Responsible Organization:	Town of Hamburg, Village of Hamburg Engineering and DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning, Shared Services Agreements with Town/Village

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	N/A	May not solve issues, not cost effective
	Build bridges at intersections	N/A	Need to determine cause and source of flooding

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Town and Village Drainage Study	
Project Number:	2022-T. Hamburg-006	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flooding
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village support project
Legal	1	
Fiscal	-1	Will need to seek funding to implement
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Shares services agreement with town/village
Total	12	
Priority (High/Med/Low)	High	

Attachment: 65-Section-9.26-Hamburg-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.27 VILLAGE OF HAMBURG

This section presents the jurisdictional annex for the Village of Hamburg. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Hamburg's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.27.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Hamburg's hazard mitigation plan primary and alternate points of contact. The Village of Hamburg followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Emergency Management and Code Enforcement. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.27-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ric Dimpfl Jr., Emergency Manager Address: 100 Main Street, Hamburg, NY 14075 Phone Number: 716-491-8684 Email: ricdimpfl@roadrunner.com	Name/Title: Sean Crotty, Emergency Manager Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2811 Email: scrotty@thpdny.org
NFIP Floodplain Administrator	
Name/Title: Roger Gibson, Supervising Code Enforcement Officer Address: 6100 South Park Avenue, Hamburg, New York 14075 Phone Number: 716-649-6111 ext. 2210 Email: rgibson@townofhamburgny.com	
Additional Contributors	
Name/Title: Jason Cozza, Village Administrator Method of Participation: Provided data and information	
Name/Title: Dean Messing, Assistant Emergency Manager Method of Participation: Provided data and information	

9.27.2 Municipal Profile

The Village of Hamburg is 2.5 square miles in size and lies in the southeast part of the Town of Hamburg, south of Buffalo. Eighteen Mile Creek flows in the south part of the village towards Lake Erie. The village is located entirely within the Town of Hamburg. US Route 62 passes through the village.

The village was first settled by whites in 1806 and was then a rural farming community for generations. The town was first known as White's Corners. Early settlers located in what is now the village center. As Hamburg's population increased, new businesses and residences were built. The village incorporated in 1874 at which time the population of the approximately 700. By 1900, the village's population had grown to approximately 2,000. After World War II, the village developed suburban-scaled neighborhoods and commercial nodes (Village of Hamburg Comprehensive Plan, 2012).

According to the U.S. Census, the 2010 population for the Village of Hamburg was 9,409. The estimated 2019 population was 9,636, a 2.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.8 percent of the population is 5 years of age or younger and 19.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.27.3 Jurisdictional Capability Assessment and Integration

The Village of Hamburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.27.3). The Village of Hamburg's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Hamburg. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.27-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 123	Local	Code Enforcement
Comment: It is the purpose of this chapter to provide for the administration and enforcement of the Uniform Fire Prevention and Building Code established by Article 18 of the Executive Law as added by Chapter 707 of the Laws of 1981 of the State of New York, as the same may be applicable to the Village of Hamburg, New York.					
Zoning Code	Yes	Yes	Village Code Chapter 250	Local	Code Enforcement

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The purposes of this chapter, regulations and zoning districts, as outlined on the Zoning Map, are to provide for orderly growth in accordance with a comprehensive plan, to lessen congestion in the streets, to secure safety from fire, flood and other dangers, to provide adequate light and air, to prevent overcrowding of land, to avoid undue concentration of population, to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements, and to promote the health, safety and general welfare of the public.					
Subdivision Ordinance	Yes	Yes	Village Code Chapter 207	Local	Code Enforcement
Comment: By authority of the resolution adopted by the Village Board of Trustees on the 24th day of July, 1967, pursuant to the provision of Article VIA of the Village Law, the Planning Commission of the Village of Hamburg is empowered and authorized to approve plans for land subdivision within the Village of Hamburg. These regulations are adopted for the purpose of providing for the future growth and development of the village and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health and welfare of its population.					
Stormwater Management Ordinance	Yes	Yes	Village Code Chapter 200	Local	Code Enforcement
Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 200-1A. This chapter seeks to meet those purposes by achieving the following objectives: • Meet the requirements of minimum measures 4 and 5 of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, as amended or revised; • Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01, as amended or revised; • Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; • Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Village Code Chapter 250-19	Local	Code Enforcement
Comment: In addition to all other powers provided by law the Planning Commission is empowered to approve, disapprove or approve with modifications special permits required by this chapter. The procedures hereinafter set forth for site plan review shall also apply to special permits and in addition if the application indicates that a special permit will be required, the Building Inspector shall, not less than five days prior to the meeting of the Planning Commission at which the application is to be considered, mail a notice which briefly but clearly describes the intent of the proposed special permit to all property owners abutting and within 100 feet of the property which is the subject of the proposed special permit. If the application is approved or approved with modifications, the Building Inspector shall issue the permit, provided that the Building Inspector has determined that all code requirements have been met and approved modifications, if any, have been met.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Flood Damage Prevention Ordinance	Yes	Yes	Village Code 146	Local	Code Enforcement
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas, by provisions designed to: • Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities; • Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; • Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; • Control filling, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and • Qualify for and maintain participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	2012 Comprehensive Plan	Local	Village of Hamburg
Comment: The Primary Objectives of the Comprehensive Plan Update were: a.) Review the existing comprehensive plan to determine which recommendations have already been accomplished and what items still remain and determine whether remaining actions still make sense in light of the Village's vision and primary goals. b.) Revise existing policy/strategy sections and provide additional to address needs and issues. Primary Focus Areas: This update concentrated on several key areas within the Village: a.) Main Street - Professional Office b.) Lake Street Corridor c.) Buffalo Street d.) Pine Street e.) West End (industrial area). The plan addresses future land use issues, such as the boundaries and uses in the Commercial District, the Lake Street Corridor, protecting the character of Main Street between Lake and Center and addressing the Village's west end – near the train tracks.					
Capital Improvement Plan	Yes	No	Done annually with Village budget	Local	Village of Hamburg
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	Yes	No	Not Indicated	Local	Village of Hamburg
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other	Yes	No	• Shared Maintenance Facilities Plan • Underutilized Sites Study	Local	Village of Hamburg
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Hamburg to oversee and track development.

Table 9.27-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town of Hamburg issues on behalf of Village of Hamburg
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Underutilized Sites Study Completed January 2018

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Hamburg and their current responsibilities which contribute to hazard mitigation.

Table 9.27-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planning Board	Yes	Reviews site plans, including new construction
Zoning Board of Adjustments	Yes	Hears requests for variances to village code
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Village has Advisory Commission
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Village has Volunteer Committee
Public Works/Highway Department	Yes	DPW Superintendent
Construction/Building/Code Enforcement Department	Yes	Town of Hamburg
Emergency Management/Public Safety Department	Yes	OEM Coordinator
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Website may be used for these purposes, currently no mass notification system.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW mitigates natural disasters regarding wind events, snow events, and rain events, among others.
Mutual aid agreements	Yes	Town of Hamburg
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer or Building Code Officer
Planners or engineers with an understanding of natural hazards	Yes	Engineer or Building Code Officer
Staff with expertise or training in benefit/cost analysis	Yes	Clerk/Treasurer
Professionals trained in conducting damage assessments	Yes	Chief Building Official
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	OEM Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other	No	-

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Fiscal Capability

The table below summarizes financial resources available to the Village of Hamburg.

Table 9.27-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Other State Grants as eligible for mitigation

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Hamburg.

Table 9.27-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Village Administrator/Clerk-Treasurer
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Police and Recreation Social Media Accounts
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Environmental Commission, Planning Commission, ZBA
Other programs already in place that could be used to communicate hazard-related information	Yes	Annual Newsletter to Community
Warning systems for hazard events	No	-
Natural disaster/safety programs in place for schools	Yes	School Safety Plans
Other	No	-

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Community Classifications

The table below summarizes classifications for community programs available to the Village of Hamburg.

Table 9.27-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.27-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.27.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Floodplain Administrator (FPA)

Mr. Roger Gibson, Supervising Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Hamburg.

Table 9.27-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Hamburg	5	26	$214,636	7	1

Source: FEMA, 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

There are no areas prone to flooding or floodplains within the village. Therefore, the village does not maintain a list of property owners that are interested in flood mitigation projects, nor are there any RiskMAP projects currently underway. The flood hazard maps for the village adequately address the flood risk. There have been zero homes that have previously been mitigated against flood damages. The Code Enforcement Officer makes Substantial Damage determinations based on if the repair cost of a home is 50 percent or more of the market value, excluding land.

NFIP Compliance

The Town of Hamburg Code Enforcement Officer is responsible for floodplain management within the Village of Hamburg. There are no certified floodplain managers within the own or Village of Hamburg. NFIP Administration services available to the village include plan review, engineering review, and inspections.

The village determines if proposed developments to existing structures qualify as a "substantial improvement" if the construction estimates exceed 50 percent of the market value of the structure, excluding land.

Local Law 146-2 of the Village of Hamburg Code refers to the Village Flood Damage Prevention Ordinance, which meets or exceeds minimum requirements. Village site plan review supports floodplain management and discourages development within flood-prone areas.

There are no outstanding NFIP compliance issues within the village.

9.27.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Hamburg has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 62, Route 20, and Route 5 can be used for evacuations going North or South from the village.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Lakeview Road can be used for evacuations East or West from the village.
- Interstate 90 could be used to evacuate residents in either direction, as well as Route 391-S.
- The best evacuation route is event-dependent, and the village can contact residents through the media, or a reverse-911 call to provide current information.

Sheltering

The Village of Hamburg has identified the following designated emergency shelters within the village.

Table 9.27-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Hamburg High School	Legion Drive	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms
Hamburg Middle School	Division Street	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms
Charlotte Avenue School	Charlotte Avenue	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms
Union Pleasant Grade School	Pleasant Avenue	Unknown	No	Yes	Yes	Fire department	Kitchen facilities, showers bathrooms

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Hamburg has identified the following sites suitable for placing temporary housing units.

Table 9.27-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The village indicated that they could use all the schools within the village for temporary housing, as well as hotels as they all have the necessary utilities. The schools would be the first choice.					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Hamburg has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.27-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Hampton Inn	Camp Road	Dependent on rooms available	Hotel	Yes	None
Quality Inn	Camp Road	Dependent on rooms available	Hotel	Yes	None
Super 8	Camp Road	Dependent on rooms available	Hotel	Yes	None

9.27.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.27-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.27-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	2	-	2	-	5	-	15	-	38	-	4	-
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	23	-	18	-	25	-	17	-	24	-	16	-
Total Permits Issued	**25**	-	**20**	-	**30**	-	**32**	-	**62**	-	**20**	-

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Country Meadows	Residential	278 units	South Lake Street	None	Complete
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None indicated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.27.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Hamburg's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

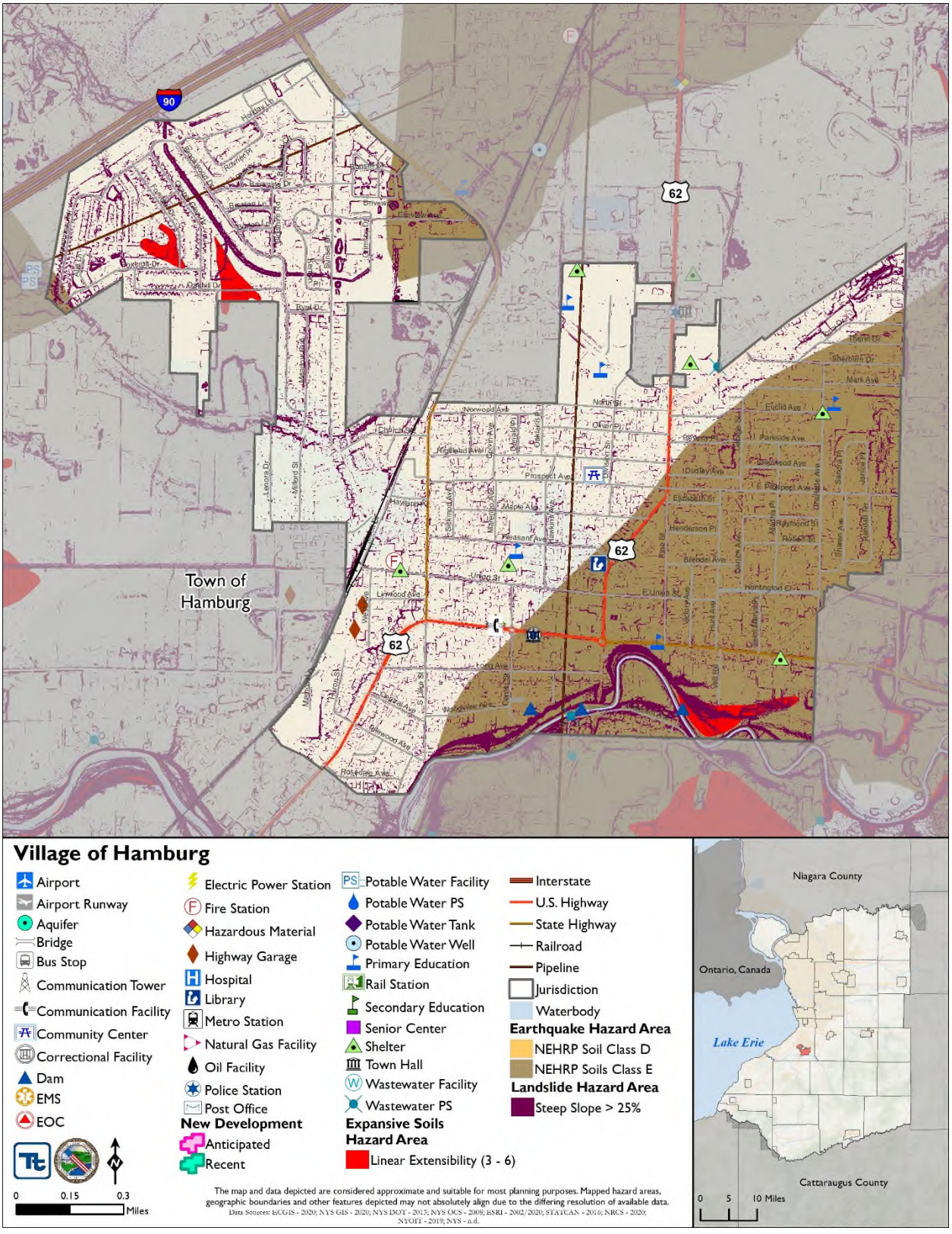
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Hamburg has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.27-1. Village of Hamburg Hazard Area Extent and Location Map 1

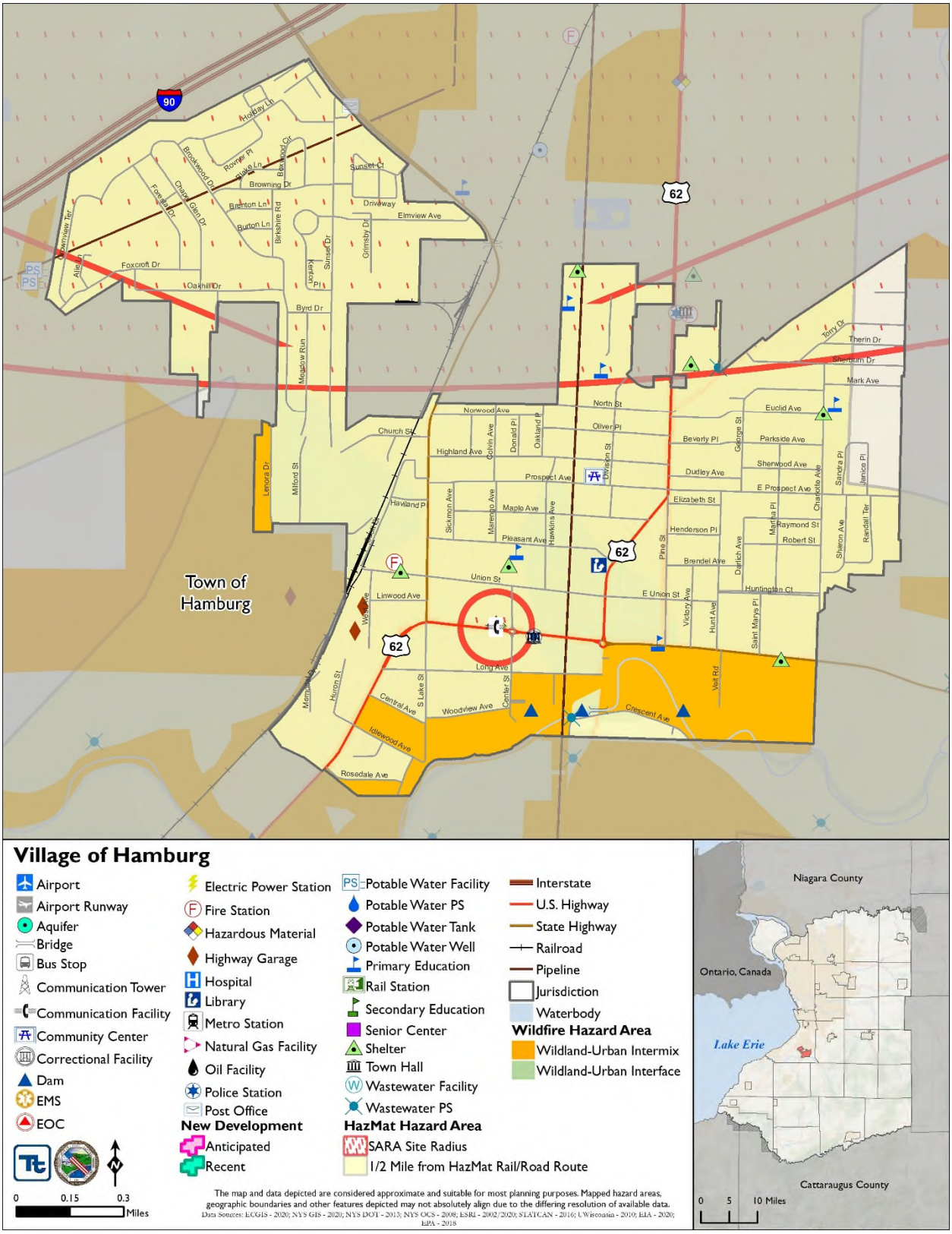
Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.27-2. Village of Hamburg Hazard Area Extent and Location Map 2



Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.27-3. Village of Hamburg Hazard Area Extent and Location Map 3



Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Hamburg's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.27-14 provides details regarding municipal-specific loss and damages the Village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.27-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 9, 2015	Lake Effect Snow	No	Lake effect snow moved across Lake Erie, creating blizzard-like conditions with zero visibility and wind gusts of 45 mph. A portion of the New York State Thruway was closed Friday morning, with rates of snow falling up to four inches per hour.	Estimated snowfall totals reached 19 inches in Hamburg.
January 1, 2016	Lake Effect Snow	No	Bands of lake effect snow developed over the course of New Year's Eve, with peak snowfall on New Year's Day reaching snowfall peaks of two inches per hour, and reports of thunder within the band.	Estimated snowfall totals reached 10 inches in Hamburg.
January 10, 2016	Lake-Effect Snow	No	A strong cold front resulted in significant lake effect snow across Lake Erie, accumulating up to 3 inches per hour.	An estimated 9 inches of snow was reported in Hamburg.
February 12, 2016	Lake-Effect Snow	No	Lake effect snow bands formed across Lake Erie in the morning, and later off Lake Ontario bringing two inches of snow per hour. The snowfall was during the early morning commute and caused several accidents and slowed traffic.	An estimated 8 inches of snow was reported in Hamburg.
February 15, 2016	Winter Storm	No	A low pressure system moved across Pennsylvania into New York, bringing minor snow accumulations and half an inch of ice. Heaviest snowfalls were in Rochester (22 inches).	An estimated 10 inches of snow was reported in Hamburg.
January 4-7, 2017	Lake-Effect Snow	No	A long duration, high impact lake effect snow event produced three to four feet of snow east of Lake Erie and Lake Ontario. Snowfall rates reached up to 5 inches per hour, which combined with people leaving work and school in the afternoon, brought traffic to a standstill. Snow accumulated so quickly that the plows were unable to keep up and people abandoned their cars on the Thruway and local roads, evening commutes reached 6 hours or mere and school busses were unable to bring	Total snowfall report in Hamburg amounted to 23 inches.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			students home. Snow continued into Saturday morning, creating hazardous road conditions along I-90 near Angola.	
March 8, 2017	High Wind	No	A deep low pressure system brought strong winds to the entire region with sustained winds up to 49 mph and gusts reaching 81 mph. Hundreds of thousands of people were without power in Monroe County, NY alone. Strong winds derailed 12 train cars in Batavia (Genesee County). Numerous flights into the Buffalo and Rochester Airports had to be diverted due to the high winds.	Measured wind gusts reached 75 mph in Hamburg.
June 27, 2017	Hail	No	Thunderstorms in Orchard Park and West Seneca produced three-quarter inch hail.	Three-quarter inch (0.75) hail was reported in Hamburg.
July 20, 2017	Thunderstorm Wind/Tornado	No	A cluster of thunderstorms resulted in four tornadoes across Western NY.	A tornado began in Hamburg before moving across Orchard Park. Hundreds of car windows were blown out at the Hamburg Fairgrounds, where several buildings were damaged, including the Grandstand. Numerous trees were downed across the fairgrounds. An NWS storm survey confirmed an EF2 tornado touched down in Hamburg.
August 4, 2017	Thunderstorm Wind	No	Thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, winds partially tore the roof off a building. One inch hail was also reported.	Law enforcement reported trees down by thunderstorm winds in the Village of Hamburg.
December 6, 2017	Lake-Effect Snow	No	A cold front brought lake-effect snow across Lake Erie and Lake Ontario, resulting in heavy snow accumulation across Erie County.	An estimated 12 inches of snow were reported in Hamburg.
December 10, 2017	Lake-Effect Snow	No	Heavy snow fell throughout Erie County, accompanied by reports of thunder and lightening throughout the duration of the event.	An estimated 16 inches of snow were reported in Hamburg
December 29, 2017	Lake-Effect Snow	No	Bands of lake-effect snow developed throughout the afternoon, with snowfall rates reaching three inches per hour.	An estimated 9inches of snow were reported in Hamburg.
March 1, 2018	Winter Storm	No	A winter storm brought heavy snow across the entire region. There were several reports of downed trees and wires due to the weight of the snow and high winds.	Fifteen (15) inches of snow were reported in Hamburg.
October 27-November 1, 2019	Lakeshore Flooding and High Winds, DR-4472-NY	Yes	An intense storm system brining record breaking rains, damaging wind gusts, a large Lake Erie seiche and river flooding to the area. Over $5.5 million in damages to homes and property in Erie County alone was reported.	Hoover Beach in Hamburg became inundated from lakeshore flooding. Homes were flooded on Grand Island and along Route 5 near Hamburg. Water levels

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				reached 10.67 feet above low water. Rainfall totals reached 2.3 inches in Hamburg.
November 27, 2019	High Wind	No	A strong low pressure front followed by a cold front produced favorable conditions for high winds and storms across western NY. Water Levels in Lake Erie peaked at 9.56 feet above low water and remained above flood stage for four hours.	Peak wind speeds reached 66 mph in Hamburg.
January 12, 2020	High Wind	No	Wind gusts along the Lake Erie shore exceeded 65 mph, resulting in widespread damage in all lakeshore counties.	High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg. Due to the seiche, water levels peaked in Buffalo at 9.85 feet above low water.
January 18, 2020	Lakeshore Flood	No	Heavy snowfalls and precipitation followed by a cold front resulted in a seiche on Lake Erie that caused lakeshore flooding throughout the county. Peak water levels on Lake Erie reached 8.18 feet above low water.	The seiche on Lake Erie resulted in flooding and the closure of Route 5 in Hamburg.
February 26, 2020	Lake-Effect Snow	No	A low-pressure system brought lake-effect snow across Lakes Erie and Ontario. Widespread snow accumulations of 1-2 feet of snow occurred east of Lake Erie, accompanied by strong wind gusts and lakeshore flooding. The biggest seiche of the month occurred during the event, brining the water level in Lake Erie to 7.5 feet above low water.	Sustained wind speeds reached 56 mph in Hamburg. Minor flooding along Route 5 was reported.
August 25, 2020	Thunderstorm Wind	No	A cold front generated scattered thunderstorms throughout the evening, increasing in intensity as they crossed Lake Ontario moving south into Buffalo.	Several trees were down onto Smith Road in Hamburg.

Notes:

EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Hamburg's risk assessment results and data used to determine the hazard ranking.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Hamburg. The Village of Hamburg has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.27-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.27-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Schoepflin Mill Dam	Dam	X	X	2022-V. Hamburg-001

Source: Effective DFIRM

Identified Issues

After review of the Village of Hamburg's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Hamburg has identified the following vulnerabilities within their community:

- During extended power outages, most residential homes do not have power backups. The longest period of power loss lasted four to five days, and most residents chose to shelter-in-place.

9.27.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.27-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	-	Drainage, Flooding	Engineering	Town Drainage Study incorporating Hamburg Village	No Progress	Cost	-	1. Include in 2022 HMP 2. See 2022-V. Hamburg-004 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	-	Flooding	Town Code Review and Enforcement	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Complete	Cost	-	1. Discontinue 2. 3. Complete. Updated April 2019
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	-	Flooding	Town Code Review and Enforcement	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Complete	Cost	-	1. Discontinue 2. 3. Complete. Updated April 2019
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
-	-	Flooding	Town Engineering	Join the Community Rating System (CRS)	No Progress	Cost	-	1. Discontinue 2. 3. No longer priority
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Hamburg has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Indicated

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Hamburg participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.27-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils										
Extreme Temperature										
Flood	X	X		X	X		X		X	
Hazardous Materials										
Landslide										
Pandemic										
Severe Storm	X	X			X				X	
Severe Winter Storm	X	X			X				X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.27-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Hamburg would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.27-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. Hamburg-001	Schoepflin Mill Dam Flood Mitigation	1, 2, 3	Flood	**Problem**: The Schoepflin Mill Dam is located within the 1% SFHA (100-year floodplain). **Solution**: The privately owned Schoepflin Mill Dam is classified as a Class D dam, posing no hazard to the village. The village will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The village will aid in any flood mitigation measures as determined by the owner as necessary.	Yes	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces flooding at critical facilities	Municipal Budget	High	EAP	PI
2022-V. Hamburg-002	Repetitive Loss Homeowner Outreach	1, 2, 3	Flood	**Problem**: There are 7 repetitive loss properties within the Village, and 1 NFIP policy holder living within the 1% SHFA (100-year floodplain). **Solution**: The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.	No	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces flooding at private homes	Municipal Budget	High	EAP	PI
2022-V. Hamburg-003	Earthquake Outreach at Critical Facilities	1, 2, 3	Earthquake	**Problem**: Several critical facilities in the village are in the earthquake hazard area (NEHRP Soil Class E). Including: • Hamburg Public Library • Hamburg Town Police Department at 100 Main Street • SS Peter & Paul School	Yes	No	6 months	Village of Hamburg	Low to conduct outreach	High, reduces impacts from earthquakes	Municipal Budget	High	EAP	PI

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				• Charlotte Avenue Elementary School • Village of Hamburg Hall • Schoepflin Mill Dam • Hamburg North Branch Dam • Woodview Park Dam • Charlotte Avenue Elementary School • Trinity Episcopal Church (Shelter) • Crescent Avenue PS (Wastewater Pump Station) **Solution**: The village will conduct outreach to the above owners about the soil type and provide information about the potential of increased earthquake/ground shaking risk. The village will support property protections for increased earthquake resistance, or strengthening the building code and construction requirements in the area.										
2022-V. Hamburg-004	Town and Village Drainage Study	1, 2, 3	Flood, Severe Storm, Severe Winter Storm	**Problem**: The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events. **Solution**: The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump	No	No	3 years	Town of Hamburg, Village of Hamburg Engineering and DPW	Low to conduct study, High to implement	High, reduces roadway flooding and storm impacts	FMA, BRIC, HMGP	High	LPR, SIP	PR, SP

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.27-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				pumps, or upsizing culverts as necessary.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*

- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.27-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Hamburg-001	Schoepflin Mill Dam Flood Mitigation	1	1	1	1	0	0	1	1	1	1	0	1	1	0	10	High
2022-V. Hamburg-002	Repetitive Loss Homeowner Outreach	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-V. Hamburg-003	Earthquake Outreach at Critical Facilities	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-V. Hamburg-004	Town and Village Drainage Study	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.27.9 Action Worksheets

The following action worksheets have been developed by the Village of Hamburg to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Schoepflin Mill Dam Flood Mitigation		
Project Number:	2022-V. Hamburg-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Schoepflin Mill Dam is located within the 1% SFHA (100-year floodplain).		
Action or Project Intended for Implementation			
Description of the Solution:	The privately owned Schoepflin Mill Dam is classified as a Class D dam, posing no hazard to the village. The village will conduct outreach to the dam owner about the condition of the dam and potential risks posed by a flood and support an inspection plan of the dam by an engineer in accordance with NYSDEC Dam Safety guidelines. The village will aid in any flood mitigation measures as determined by the owner as necessary.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	High, reduces flooding at critical facilities
Useful Life:	30 years	**Goals Met:**	1, 2, 3
Estimated Cost:	Low to conduct outreach	**Mitigation Action Type:**	Education and Awareness Programs
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	Municipal Budget, FMA
Responsible Organization:	Village of Hamburg Code Enforcement	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Decommission Dam	$500,000	Privately owned, dam is not in hazardous condition, unnecessary
	Reinforce Dam	$500,000	Privately owned, dam is not in hazardous condition, unnecessary

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Schoepflin Mill Dam Flood Mitigation	
Project Number:	2022-V. Hamburg-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Critical Facility in SFHA
Property Protection	1	Protects downstream properties
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	Village does not own dam
Fiscal	1	
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Town and Village Drainage Study		
Project Number:	2022-V. Hamburg-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Town and Village of Hamburg have aging infrastructure systems and experience increased flooding outside of the SFHA during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town and Village of Hamburg will coordinate a large scale drainage study of the communities to adequately measure the ability to handle storm water and drainage. Upon completion of the assessment, the town and village will seek funding to implement the recommendations of the Engineer, including updating and increasing the capacity of drainage systems, redirecting flow via sump pumps, or upsizing culverts as necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces roadway flooding and storm impacts
Useful Life:	30 years	**Goals Met:**	1, 2, 3
Estimated Cost:	Low to conduct study, High to implement	**Mitigation Action Type:**	Local Plans and Regulations, Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FMA, BRIC, HMGP
Responsible Organization:	Town of Hamburg, Village of Hamburg Engineering and DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning, Shared Services Agreements with Town/Village

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	N/A	May not solve issues, not cost effective
	Build bridges at intersections	N/A	Need to determine cause and source of flooding

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Town and Village Drainage Study	
Project Number:	2022-V. Hamburg-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flooding
Property Protection	1	Reduces flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village support project
Legal	1	
Fiscal	-1	Will need to seek funding to implement
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	Shares services agreement with town/village
Total	12	
Priority (High/Med/Low)	High	

Attachment: 66-Section-9.27-Hamburg-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.28 Town of Holland

This section presents the jurisdictional annex for the Town of Holland. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Holland's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.28.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Holland's hazard mitigation plan primary and alternate points of contact. The Town of Holland followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Town departments, including: council, supervisor, and building inspector The disaster coordinator and town council member represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.28-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michael C. Kasprzyk – Supervisor Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-9443x1 Email:mkasprzyk@townofhollandny.com	Name/Title: Geoff Hack – Councilman / Disaster Coordinator Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-3191 Email:hckgff23@gmail.com
NFIP Floodplain Administrator	
Name/Title: Michael C. Kasprzyk – Supervisor Address: 47 Pearl Street, Holland, NY 14080 Phone Number: 716-537-9443x1 Email:mkasprzyk@townofhollandny.com	

9.28.2 Municipal Profile

The Town of Holland is in southeast Erie County, approximately 25 miles from downtown Buffalo. The town is bordered by the Town of Sardinia to the south, the Town of Colden to the west, the Town of Wales to the north, and the Town of Java (Wyoming County) to the east. The Town of Holland is 36 square miles in size. (Town of Holland 2012)

The Town of Holland is named after the Holland Land Company. The first part of the town to be settled was the northern edge, known as the "Humphrey Valley," along what is now Rt. 16. In 1818, the Town of Holland was officially formed from the original Town of Willick. Although primarily agrarian for many generations, Holland today has few large farms. Some light industry remains active. (Town of Holland 2020)

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

According to the U.S. Census, the 2010 population for the Town of Holland was 3,401. The estimated 2019 population was 3,355, a 1.4 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.3 percent of the population is 5 years of age or younger and 16.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.28.3 Jurisdictional Capability Assessment and Integration

The Town of Holland performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.28.3). The Town of Holland's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Holland. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.28-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 55 (Building Construction)	Local	Town Board
Comment: *The main purpose of building codes are to protect public health, safety and general welfare as they relate to the construction and occupancy of buildings and structures.*					
Zoning Code	Yes	No	Chapter 120 (Zoning); adopted by the Town Board on 4/11/1973	Local	Town Board
Comment: *Guidelines for community safety include the following: 1) Existing natural features, such as trees, brooks, drainage channels and views, shall be retained. Whenever such features interfere with the proposed use of such property, a retention of the maximum amount of such features consistent with the use of the property shall be required. 2) Light industrial uses are not permitted if they may result in hazard of fire or explosion or other physical hazard to any adjacent building or to any plant growth on any land adjacent to the site of the use. 3) Excavations made to a water-producing depth shall be properly sloped to the waterline, with banks sodded or surfaced with soil of an equal quality to adjacent land area topsoil; such topsoil required under this section shall be planted with trees, shrubs, legumes or grasses upon the parts of such areas where revegetation is possible. 4) All pond building permit applications shall be accompanied by a site plan drawn to scale showing the total acreage of the property, property lines, existing features and structures (i.e., dwellings, accessory structures, drives, septic fields, wells, floodplains, wetlands, streams and topographical features) and the proposed pond location.*					

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	Yes	No	Chapter 104 (Subdivision of Land); adopted by the Town Board on 4/11/1973	Local	Town Board
Comment: *The subdivision ordinance incorporates resilience related measures through the following means: 1) Where a subdivision is traversed by a drainageway, channel or stream, a drainageway easement, conforming substantially to the lines of such watercourse, shall be provided. The easement shall be 20 feet wide or such width as will be adequate to preserve natural drainage and provide sufficient width for maintenance. 2) Floodways, as defined by the United States Army Corps of Engineers, and land deemed by the Planning Board to be otherwise uninhabitable shall not be platted for residential occupancy nor for such other uses as may increase danger to health, life or property or aggravate the flood hazard. Floodplain areas subject to periodic minor flooding may be developed, provided that structures are adequately floodproofed as provided in Chapter 69, Flood Damage Prevention.*					
Stormwater Management Ordinance	No	Yes – for county	-	County	-
Comment:					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 77 – development plan review Local Law Number 5 of 1993.	Local	Town Board
Comment: *The application must contain an endorsement by the State and/or County Health Department indicating compliance with the standards of the applicable sanitary code, Public Health Law or the applicable health codes. In the event that the proposed open development area does not require approval of the State and/or County Health Departments, a statement to this effect must be submitted with the application and verified by the State and/or County Health Department.* *All requirements of the State Environmental Quality Review Act shall be complied with by the applicant prior to consideration by the Town Board.*					
Environmental Protection Ordinance	Yes	Yes	Chapter 16 – Environmental Council.	Local	Environmental Advisory Council/ Planning Board
Comment: *The intent of the council and the protection ordinance is for the town to comply with local and state environmental protection ordinances and protect the health and safety of the community.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 69 (Flood Damage Prevention); adopted by Town Board on 8/13/2008	Federal	Town Supervisor
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;*					

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and *F. Qualify for and maintain participation in the National Flood Insurance Program.* *The Town Supervisor is the appointed floodplain administrator for the town. Duties include: permit application review, using flood data, notify proper agencies about watercourse alterations, conduct site inspections, issue certificate of compliance, and retain information. For new construction or substantial improvements for residential and non-residential properties in the SFHA, the town requires the lowest floor be elevated to or above two feet above the BFE.*					
Municipal Separate Storm Sewer System (MS4)	No- NA	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Holland Comprehensive Plan (January 2018)	Town	Planning
Comment: *The goals of the comprehensive plan include the following: 1) Establish riparian regulations to manage disturbance of land and limit removal of natural vegetation within 100 feet of streams. 2) Identify and map key natural assets including forest blocks, wetlands, stream and riparian areas and connecting corridors to prioritize restoration and protection. 3) Encourage responsible timber harvesting and best management practices on County Forests to ensure protection of associated wetlands and streams.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Emergency Operation Plan, 2019	Local	Town OEM
Comment: *The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Holland to oversee and track development.

Table 9.28-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building and Zoning Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Flood Zone
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town is rural and has abundant land, though it is privately owned.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Holland and their current responsibilities which contribute to hazard mitigation.

Table 9.28-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board reviews requests for special use permits and development projects, and makes recommendations to the Town Board.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals hears and deliberates applications for variances to town ordinances. The committee meets on an "as needed" basis. Appeal applications are available from the Building Zoning Officer.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planning Department	Yes	Members of the Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The environmental commission conducts various reviews on local and regional development to mitigate any environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department
Construction/Building/Code Enforcement Department	Yes	Building and Zoning
Emergency Management/Public Safety Department	No	New York State Police substation (unmanned) at Town Hall
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Highway Department
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Supervisor is the appointed FPA for the town
Surveyor(s)	No	-
Emergency Manager	Yes	Town Emergency Management
Grant writer(s)	Yes	Various individuals on a volunteer basis
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Holland.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.28-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Holland.

Table 9.28-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk and Supervisor
Personnel skilled or trained in website development	Yes	Town Clerk and Supervisor
Hazard mitigation information available on your website	Yes	Website
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	None	-
Warning systems for hazard events	Yes	CODE Red and Alert NY
Natural disaster/safety programs in place for schools	None	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Holland.

Table 9.28-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.28-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderated
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Moderated
Severe Winter Storm	Moderated
Utility Failure	Medium
Wildfire	Medium

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement
NOTE: For severe storm and severe winter storm, limited resources could overburden the town's ability to provide services to the community. For Utility failure, a lack of generators at key, town facilities could overload the capacity when needed. Addressed in mitigations actions 1,2, and 3.

9.28.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael C. Kasprzyk – Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Holland.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.28-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Holland	3	2	$2,738	0	2

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town does not have any areas prone to flooding and does not maintain a list of properties interested in flood mitigation. The Town does not have any ongoing RiskMAP projects underway or planned. The Town has not made any substantial damage determinations and has not mitigated any properties within the town. Flooding has not changed significantly in the town and the flood maps adequately address flood risk within the town.

NFIP Compliance

The supervisor is responsible for floodplain management, though the town does not have any certified floodplain managers on staff. The town does not have adequate resources to address climate change and no staff is in need of assistance to support the town flood mitigation program. The current town NFIP program provides EC GIS System and building inspection services to its community. For substantial improvement determination, the building inspector is in charge of determination.

At this time, there are no barriers to running an effective NFIP program and the current program does not have any violations. The town received a CAC visit on May 5, 2020.

Town supervisor is in charge of floodplain prevention ordinance and the program meets the basic requirements. Given the town's characteristics, the municipality does not have any additional plans pertaining to the NFIP program and is not interested in participating in the FEMA CRS Program.

9.28.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Holland fire department has identified routes and procedures to evacuate residents prior to and during an event. In the time of event and magnitude, the town FD will determine best routes for evacuation. The main routes that are considered evacuation routes are state and county routes. Most municipal routes are not evacuation routes, though based on the location of the event, municipal routes might have to be used.

Sheltering

The Town of Holland has identified the following designated emergency shelters within the town.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.28-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Community Center	3 Legion Dr	100	No	Yes	Yes	HFD EMT	None
Holland School	103 Canada St	500	No	Yes	Yes	HFD EMT	None
Town Hall	47 Pearl St	50	No	Yes	Yes	HFD EMT	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Holland has identified the following sites suitable for placing temporary housing units.

Table 9.28-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Park	Legion Drive	5	Park	Water and Electric	None
Three Valley	Olean Rd	50	Camp Site	Electric	None
Mountain Meadows	Parker Rd	50	Camp Site	Electric	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Holland has not identified permanent housing locations, but will work with the county and land owners to determine future locations for permanent housing locations.

Table 9.28-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Mountain Meadows	Parker Rd	50	Camp Site	Electric	None

9.28.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.28-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.28-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	2	0	7	0	2	0	2	0	5	0	8	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	1	0	0	0	0	0	0	0	3	0	2	0
Total Permits Issued	3	0	7	0	2	0	2	0	8	0	11	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
R & S Development	Commercial	3	Olean Rd	Near Caz Creek	Not in flood plain
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
R & S Development	Commercial	Up to 15	Olean Rd	Near Caz Creek	Not in flood plain

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

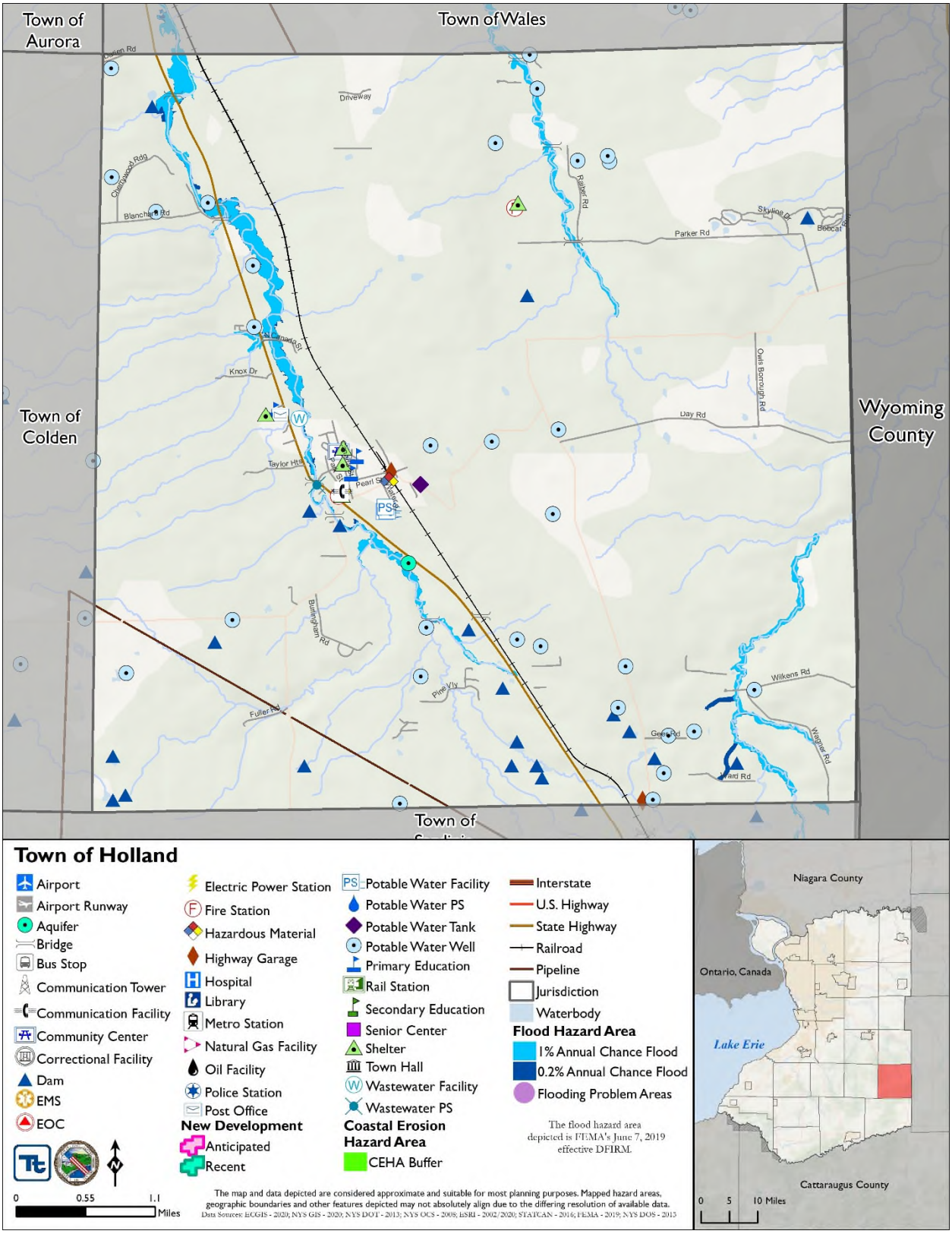
9.28.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Holland's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Holland has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

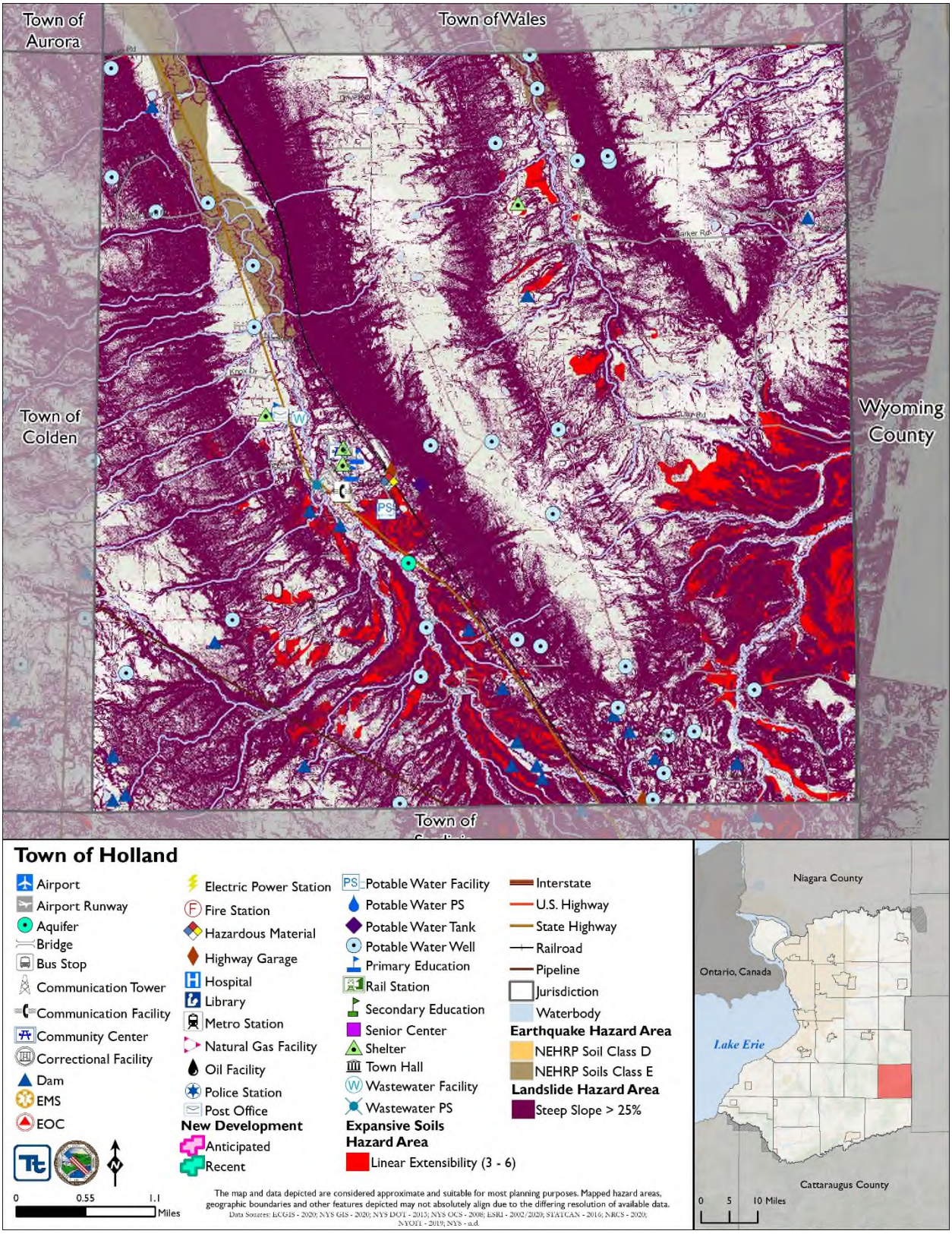
Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.28-1. Town of Holland Hazard Area Extent and Location Map 1



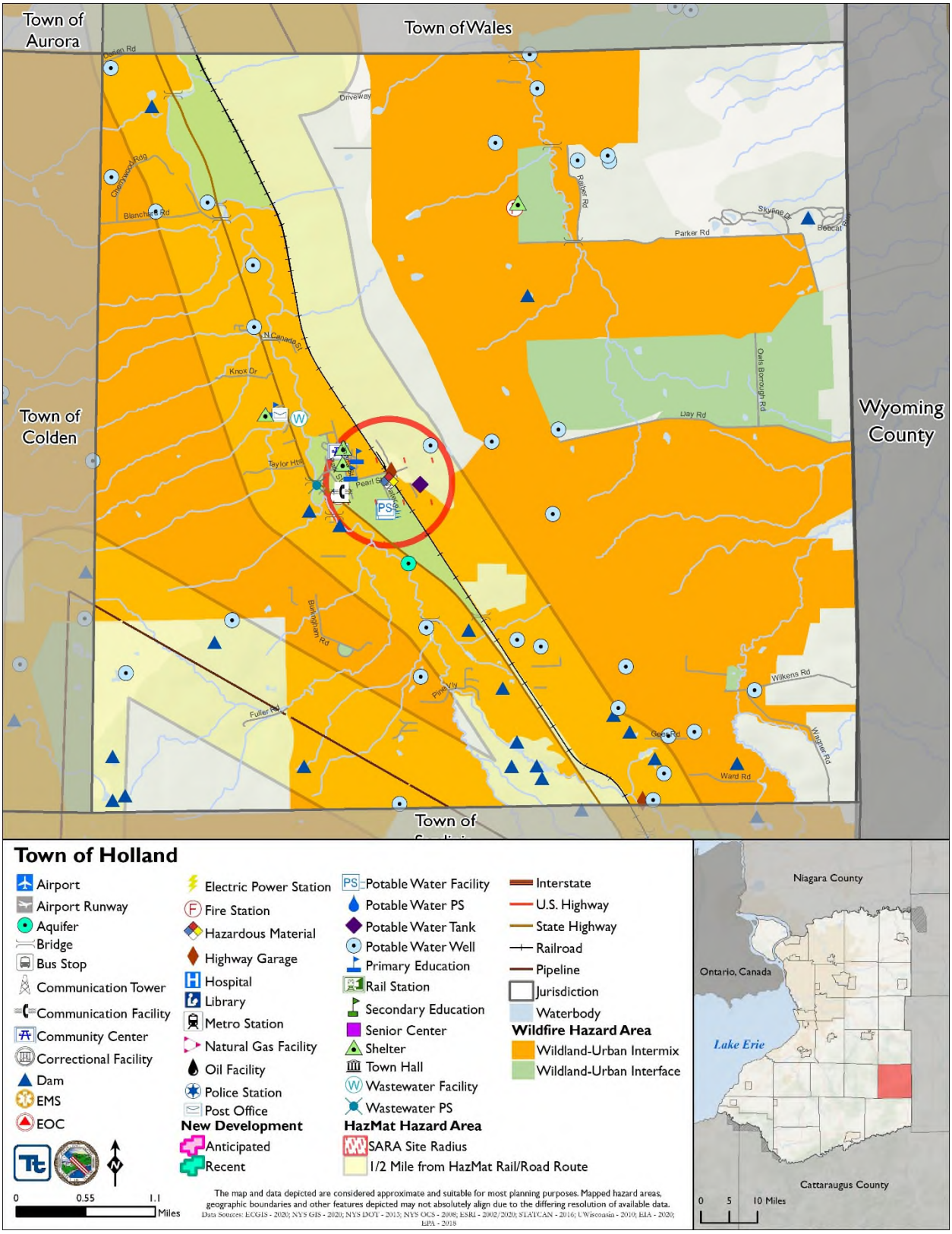
Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.28-2. Town of Holland Hazard Area Extent and Location Map 2



Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.28-3. Town of Holland Hazard Area Extent and Location Map 3



Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Holland's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.28-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.28-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	Yes	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and	Although the County was impacted, the town did not report damages

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wires in Forestville, Sardinia, Cheektowaga, and South Wales.	
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the town did not report damages
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees.	Although the County was impacted, the town did not report damages

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Increased expenses for manpower and equipment, contractor cost
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds	Although the County was impacted, the town did not report damages

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing	Although the County was impacted, the town did not report damages

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the low sliced through western New York trailing it and ushering in very gusty winds.	
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	No	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	No	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the town did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-	Although the County was impacted, the town did not report damages

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
July 16, 2020	Tornado	No	A mesoscale convective vortex pulled a pair of fronts across the area during the afternoon and evening near the time of peak heating. Due to cloud cover ahead of the MCV, instability was not very strong, however shear was impressive. Helicity values were impressive, and the presence of the MCV likely added to it locally over the western Southern Tier. Precipitable water values were between 1.75 and 2 inches, which resulted in torrential rainfall in concert with severe thunderstorm development.	Trees uprooted, power loss, and home damage.
2020-21	COVID 19	No	Pandemic – EM 3504	Various business closures, social distancing, and recorded deaths across Erie County.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Holland's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Holland. The Town of Holland has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- Flooding is more of an issue than surrounding communities, the town adjusted the ranking from low to medium.
- Wildfires have historically not been an issue for the municipality; ranking adjusted from medium to low

Table 9.28-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Medium	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Medium	Medium	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.28-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
No critical facilities in the floodplain				

Source: 2021 GIS

Identified Issues

After review of the Town of Holland's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Holland has identified the following vulnerabilities within their community:

- The town does not have a salt barn and the salt is stored outside and often gets buried in snow as a result. There have been times where municipal staff need to continuously keep the pile free from snow. As a result, the operations and response of the Highway Department is hindered during a snowstorm, which is one of the highest hazards in the community.
- The town Highway Department community center (2 Legion Drive) (which is used as the community emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event. It is critical that both remain operational through all hazard events and have power at all times.
- Both Fire Departments (Building #1 @ 49 North Main Street and #2 7640 Hunters Creek Road) do not have generators, except for a portable generator which is not enough power for power the entire facility. Due to the lack of backup power, the facilities cannot adequately operate during a power outage. This is essential as the departments provide emergency services to the town.
- Cellular service throughout the town is limited and causes communications disruptions. Due to the relatively rural characteristic of the town, municipal services have limited capacity to respond to emergencies in areas where lack of cell service exists.
- The Hamlet of Holland has a box culvert that is in disrepair on Pearl/ Canada/ Route 16, running east to west. It drains into Cazenovia Creek. Recently, there was remedial work conducted to reduce road flooding, but further work and improvements need to be done to increase capacity of existing stormwater drainage and prevent further road flooding that often occurs now with increasing rain events.
- Vermont St, Partridge, Warner Gulf , Old Route 16/ South Protection Road are all routes that are in severe disrepair. However, the town does not have jurisdictional authority over these routes because they are owned by the County. These roads have major drainage issues (shoulders and ditches are in disrepair) and need to be rebuilt prior to rehab of the road itself, beyond re-pavement. According to the town, many of the county roads do not have shoulders and have clogged stormwater systems which would need to be repaired, prior to any upgrading.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.28.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.28-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Provide portable generators, improvising shelter, and restore electric power	Ice Storm	Ice storms causing extensive damage primarily to electric wires	Holland Fire Dept, Power Co.	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
2	Public awareness about wildfires, recruit new firefighters, enforce codes	Wildfire	Fire damages to structures	Holland Vol. Fire Dept	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
3	Improve shelter planning, public awareness about winter storm events, plowing and salting roads	Winter Snowstorm, Transportation	Low temperatures, Large amount of snow	Holland DPW	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
4	Provide warming shelters	Extreme Low Temperatures	Loss of heat in homes	Holland Disaster Coordinator	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. No longer applicable
5	Debris removal from waterways and culverts	Flooding	Flooded homes and highways	Dept. of Public Works	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
6	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Flood Plain Admin	Ongoing Capability	Cost	-	1. Discontinue
						Level of protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
7	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Flood Plain Admin	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing capability
7	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Flood Plain Admin	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2.
						Damages Avoided; Evidence of Success	None	3. Complete

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Holland has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- No additional actions identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Holland participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.28-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood		X				X		X	X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X							X	X
Severe Winter Storm		X							X	X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Error! Reference source not found. summarizes the comprehensive range of specific mitigation initiatives the Town of Holland would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Error! Reference source not found. provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.28-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Holland Town - 001	Salt Barn	1,2	Severe Winter Storm	**Problem**: The town does not have a salt barn and the salt is stored outside and often gets buried in snow as a result. There have been times where municipal staff need to continuously keep the pile free from snow. As a result, the operations and response of the Highway Department is hindered during a snowstorm, which is one of the highest hazards in the community. **Solution**: The town would like to install a new facility at 14 Edgewood Drive, same location as the highway facility. The facility would be used to house the town's salt supply. Current efforts would reduce overall manpower needed to maintain salt pile and would facilitate the response time of the various Highway Department workers.	Yes	No	2 years	Highway Department	$300,000	High	HMGP, Climate Smart Communities Grant Program	High	SIP	SP
2022-Holland Town - 002	Generator Installation	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Failure	**Problem**: The town Highway Department and Community Center (2 Legion Drive) (which is used as the community emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event. It is critical that both remain operational through all hazard events and have power at all times. **Solution**: Install a 3-phase generator that will provide adequate electricity to the two separate facilities. The town engineer would need to be consulted to determine the best location of the generator and the proper size generator to power both facilities. Once determined, the town will purchase and install the generator	Yes	No	1 year	Highway Department, Town Engineer	$100,000	High	HMGP	High	SIP	ES

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Holland Town - 003	Fire Department Generator Installation	1,2	Flood, Severe Storm, Severe Winter Storm, Utility Outage	**Problem**: Both Fire Departments (Building #1 @ 49 North Main Street and #2 7640 Hunters Creek Road) do not have generators, except for a portable generator which is not enough power for power the entire facility. Due to the lack of backup power, the facilities cannot adequately operate during a power outage. This is essential as the departments provide emergency services to the town. **Solution**: Install a 3-phase generator that will provide adequate electricity to the two separate facilities. The town engineer would need to be consulted to determine the best location of the generator and the proper size generator to power both facilities. Once determined, the town will purchase and install the generator	Yes	No	1 year	Town Fire Department	$100,00	High	HMGP, Department of Homeland Security Grant Program (HSGP), Assistance to Firefighters Grant Program	High	SIP	SP
2022-Holland Town - 004	Verizon Cell Tower	1,2	All	**Problem**: Cellular service throughout the town is limited and causes communications disruptions. Due to the relatively rural characteristic of the town, municipal services have limited capacity to respond to emergencies in areas where lack of cell service exists. **Solution**: Working with cellular providers (e.g. Verizon), the town will conduct a feasibility study to determine the best locations to install towers and cellular antennas. Once identified, the town will work with cellular providers to install towers and antennas.	No	No	2 years	Town Board, Engineer, Verizon and other cellular providers	$150,000	High	Municipal Budget	High	SIP	ES
2022-Holland Town - 005	Box Culvert Replacement	1,2	Flood, Severe Storm	**Problem**: The Hamlet of Holland has a box culvert that is in disrepair on Pearl/ Canada/ Route 16, running east to west. It drains into Cazenovia Creek. Recently, there was remedial work conducted to reduce road flooding, but further work and improvements need to be done to	No	No	2 years	Town DPW	$500,000	High	HMGP, Clean Water Act Section 604(b) Water Quality Planning Grants Water Quality Improvement	High	SIP	SP

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				increase capacity of existing stormwater drainage and prevent further road flooding that often occurs now with increasing rain events. **Solution**: Working with the town engineer and Highway Department, a study will be done to determine the proper size needed to upgrade the culvert. Once the proper size is determined, the town will work on removing the old culvert and replacing it with a new one to increase capacity.							Project (WQIP) Program, New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant (EPG)			
2022-Holland Town - 006	County Road Assessment	2,3,4	Flood, Severe Storm	**Problem:** Vermont St, Partridge, Warner Gulf , Old Route 16/ South Protection Road are all routes that are in severe disrepair. However, the town does not have jurisdictional authority over these routes because they are owned by the County. These roads have major drainage issues (shoulders and ditches are in disrepair) and need to be rebuilt prior to rehab of the road itself, beyond re-pavement. According to the town, many of the county roads do not have shoulders and have clogged stormwater systems which would need to be repaired, prior to any upgrading. **Solution:** Working with the County, conduct an assessment on the existing county roads in the Town of Holland to prioritize areas in need of repair to reduce hazardous road conditions. Once identified, the town and county will work to make the repairs and upgrades.	No	No	5 years	Town DPW and Erie County	Low for Municipality, High for County	High	Municipal Budget, Transportation Investment Generating Economic Recovery (TIGER), HMGP, County DPW Funds	High	SIP	SP, ES
2022-Holland Town - 007	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.	No	No	Within 3 years	Supervisor	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood	BRIC, HMGP, FMA, cost share by homeowners	High	EAP, SIP	PI, PP

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).						threatened homes				

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.28-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Holland Town - 001	Salt Barn	1	1	1	0	1	1	-1	0	1	1	0	1	1	1	9	High
2022-Holland Town - 002	Generator Installation	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Holland Town - 003	Fire Generator Installation	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Holland Town - 004	Verizon Cell Tower	1	1	1	0	1	1	0	1	1	0	1	0	0	1	9	High
2022-Holland Town - 005	Box Culvert Replacement	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Holland Town - 006	County Road Assessment	1	1	1	1	1	1	-1	1	1	0	0	0	0	1	8	Medium
2022-Holland Town - 007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.28.9 Action Worksheets

The following action worksheets have been developed by the Town of Holland to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Salt Barn		
Project Number:	2022-Holland Town - 001		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Winter Storm		
Description of the Problem:	The town does not have a salt building. Currently there is no salt barn and the salt is stored outside and often gets buried in snow as a result. Sometimes the municipality needs to have someone to continuously keep the salt pile free of any snow. As a result, the operations and response of the DPW is hindered during a snowstorm, which is one of the highest hazards in the community.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install a new facility at 14 Edgewood drive same location as the highway facility. Approximate costs are 300000 and would be used to house the town's salt supply. Current efforts would reduce overall manpower needed to maintain salt pile and would facilitate the response time of the various DPW workers.		
Is this project related to a Critical Facility?	Yes X	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No X	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Increase overall capacity and improve response time
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$300,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, Climate Smart Communities Grant Program
Responsible Organization:	Town DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Coordinate with neighboring town salt barn	Low	Would protect salt from natural elements but other issues will continue
	Build Salt Barn	$300,000	Best option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Salt Barn	
Project Number:	2022-Holland Town - 001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project will increase capacity to protect life
Property Protection	1	This project helps protect life
Cost-Effectiveness	1	This is the most cost-effective option
Technical	0	The technical aspects have not been fully realized
Political	1	There are no political issues
Legal	1	There are no legal issues
Fiscal	-1	The town does not have adequate resources to address this issue
Environmental	0	The does not have any adverse nor positive impact on the environment
Social	1	This has a positive impact on the community
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses concerns to multiple hazards
Timeline	1	The timeline is feasible
Agency Champion	1	The DPW
Other Community Objectives	1	Reduces exposure to rain and loss of salt
Total	10	
Priority (High/Med/Low)	High	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Generator Installation		
Project Number:	2022-Holland Town - 002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The town Highway Department and Community Center (2 Legion drive) (which is used as the community the emergency shelter) do not have adequate backup power. Both of these facilities are used as emergency operation centers during a hazard event and it is critical to increase capacity of these sites to facilitate and streamline response.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a 3-phase generator that can provide adequate electricity to the two separate facilities. As the facilities do not have any current generator, the town engineer would need to be consulted to determine the best location of the generator. Additionally, the capacity has not yet been determined so the town engineer would also need to determine that as well.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP
Responsible Organization:	Town DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar	High	Variant based on weather
	Generator	High	Best solution

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Generator Installation	
Project Number:	2022-Holland Town - 002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Fire Generator Installation		
Project Number:	2022-Holland Town - 003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Both Fire Department (Building #1 @ 49 North Main St and #2 7640 Hunters Creek Road) does not have generator, except for a portable generator which is not enough power for power the entire facility. Currently the facility does have adequate to operate the facility at a minimum, but by investing in a new generator, the town would be able to better facilitate emergency response, especially during a severe storm or aver a hazard event.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a 3-phase generator that can provide adequate electricity to the two separate facilities. As the facilities do not have any current generator, the town engineer would need to be consulted to determine the best location of the generator. Additionally, the capacity has not yet been determined so the town engineer would also need to determine that as well.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, Department of Homeland Security Grant Program (HSGP), Assistance to Firefighters Grant Program
Responsible Organization:	Town DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar	High	Variant based on weather
	Generator	High	Best solution

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Fire Generator Installation	
Project Number:	2022-Holland Town - 003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the town DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 67-Section-9.28-Holland-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.29 Village of Kenmore

This section presents the jurisdictional annex for the Village of Kenmore. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Kenmore's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.29.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Kenmore's hazard mitigation plan primary and alternate points of contact. The Village of Kenmore followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including the Village Clerk and Police Department. The Police Department represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.29-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Kathleen Johnson, Clerk/Treasurer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-583-0557 (cell) 716-873-5700 Email: kjohnson@vi.kenmore.ny.us	Name/Title: AJ Kiefer, Captain, Kenmore Police Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-262-6624 (cell) 716-875-1234 (work) Email: akiefer@kenmorepolice.org
NFIP Floodplain Administrator	
Name/Title: Michael Berns, Code Enforcement Officer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-913-4353 (cell) 716-873-5700 Email: mberns@vi.kenmore.ny.us	

9.29.2 Municipal Profile

The Village of Kenmore is located within the southern part of the Town of Tonawanda, and together the two are referred to as "Ken-Ton". It is bordered on three sides by the town and on the south by the City of Buffalo. The village is in the northwest corner of Erie County and is 1.4 square miles in area. No significant waterways/waterbodies are located within the village. NYS 265 and NYS Route 384 traverse it.

The Village of Kenmore was "Buffalo's First Suburb". Following the Civil War, the City of Buffalo's population grew very quickly. With the invention of electric streetcars, people were able to live further than walking distance from their jobs. Around 1888, the first homes and then neighborhoods began to be laid out on future Village of Kenmore territory just north of Buffalo. The first church in the village was erected in 1891 and the first store opened in 1897. The village incorporated in 1899 (Village of Kenmore 2020).

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

According to the U.S. Census, the 2010 population for the Village of Kenmore was 15,423. The estimated 2019 population was 15,132, a 1.9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.29.3 Jurisdictional Capability Assessment and Integration

The Village of Kenmore performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.29.3). The Village of Kenmore's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Kenmore. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.29-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	No	Local Law 1962, Chapter 7, Buildings and Building Regulations	Local	Code Enforcement
Comment: Proactive management of construction will help mitigate against different hazards.					
Zoning Code	Yes	No	LL1-2015; Chapter 25, Zoning	Local	Planning Board, Village Board
Comment: Establishes minimum stormwater management requirements. Easement shall provide for access to the facility at reasonable times for periodic inspection by the village to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this article. Enactment of zoning will protect against hazard exposure.					
Subdivision Ordinance	Yes	Yes	LL7-2018,Chapter 17 Planning and Development; Subdivision	Local	Code Enforcement, Planning Board
Comment: Avoid, minimize, or mitigate natural hazards and protect natural resources. There shall be no subdivision of land in the village without planning board approval.					

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	Yes	Yes	LL1-2008 and Village of Kenmore. 1970. Chapter 18 Sewers and Sewage Disposal.	Local	Village DPW
Comment: Avoid, minimize, or mitigate natural hazards and protect natural resources. There shall be no subdivision of land in the village without planning board approval. Provide for the health, safety, and general welfare of the citizens of the village through the regulation of stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. Controls discharges to waterways.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	Yes	LL1-2015; Chapter 25, Zoning	Local	Village Planning Board
Comment: The Zoning Code includes growth management components, such as requiring site plan review for most development proposals.					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	LL1-2015; Chapter 25, Zoning	Local	Village Planning Board
Comment: Site plan review requirements for locations, dimensions, grades and flow directions of existing sewers, drainage ditches, culverts, and water lines, as well as other communication facilities or underground and above ground utilities within or adjacent to the property. The planning board will pay special attention to the adequacy of structures, roadways, and landscaping in areas susceptible to flooding, ponding, or erosion.					
Flood Damage Prevention Ordinance	Yes	Yes	Local Law#2 2019, Article 2, Chapter 8 Flood Damage Prevention	Local	FPA
Comment: BFE+2 feet is required for all construction in the SFHA (residential and non-residential). It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (1) Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; (4) Control filling, grading, dredging and other development which may increase erosion or flood damages; (5) Regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards to other lands; and (6) Qualify and maintain for participation in the National Flood Insurance Program.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 18 Sewers and Sewage Disposal	Local	Public Works Department
Comment: The Village participates as an MS4 and is required to limit pollution discharge into stormwater channels.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-		-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan for the Village of Kenmore Business District, 2003	Local	Planning Board
Comment: Comprehensive planning will incorporate hazard risk into land use deliberations.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Kenmore to oversee and track development.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.29-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The village Building Department administers construction permits
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	The village is fully developed, and no buildable land remains.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Kenmore and their current responsibilities which contribute to hazard mitigation.

Table 9.29-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Village Department of Public Works staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	The Building Department administers the building code in part of reduce exposure to risk.
Emergency Management/Public Safety Department	No	The village does not have an Emergency Management Department
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Police, via social media including Facebook, Village website, One Pause Code Red
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Neighboring Fire Districts provide added capacity in emergency response.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village works with a consultant engineering firm.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	The village works with a consultant engineering firm.
Planners or engineers with an understanding of natural hazards	Yes	Planning and Zoning Boards incorporate natural hazards exposure into review of development proposals.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	The Building Inspector and Police are trained in damage assessment.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Michael Borth, Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	The Police Captain is the designated Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Consultant engineer

Fiscal Capability

The table below summarizes financial resources available to the Village of Kenmore.

Table 9.29-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	CHIPS, EWR, Pave NY
Open Space Acquisition funding programs	N/A
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Kenmore.

Table 9.29-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk
Personnel skilled or trained in website development	No	The village retains a consultant technical professional.
Hazard mitigation information available on your website	Yes	The town website contains information about flooding and drainage problems.
Social media for hazard mitigation education and outreach	Yes	The Police Department employs Facebook as social media
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning Board/ZBA
Other programs already in place that could be used to communicate hazard-related information	Yes	Village website, Police, social media, news media, One Pause/Code Red
Warning systems for hazard events	Yes	NY Alert/NY Warn
Natural disaster/safety programs in place for schools	N/A	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Kenmore.

Table 9.29-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.29-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.29.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Berns, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Kenmore.

Table 9.29-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Kenmore	1	8	$3,379	0	0

Source: *FEMA 2020a and 2020b*
Notes:
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The village did not identify particular locations that are prone to flooding. The village does not maintain a list of properties that have been damaged by flooding. The village does not maintain a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the village. The village did not identify how many (if any) properties have been mitigated. The village's flood hazard maps adequately address the flood risk within the jurisdiction.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The Village of Kenmore does not have any outstanding NFIP compliance violations that need to be addressed. There is no record of a Community Assistance Visit (CAV) or a Community Assistance Contact having occurred with the village. The Building Department is responsible for floodplain administration however, there are not any certified floodplain managers on staff. The village does not have access to resources to determine possible future flooding conditions from climate change. The village feels that its floodplain management staff would benefit from assistance or training to support its floodplain management program. The town references construction estimates and knowledge of value of work and scope state and federal authorities for their NFIP administration services as well as how to determine if proposed development on an existing structure would qualify as a substantial improvement. The Planning Board's site plan review process is an important component of the local NFIP administration. The village identified that the barriers to include a lack of knowledge about the location of floodplains and a disregard for regulations/limitations on property. There are outstanding issues with NVIP compliance involving the elevation of flood gates and a missing development permit. The village's NFIP program meets minimum requirements.

9.29.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Kenmore identified two designated evacuation routes. The village will coordinate with county and state agencies when needed. The evacuation routes are listed below:

- Delaware Avenue, Elmwood Avenue and Colvin Boulevard, which traverses north to south.
- Kenmore Avenue, which traverses east to west.

Sheltering

The Village of Kenmore has identified the following designated emergency shelters within the village.

Table 9.29-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Kenmore Community Center	135 Wilber; Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	No	Yes	No	Kenmore	Kitchen on premises
Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	No	Yes	Yes	Kenmore	Kitchen on premises

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Kenmore has identified the following sites suitable for placing temporary housing units.

Table 9.29-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Kenmore Community Center	135 Wilber; Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	Community Center	All available	Unknown
Kenmore Middle School	155 Delaware Road, Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	Public School	All available	Unknown
Roosevelt Elementary	283 Washington; Kenmore, NY 14217	Unknown, addressed by 2022-Village Kenmore-005	unknown	All available	Unknown

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Kenmore has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.29-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
The village did not identify any permanent housing locations. Village staff will identify and coordinate with the county on identifying these sites as addressed in Proposed Mitigation Action #2022-Village Kenmore-005					

9.29.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.29-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.29-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	0	0	0	0	0	0	0	0	0	0	0	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
The village did not identify any recent major developments					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
The village did not identify any major developments anticipated in the next 5 years.					

SFHA Special Flood Hazard Area (1% flood event. The Village did not provide building permit data.

** Only location-specific hazard zones or vulnerabilities identified.*

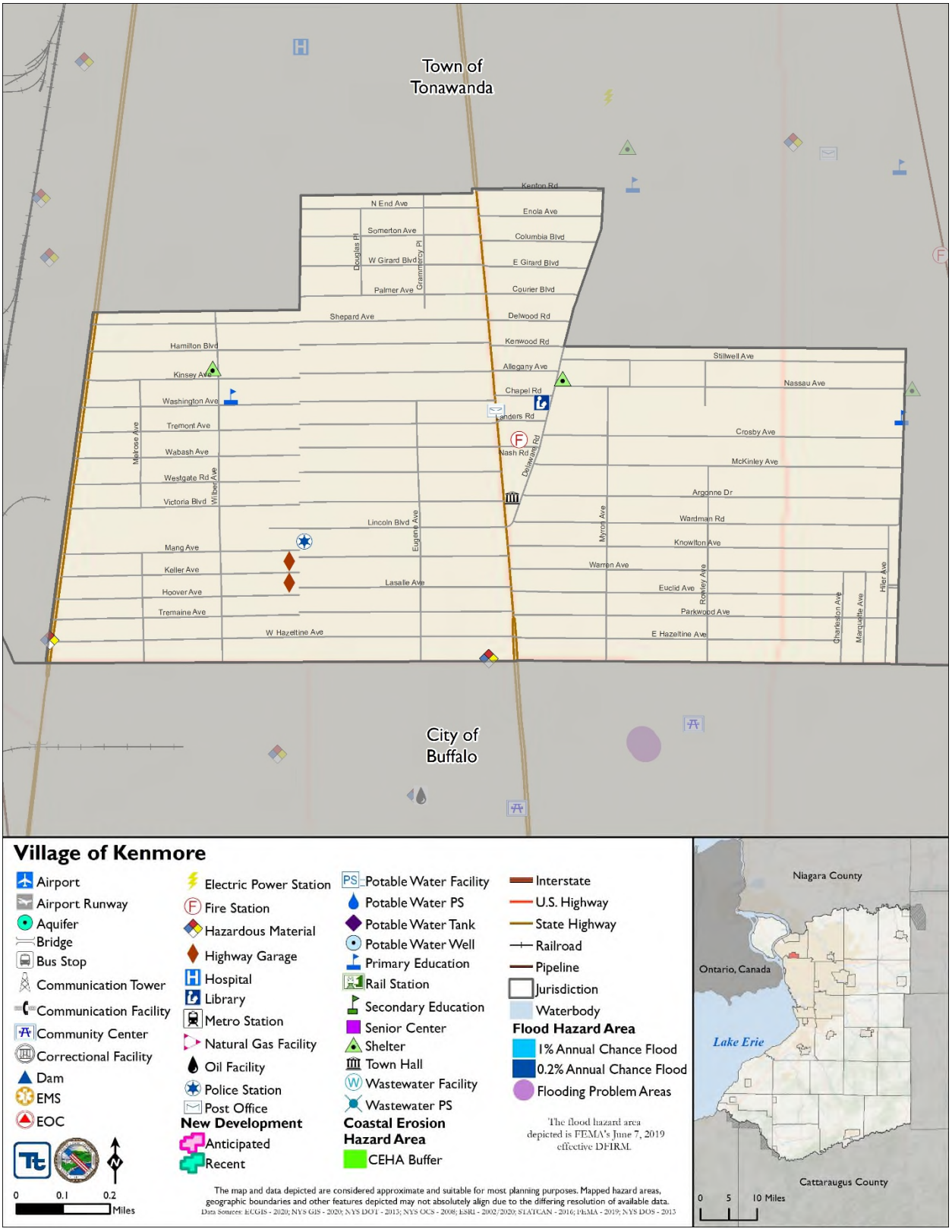
9.29.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Kenmore's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Kenmore has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

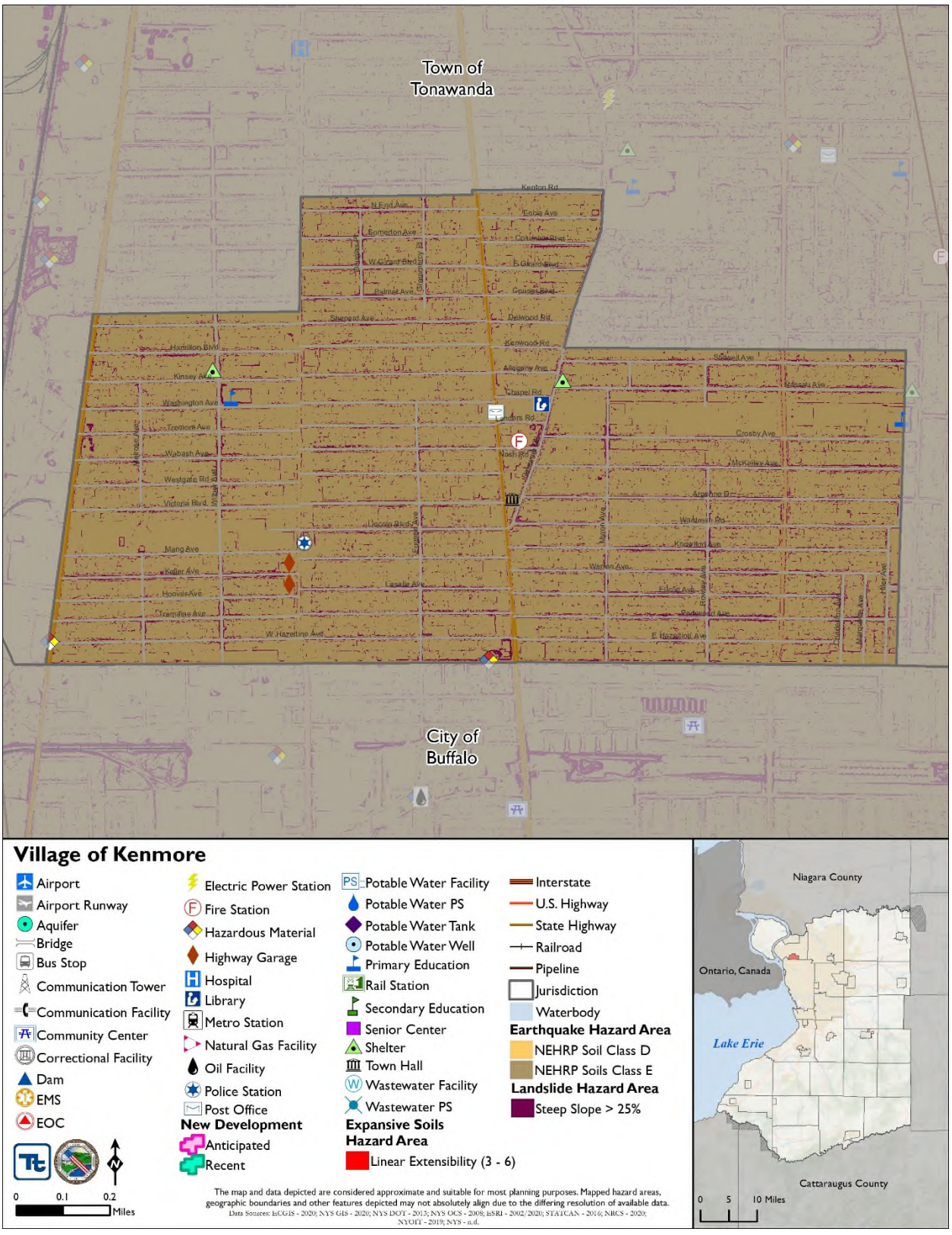
Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.29-1. Village of Kenmore Hazard Area Extent and Location Map 1



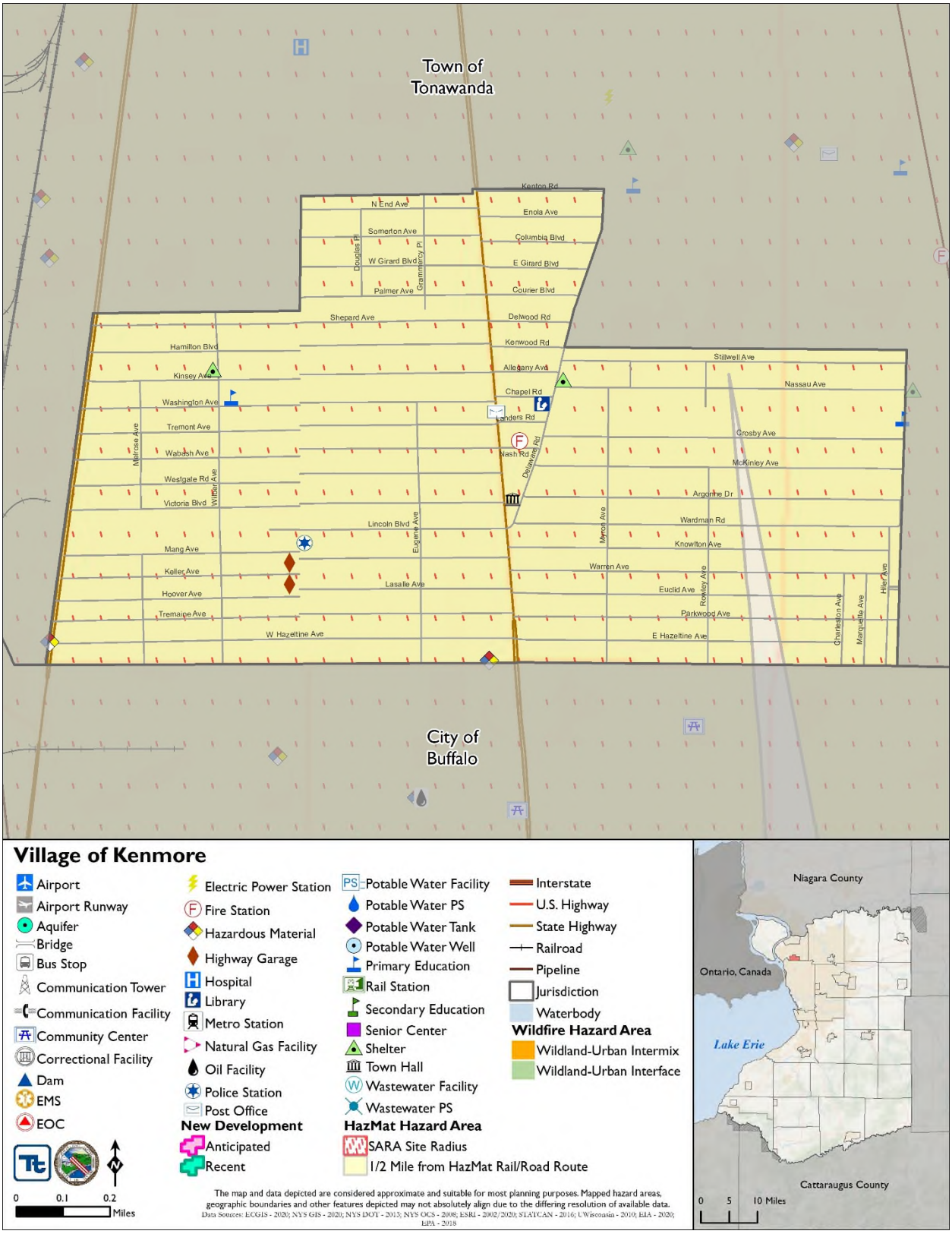
Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.29-2. Village of Kenmore Hazard Area Extent and Location Map 2



Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.29-3. Village of Kenmore Hazard Area Extent and Location Map 3



Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Kenmore's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.29-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.29-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county was impacted by this event, the village did not report any damage
October 28-29, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted by this event, the village did not report any damage
November 12, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
November 18, 2015	High Wind	No	Although the county was impacted by this event, the village did not report any damage
January 11, 2017	High Wind	No	Although the county was impacted by this event, the village did not report any damage
March 8, 2017	High Wind	No	Although the county was impacted by this event, the village did not report any damage
March 13, 2017	Winter Storm	No	Although the county was impacted by this event, the village did not report any damage
July 20, 2017	Tornado	No	Although the county was impacted by this event, the village did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted by this event, the village did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the village did not report any damage
January 2, 2018	Blizzard	No	Although the county was impacted by this event, the village did not report any damage
October 6, 2018	Lightning	No	Although the county was impacted by this event, the village did not report any damage
February 24, 2019	High Wind	No	Although the county was impacted by this event, the village did not report any damage
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted by this event, the village did not report any damage
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted by this event, the village did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the village did not report any damage
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Kenmore's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Kenmore. The Village of Kenmore has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results and the village agrees with the relative risk of the hazards of concern to the community.

Table 9.29-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.29-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure				Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage		
None Identified						

Source: FEMA DFIRM

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the Village of Kenmore's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Kenmore has identified the following vulnerabilities within their community:

- The municipal building lacks a back-up power source.
- Floodplain management capabilities need improvement.
- Stormwater catch basins need rebuilding.
- There may be Repetitive Loss Properties in the village.
- The village should identify locations for permanent housing for use after a natural disaster.

9.29.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.29-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Backup power generation for Village Municipal Building to prevent loss of government functions	All Hazards	Location at 2919 Delaware Ave, Kenmore, NY 14217	Village DPW	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Adopt the new FIRM's and replace our local law with DEC's model floodplain management law	Flooding	Not Identified	Village DPW, Village Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	Work with DEC for preparing policies and procedures to administer the program.	Flooding	Not Identified	Village DPW	Completed	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	Have personnel attend Flood Plain Managers training and become Certified Floodplain Managers (CFMs)	Flooding	Not Identified	Village DPW, Village Board	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Work with local homeowners to determine interest in inclusion in a grant application to FEMA for mitigation project funding (flood proof/elevate/acquire) and apply to FEMA on homeowner behalf	Flooding	Frequent flooded properties	Village DPW	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
		Flooding		Village DPW	Ongoing	Cost		1. Discontinue

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Cleaning of existing storm sewer by flushing systems of silt and debris		Done over a five-year period to prevent/correct flood problems			Level of Protection Damages Avoided; Evidence of Success		2. 3. Ongoing capability
	Rebuild existing storm catch basins	Flooding	Alleviate water restriction caused by broken concrete in catch basin	Village DPW	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Village Board	Completed	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flooding	Not Identified	Village Board	Completed	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	Install creek gauging stations and conduct annual flood channel inspections/clearing	Flooding	Not Identified	Village Board	Ongoing	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing capability

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Kenmore did not identify any mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Kenmore participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.29-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	-	X	-	X	-	-	-	-	-	X
Cyber Attack	-	X	-	X	-	-	-	-	-	X
Earthquake	-	X	-	X	-	-	-	-	-	X
Expansive Soils	-	X	-	X	-	-	-	-	-	X
Extreme Temperature	-	X	-	X	-	-	-	-	-	X
Flood	X	X	-	X	X	X	-	-	-	X
Hazardous Materials	-	X	-	X	-	-	-	-	-	X
Landslide	-	X	-	X	-	-	-	-	-	X
Pandemic	-	X	-	X	-	-	-	-	-	X
Severe Storm	-	X	-	X	X	-	-	-	-	X
Severe Winter Storm	-	X	-	X	-	-	-	-	-	X
Wildfire	-	X	-	X	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.29-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Kenmore would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.29-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village Kenmore-001	Protect the village municipal building from power interruption	1	All Hazards, Utility Failure	**Problem**: The municipal building lacks back-up power source. Vulnerable to Utility Failure hazard. **Solution**: The village will conduct an engineering analysis to determine what size of generator should be installed to provide backup power for the Village municipal building. The Village DPW will then purchase and install the generator	Yes	No	Within 3 years	Village DPW, Village Board	~$75,000 for a generator	Operational continuity of critical facility services	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Municipal Budget	High	SIP	ES
2022-Village Kenmore-002	Improve floodplain management capabilities	3	Flood	**Problem**: Floodplain management staff at the village could benefit from additional training. **Solution**: Procure trainings in floodplain management capabilities.	No	No	Within 2 years	FPA, Village Board	$5,000	Improve administration of floodplain management in the village.	Municipal budget	High	LPR	PR
2022-Village Kenmore-003	Rebuild stormwater catch basins	1	Flood, Severe Storm	**Problem:** Stormwater catch basins are inadequately sized or not functioning properly. During storm events this can cause pooling on village roads. **Solution:** The Village DPW will conduct an engineering design of stormwater catch basin repair measures.	No	No	Within 5 years	Village DPW, Village Board	TBD by engineer's analysis	Improve stormwater management within the village	FEMA HMGP, BRIC, Municipal Budget	High	SIP	SP

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				The Village DPW will then complete the chosen repair measures.										
2022-Village Kenmore-004	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, local cost share by residents	High	SIP	PP
2022-Village Kenmore-005	Identify locations and capacity for permanent housing and determine capacity of emergency	2	All Hazards	**Problem:** Village cannot identify locations for residents to live permanently or temporarily.	No	No	Within 3 years	Village FPA	Staff time	Ensure residents a location to live after a disaster	Municipal funds	High	EAP	ES

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.29-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	shelters and temporary housing locations			**Solution:** Work with the County to identify these housing locations and capacities										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*

- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.29-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village Kenmore-001	Protect the village municipal building from power interruption	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022- Village Kenmore -002	Improve Floodplain management capabilities	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022- Village Kenmore -003	Rebuild stormwater catch basins	1	1	1	1	1	1	1	1	1	1	1	0	1	0	12	High
2022-Village Kenmore-004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022-Village Kenmore-005	Identify locations for temporary and permanent housing	1	1	1	1	0	1	1	1	0	0	1	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.29.9 Action Worksheets

The following action worksheets have been developed by the Village of Kenmore to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Village of Kenmore Action Worksheet			
Project Name:	Protect the village's municipal hall from power outage		
Project Number:	2022-Village Kenmore-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The village municipal building lacks back-up power source and is vulnerable to the Utility Failure hazard.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will conduct an engineering analysis to determine what size of generator should be installed to provide backup power for the village municipal building. The Village DPW will then purchase and install the generator		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations at the village municipal building
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	~$75,000 for a backup generator	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Municipal Budget
Responsible Organization:	Village DPW, Village Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new municipal hall	Very High	Prohibitively expensive
	Install solar farm to supply power	High	Variable power generation, infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the village municipal hall from power outage	
Project Number:	2022-Village Kenmore-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided at the municipal building
Property Protection	1	Project will protect the municipal hall from utility failure risk.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 3 years
Agency Champion	1	Village DPW, Village Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Village of Kenmore Action Worksheet			
Project Name:	Rebuild stormwater catch basins		
Project Number:	2022-Village Kenmore-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Stormwater catch basins are inadequately sized or not functioning properly. During storm events this can cause pooling on village roads.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village DPW will conduct an engineering design of stormwater catch basin repair measures. The Village DPW will then complete the chosen repair measures.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Reduce flooding risk	**Estimated Benefits (losses avoided):**	Reduce flooding risk
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by engineer's analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	FEMA HMGP and PDM, Municipal Budget
Responsible Organization:	Village DPW, Village Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Stormwater Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Cease providing stormwater services	Very High	Prohibitively expensive, increased flooding
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Rebuild stormwater catch basins	
Project Number:	2022-Village Kenmore-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect safe passage along roadways during flooding events.
Property Protection	1	Project will protect roadways and property from flood damage.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	Village DPW, Village Board
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 68-Section-9.29-Kenmore-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.30 City of Lackawanna

This section presents the jurisdictional annex for the City of Lackawanna. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Lackawanna's risk and vulnerability; the different capabilities utilized in the city; and an action plan that will be implemented to achieve a more resilient community.

9.30.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Lackawanna's hazard mitigation plan primary and alternate points of contact. The City of Lackawanna followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including: the Mayor's Office and Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.30-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Annette Iafallo, Mayor Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6464 Email: Mayor@lackny.com	Name/Title: Anthony DeSantis, Public Works Commissioner Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6426 Email: dpwcommissioner@lackny.com
NFIP Floodplain Administrator	
Name/Title: Richard Stanton, Director of Development Address: 714 Ridge Road, Lackawanna, New York 14218 Phone Number: (716) 827-6421 Email: development@lackny.com	
Additional Contributors	
Name/Title: John Wolf, Director of Public Safety/Emergency Manager Method of Participation: Provided data and information, supported mitigation strategy	
Name/Title: Richard Juda, Attorney Method of Participation: Provided data and information, supported mitigation strategy	

9.30.2 Municipal Profile

The City of Lackawanna is approximately six square miles. The city is bounded on the north by the City of Buffalo, on the east by the Town of West Seneca, on the south by the Town of Hamburg and the Village of Blasdell and to the west by Lake Erie. Exit 55 W of the New York State Thruway services Lackawanna. U.S. Rt. 62 and New York Rt. 5 also traverse the city.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The Seneca Indians were original inhabitants of the area that became Lackawanna. Around 1780, the British helped the Seneca establish log cabin villages on Buffalo Creek and supplied them with clothing, agricultural equipment and seeds. In 1838, the Seneca Indians were forced to leave the Buffalo Reservation and white settlers moved in. In 1899, John Albright purchased all the land along the shore of Lake Erie for Republic Steel which would become the largest steel plant in the world at that time (City of Lackawanna 2020).

According to the U.S. Census, the 2010 population for the City of Lackawanna was 18,141. The estimated 2019 population was 17,831, a 1.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.3 percent of the population is 5 years of age or younger and 16.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.30.3 Jurisdictional Capability Assessment and Integration

The City of Lackawanna performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.30.3). The City of Lackawanna's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Lackawanna. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.30-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	NYS Unified Building Code, Chapter 75 Building Code Administration.	Local	City Code Enforcement
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the City of Lackawanna.					
Zoning Code	Yes	No	City Code Chapter 230 Zoning	Local	Code Enforcement

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The purpose of the City Council in adopting this chapter is to provide for the orderly development of the City of Lackawanna in accordance with the recently adopted City of Lackawanna Comprehensive Plan. The Zoning Chapter is developed to: • Protect the character and values of open space, residential, commercial, industrial and institutional land uses; • Regulate the location and intensity of buildings and uses; • Preserve and protect significant natural features and vegetation, thereby preventing ecological damage and visual blight which occur when those features or vegetation are eliminated or substantially altered to serve economic purposes alone; • Encourage the use of the Lake Erie shoreline within the boundaries of the City of Lackawanna as a unique resource with regional significance; • Preserve and promote the general attractiveness of the city and ensure that structures and land use arrangements are aesthetically harmonious with surrounding structures and land uses; • Facilitate the provision of adequate transportation and parking facilities to maximize the utility of transportation infrastructure, protect the safety of pedestrians and motorists, and promote the convenience of consumers and employers; • Encourage the efficient use of community development infrastructure while preventing the overcrowding of land and excessive concentration of population; • Provide adequate open spaces for light, air and outdoor uses; and • Protect persons and property from damage and injury due to fire or flood; and to respect and implement the purposes and scope of the Federal Flood Insurance Study for the City of Lackawanna, and all amendments thereto, as a guide to orderly flood plain management in the City of Lackawanna.					
Subdivision Ordinance	Yes	No	City Code Chapter 144 Land Subdivision Regulations	Local	Development
Comment: The purpose of these regulations shall be to provide rules, regulations and standards to guide land subdivision within the City of Lackawanna in order to promote the public health, safety, convenience and general welfare of the city. They shall be administered to ensure the orderly growth and development, conservation, protection and proper use of land and adequate provision for circulation, utilities and services and to ensure that land utilized for building purposes shall be without danger to health or peril from fire, flood or other menace and that provision is made for adequate light and air, fire protection, recreation areas and other amenities.					
Stormwater Management Ordinance	Yes	Yes	City Code Chapter 185 Sewers Article IX Storm Drainage	Local	Code Enforcement
Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the City through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02. The objectives of this article are: • To meet the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02; • To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes; • To prohibit illicit connections, activities and discharges to the MS4; • To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and • To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	No	City Code Chapter 230-71 Site Plan Review	Local	Code Enforcement
Comment: The Planning and Development Board is authorized to review and approve, approve with modifications or conditions or disapprove site plans in accordance with the standards outlined in this chapter. Site plan review and site plan approval by the City of Lackawanna					

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning and Development Board shall be required for all uses, buildings and structures that require site plan approval as outlined in this chapter. Fees outlined and adopted by the City of Lackawanna will apply to all site plan reviews.					
Environmental Protection Ordinance	Yes	Yes	City Code Chapter 114 Environmental Quality Review, SEQR Article 8 NY ECL	Local	All city agencies, boards, departments, and offices
Comment: The purpose of this chapter is to implement, for the City of Lackawanna, the provisions of the State Environmental Quality Review Regulations, thereby incorporating environmental factors into existing planning and decision-making processes.					
Flood Damage Prevention Ordinance	Yes	Yes	City Code Chapter 230-68 Flood Development Permits	Local	Floodplain Administrator
Comment: It is the purpose of this section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: • Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; • Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; • Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; • Control filling, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and • Qualify for and maintain participation in the National Flood Insurance Program. The city requires BFE+2 feet for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	City Code Chapter 185 Sewers Article IX Storm Drainage	Local	Code Enforcement
Comment: The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the city through the regulation of non-stormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02. The objectives of this article are: • To meet the requirements of the SPDES General Permit for Stormwater Discharges From MS4s, Permit No. GP-02-02; • To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes; • To prohibit illicit connections, activities and discharges to the MS4; • To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and • To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	Yes	Comprehensive Plan, 2017	Local	Planning
Comment: The Comprehensive Plan outlines the goals and objectives which guide decision making and development into the future. The plan focuses on a range of goals in areas such as population, housing, economy and growth, land use, recreation, parks and open space, environment, transportation, infrastructure and community services.					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	Yes	No	City of Lackawanna Local Waterfront Revitalization Program May 2018	Local	Planning
Comment: The City of Lackawanna Waterfront Revitalization Area includes all lands and waters in the city extending from the Lake Erie shoreline inland to the eastern right-of-way of New York State Route 5, between the Lackawanna/Hamburg border to the south and the Lackawanna/Buffalo border to the north.					
Stormwater Plan	Yes	No	Stormwater Management Plan	Local	Planning
Comment: A plan for controlling stormwater runoff and pollutants from a site during and after construction activities. For all land development activities subject to review and approval by the Zoning Officer or Planning and Development Board under mobile home or site plan regulations, the applicant or developer shall be required to submit a SWPPP that complies with the requirements of this article to the SMO, and the land development activity shall be reviewed subject to the standards contained in this article.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	Yes	No	City of Lackawanna Local Waterfront Revitalization Program May 2018	Local	Planning
Comment: The City of Lackawanna Waterfront Revitalization Area includes all lands and waters in the city extending from the Lake Erie shoreline inland to the eastern right-of-way of New York State Route 5, between the Lackawanna/Hamburg border to the south and the Lackawanna/Buffalo border to the north.					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	Yes	No	Brownfield Opportunity Plan	Local, Federal	City, BOA
Comment: The Lackawanna First Ward BOA represents a unique opportunity for the community and the City to work together to capitalize on core strengths, mitigate environmental and market challenges and capture projected local and regional growth industries, making economic growth and community renewal the focus for the First Ward. As the strategy for the Lackawanna First Ward BOA evolved, boundaries for smaller Target Areas, each with distinct qualities, assets and potential, were first identified and then revised. Each area represents a logical collection of land parcels and has its own development emphasis. While the Target Areas are unique in character, land uses within and between areas are complementary. This provides a vibrant overall land use mix while ensuring compatibility between adjacent uses.					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the City of Lackawanna to oversee and track development.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.30-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Development and Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	Not Officially but available land maps are kept

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Lackawanna and their current responsibilities which contribute to hazard mitigation.

Table 9.30-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning and Development Board has the authority to perform the following duties: • Prepare or change a Comprehensive Plan for the City of Lackawanna; • Make investigations, maps, reports and recommendations regarding planning and development matters, upon its own initiative or referral by the City Council or Zoning Board of Appeals, provided such expenditures do not exceed appropriations; • Refer matters to the County Planning Agency for review in accordance with § 239-m of the General Municipal Law; • Review and approve, approve with conditions or deny site plans; • Review and comment on all proposed zoning amendments; and • Adopt, after public hearing and City Council approval, such rules and regulations as it deems reasonably necessary to carry out its duties under this chapter and with regard to any subject over which it has jurisdiction under any law.
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals has duties that include but are not limited to: • Interpretation. Upon appeal from a decision by the Zoning Officer, the Zoning Board of Appeals shall decide any question involving interpretation of any provisions of this chapter. Such appeal shall be initiated within 60 calendar days of the adverse decision. • Refer matters to the County Planning Agency for review in accordance with § 239-m of the General Municipal Law. • Variances. On an appeal from an order, requirement, decision or determination of any administrative official charged with the enforcement of this chapter, where it is alleged by the appellant that there are practical difficulties or unnecessary hardships in the way of carrying out the strict applications of this chapter, the Zoning Board of Appeals may grant a variance in the strict application of this chapter in accordance with Article VII.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works is responsible for weekly garbage removal, recycling, grass, yard waste, and branches, bridge and road updates, and ice and snow removal from roadways.
Construction/Building/Code Enforcement Department	Yes	The City of Lackawanna Department of Code Enforcement works closely with all departments within city government. The Code Enforcement Officer dedicates his time to enforcing Ordinances and New York State Statutes. But more importantly, the Code Enforcement Officer promotes education and cooperation between community partners and the citizens we serve. Through enforcement and education we hope to preserve and improve the quality of life and public safety for all who work, live in and visit our community. As Code Enforcement Officers, this position is to enforce the City of Lackawanna Municipal Code and the New York State Uniform Codes, particularly as it relates to land use, property maintenance and building construction. These efforts can improve the quality of the city's neighborhoods, protect property values and the environment and keep Lackawanna a safe and desirable community. Specifically, the Code Enforcement Officer concentrates on the investigation and abatement of complaints involving land use (zoning), housing conditions (substandard structures), abandoned vehicles, signs, pools, fences and general public nuisances. Code enforcement also serves the Building Department, which enforces ordinances pertaining to new construction, reconstruction, additions, demolitions and storm water and floodplain regulations.
Emergency Management/Public Safety Department	Yes	The Department of Public Safety contains the following divisions: Police Department, Fire Department, Animal Control.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	CodeRED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Annual Inspections of Smokes Creek with NYSDEC
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineers outsourced with coordination by Public Works and Development
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineers outsourced with coordination by Public Works and Development
Planners or engineers with an understanding of natural hazards	Yes	Engineers outsourced with coordination by Public Works and Development
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Engineers outsourced with coordination by Public Works and Development
Personnel skilled or trained in GIS and/or Hazards United States	No	-

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
(HAZUS) – Multi-Hazards (MH) applications		
Scientist familiar with natural hazards	Yes	Engineers outsourced with coordination by Public Works and Development
NFIP Floodplain Administrator (FPA)	Yes	Development Director
Surveyor(s)	Yes	Retained as necessary
Emergency Manager	No	-
Grant writer(s)	No	Currently seeking new grant writers
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Attorney with strong environmental law background on staff

Fiscal Capability

The table below summarizes financial resources available to the City of Lackawanna.

Table 9.30-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes – Engineering or Development
Capital improvements project funding	Yes – admin and finance department
Authority to levy taxes for specific purposes	Yes – Mayor
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes – admin and finance department
Incur debt through special tax bonds	Yes – Mayor
Incur debt through private activity bonds	Yes – admin and finance department
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes – Development
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes – Development

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Lackawanna.

Table 9.30-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	The Public Information Officer direct reports to the Mayor.
Personnel skilled or trained in website development	Yes	City Hall staff member trained as webmaster for City web-site – works in collaboration with Public Information Officer
Hazard mitigation information available on your website	Yes	Information is hosted on the city website (www.lackawannany.org) under Public Safety-Code Red System.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Social media for hazard mitigation education and outreach	Yes	Facebook (Lackawanna NY 0 City Government). City also has a Twitter handle which is less frequently used but can be.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red phone notification system. Also, direct relationships with local media.
Warning systems for hazard events	Yes	Code Red phone notification system
Natural disaster/safety programs in place for schools	N/A	Lackawanna City School District runs independently from city government and would lead such efforts.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Lackawanna.

Table 9.30-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.30-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.30.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Richard Stanton, Director of Development

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Lackawanna.

Table 9.30-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Lackawanna	184	94	$118,735	0	164

Source: FEMA 2020a, FEMA 2020b
Notes: SRL property information was not included in the available data set.
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The city has identified areas around the creek bank as flood prone although there has been no flooding in recent years. The city keeps a list of property owners that are interested in flood mitigation projects for their properties, around 10 a year. However, there have been no properties that have been mitigated by either elevation or acquisition. There are currently no RiskMAP projects being undertaken within the city. The city also notes that the flood hazard maps available accurately address flood risk.

Substantial Damage determinations are made by via inspections completed by the Code Enforcement Official, but no such events have been declared.

NFIP Compliance

The Development Department is responsible for floodplain management. There are no certified floodplain managers (CFM) within the city, and no barriers to an effective NFIP program have been identified. The Code Enforcement and Development Departments review all floodplain building permit submissions from builders. The Code Enforcement Official determines if proposed developments qualify as “substantial improvements.” The Planning Board and Zoning Board both consider floodplains and take flood risk into account when developing codes and reviewing site plans.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Chapter 230-68 of the City Code details the local Flood Damage Prevention Ordinance, last amended on April 29, 2019. The floodplain management program meets minimum requirements. The city does not participate in the Community Rating System (CRS) program. The most recent Community Assistance Contact (CAC) was on June 26, 1998 and the most recent Community Assistance Visit (CAV) was on May 16, 2018. There are currently no outstanding compliance issues.

9.30.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Lackawanna has identified the following routes and procedures to evacuate residents prior to and during an event.

- Contact NFTA for bussed; first and second would take Martin Road to senior center, the third and fourth would take Abbot and/or Ridge Road to senior center.

Sheltering

The City of Lackawanna has identified the following designated emergency shelters within the city.

Table 9.30-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Lackawanna Senior Center	230 Martin Rd, Lackawanna, NY 14218	Unknown	No	Yes	Yes	Red Cross	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Lackawanna has identified the following sites suitable for placing temporary housing units.

Table 9.30-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-C. Lackawanna -#013					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

requirements and floodplain laws. The City of Lackawanna has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.30-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will work with the county to identify and designate permanent housing locations. See Mitigation Action 2022-C. Lackawanna -#013					

9.30.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.30-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.30-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	5	0	2	0	6	0	6	1	2	1	3	1
Multi-Family	0	0	1	0	1	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	2	0	1	0	1	0	11	0	1	0	9	0
Total Permits Issued	**7**	**0**	**4**	**0**	**8**	**0**	**17**	**1**	**3**	**1**	**12**	**1**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Time Release Property	Manufacturing	1	6 Dona Street	None	95% Complete
Sucro	Manufacturing	5	2303 Hamburg Turnpike	None	50% Complete
Premium Coffee	Commercial	1	2520 Hamburg Turnpike	None	Open Food Prep
Steelwinds	Wind Energy	14	2303 Hamburg Turnpike	None	Construction on-going
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Uniland Spec Building	Manufacturing/distribution	1	8 Dona Street	None	Permits Approved
Splash Pad Park	Recreational	3	600 Ridge Rd	None	Environmental Review Stage
Mt. Olive	Senior Housing/Medical/Youth Facility	3	66 Wasson Ave	Non	Plan Review

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

300 Commerce	PPE Manufacturing	1	300 Commerce Dr	None	Permitting
Warsaw Bridge Replacement	Public Infrastructure	1	Warsaw Street	Floodplain	Engineering
City Hall Replacement	Public Infrastructure	1	2838 South Park Avenue	None	Architecture Planning

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

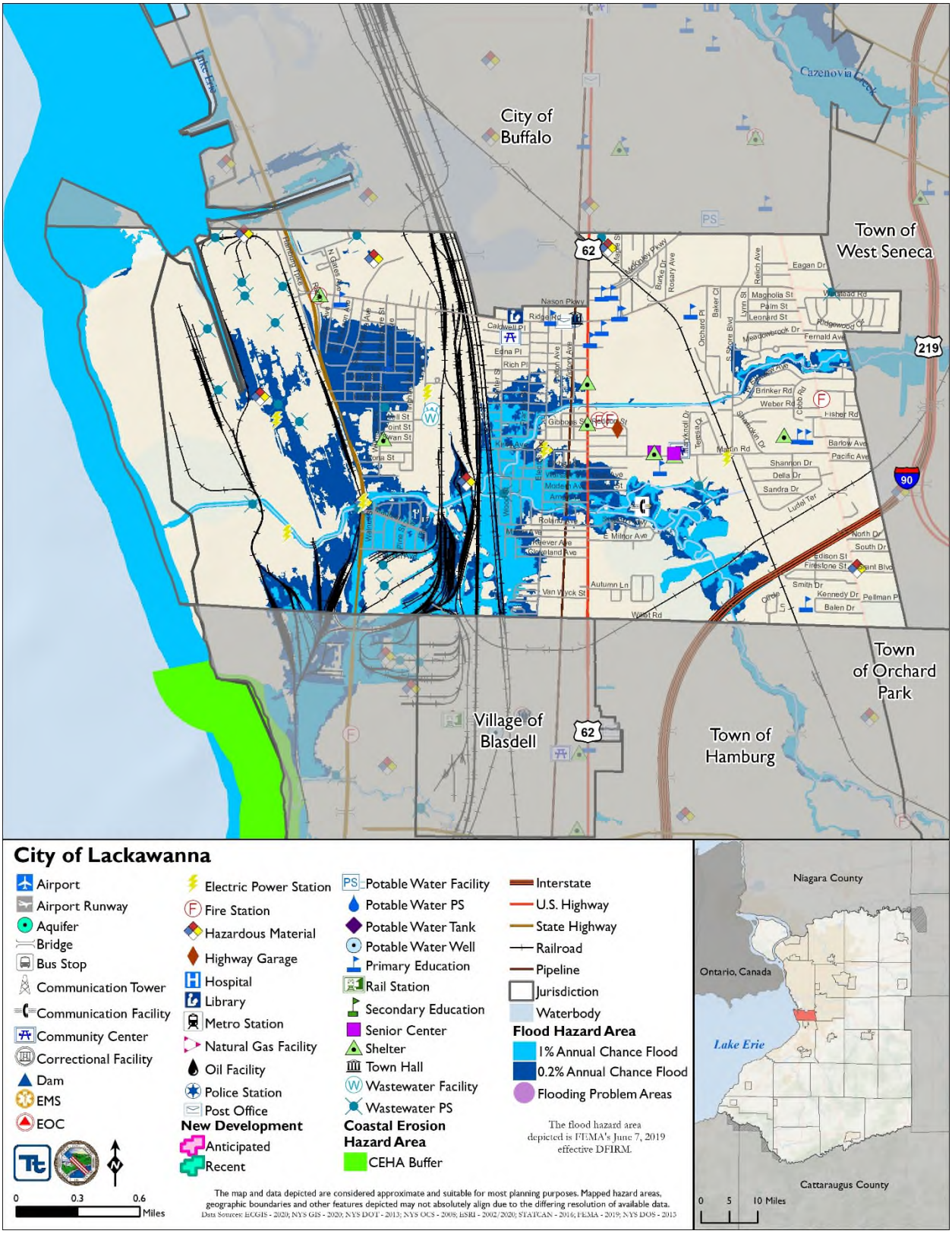
9.30.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Lackawanna's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Lackawanna has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

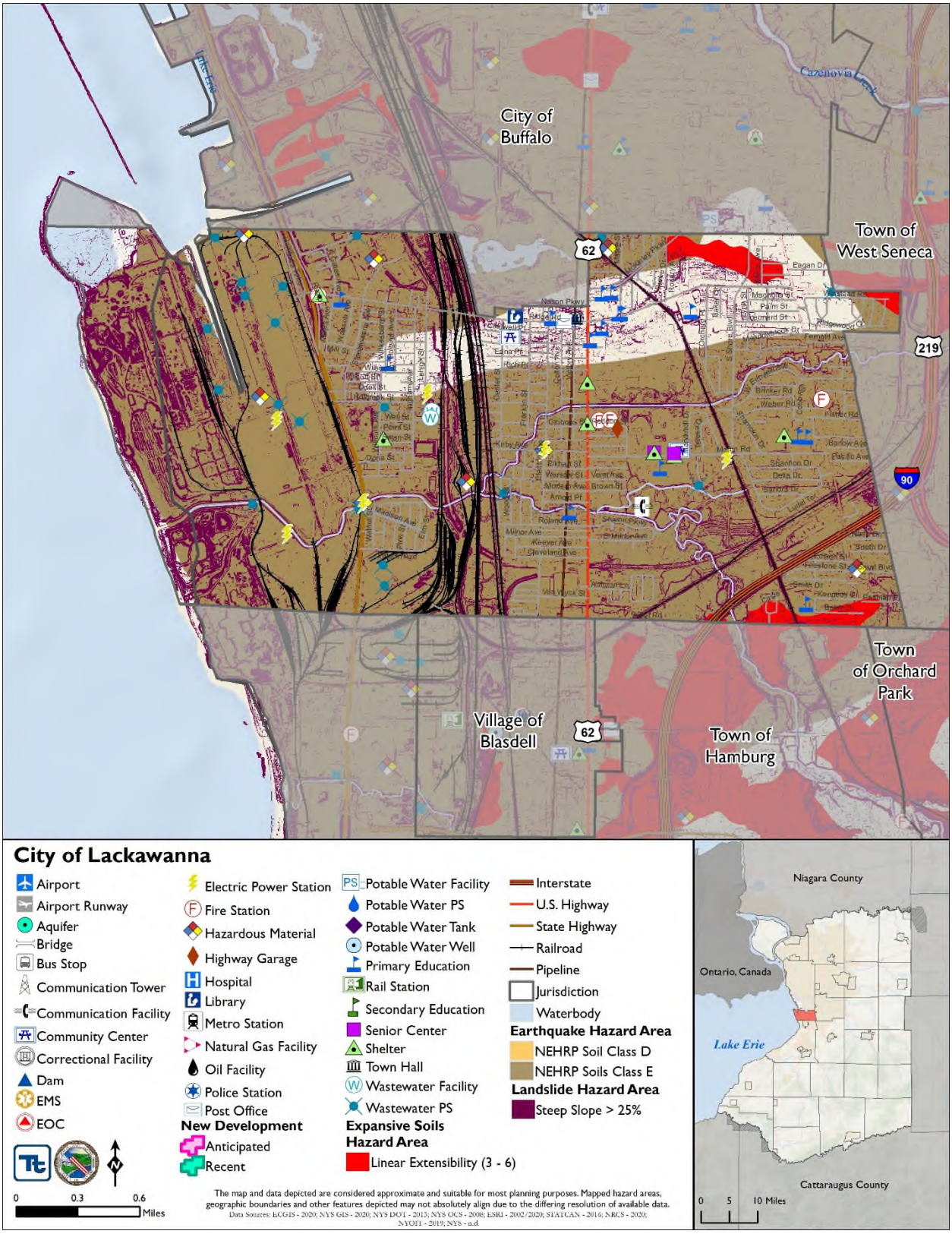
Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.30-1. City of Lackawanna Hazard Area Extent and Location Map 1



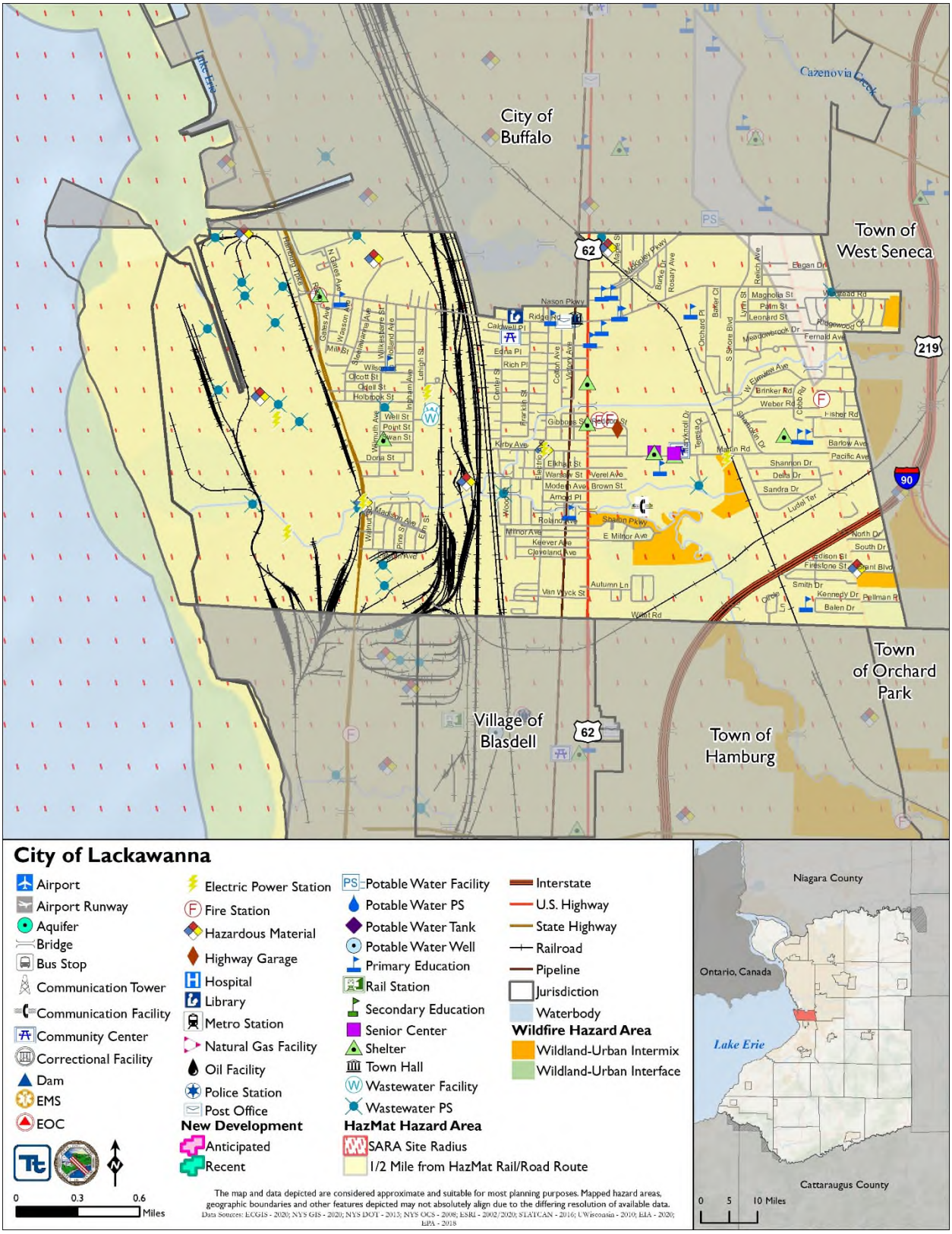
Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.30-2. City of Lackawanna Hazard Area Extent and Location Map 2



Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.30-3. City of Lackawanna Hazard Area Extent and Location Map 3



Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Lackawanna's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.30-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.30-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Overtime Costs
August 11-15, 2015	Flash Flood	No	Overtime Costs
October 28-29, 2015	High Wind	No	Overtime Costs
November 6, 2015	Thunderstorm Wind	No	Overtime Costs
November 12, 2015	High Wind	No	Overtime Costs
November 18, 2015	High Wind	No	Overtime Costs
January 11, 2017	High Wind	No	Overtime Costs
March 8, 2017	High Wind	No	Overtime Costs
March 13, 2017	Winter Storm	No	Overtime Costs
July 20, 2017	Tornado	No	Although the county was impacted, the city did not report damages
August 4, 2017	Thunderstorm Wind	No	Overtime Costs
December 10-15, 2017	Lake-effect Snow	No	Overtime Costs
December 24-29, 2017	Lake-effect Snow	No	Overtime Costs
January 2, 2018	Blizzard	No	Overtime Costs
October 6, 2018	Lightning	No	Overtime Costs
February 24, 2019	High Wind	No	Overtime Costs
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the city did not report damages
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the city did not report damages

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the City of Lackawanna's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Lackawanna. The City of Lackawanna has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the city did not provide feedback on the following risk rankings. The city noted the following:

- There has been a slight increase in the frequency of occurrence of Extreme Temperature and Extreme Wind Events in the city.
- Due to mitigation efforts, there has been a decrease in frequency and impacts of flood events in recent years.

Table 9.30-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.30-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Bethlehem Steel Station #212	Electric Power Station	X	X	2022-City of Lackawanna-001
Seal Street PS	Wastewater Pump Station	X	X	2022-City of Lackawanna-002
Wastewater Pump Station near Hamburg Turnpike (Unnamed)	Wastewater Pump Station	-	X	2022-City of Lackawanna-003
Wastewater Pump Station near Highway 5 (Unnamed)	Wastewater Pump Station	-	X	2022-City of Lackawanna-004
Wastewater Pump Station near Smoke Creek (Unnamed)	Wastewater Pump Station	X	X	2022-City of Lackawanna-005
Wilmuth Avenue PS	Wastewater Pump Station	-	X	2022-City of Lackawanna-006

Source: FEMA DFIRM

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the City of Lackawanna's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Lackawanna has identified the following vulnerabilities within their community:

- Critical facilities located within the floodplain, wildfire hazard area, hazardous materials hazard area, and are vulnerable to utility failures.
- Several community centers, a communications facility, electric power stations, hazardous material facilities, private schools, and other critical facilities are in the city are in the earthquake hazard area.
- The current City Hall is suspended on steel columns showing signs of structural deterioration. If they further destabilize before replacement, City Hall operations will be disrupted, which will affect ability to coordinate any disaster response.
- Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge.
- There is a beaver dam off of Smoke Creek behind residences on Highview Circle, which results in flooding.
- The city does not have identified temporary or permanent housing locations.
- There are 164 homeowners living within the SFHA.

9.30.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.30-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Eliminate beaver population and break up dams when they are formed in the Cleveland and Electric Ave. area	Flooding	Not Identified	Engineering	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Completed
	Install stormwater receiver on property in question to prevent the flooding on residential property on Smith Dr.	Flooding	Repetitive Flooding	Engineering	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. National Grid Resolved Problem
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Engineering	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing capability of the city to use updated FIRMS

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Lackawanna has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Lackawanna participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.30-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X				X			X	X
Cyber Attack	X	X				X			X	X
Earthquake	X	X		X		X	X		X	X
Expansive Soils	X	X				X			X	X
Extreme Temperature	X	X				X			X	X
Flood	X	X	X	X		X	X	X	X	X
Hazardous Materials	X	X		X		X	X		X	X
Landslide	X	X				X			X	X
Pandemic	X	X				X			X	X
Severe Storm	X	X				X			X	X
Severe Winter Storm	X	X				X			X	X
Utility Failure	X	X				X			X	X
Wildfire	X	X		X		X	X		X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.30-19 summarizes the comprehensive range of specific mitigation initiatives the City of Lackawanna would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.30-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City of Lackawanna-001	Work with the Bethlehem Steel Station #212 owner on how they can protect their facility to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The Bethlehem Steel Station #212 is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The facility owner will be aware of options to protect the facility to the 0.2% annual chance flood event.	City Budget	High	EAP	PI
2022- City of Lackawanna -002	Protect the Seal Street Pump Station to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Seal Street Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Seal Street Pump Station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the city will carry out the option.	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022- City of Lackawanna -003	Assess the flood risk at the Wastewater Pump Station near Hamburg Turnpike (Unnamed)	1, 2	Flood	**Problem**: The Wastewater Pump Station is in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022- City of Lackawanna -004	Assess the flood risk at the Wastewater Pump Station near Highway 5 (Unnamed)	1, 2	Flood	**Problem**: The Wastewater Pump Station is in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022- City of Lackawanna -005	Protect the Wastewater Pump Station near Smoke Creek (Unnamed) to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Wastewater Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The city will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater pump station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				identified, the city will carry out the option.										
2022- City of Lackawanna -006	Assess the flood risk at the Wilmuth Avenue Pump Station	1, 2	Flood	**Problem**: The Wastewater Pump Station is in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	City Budget	High	EAP	PI
2022- City of Lackawanna -007	Work with the private building owners in the city to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	**Problem**: Several community centers, a communications facility, electric power stations, hazardous material facilities, private schools, and other critical facilities are in the city are in the earthquake hazard area. **Solution**: The city will conduct outreach to facility owners to encourage the assessment of the structures to determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes.	Yes	None	Within 6 months for outreach	City of Lackawanna Administration	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	City Budget	High	EAP	PI
2022- City of Lackawanna -008	Work with the Electric Power Station No 713127 owner to protect the facility from wildfires	1, 2, 3	Wildfire	**Problem:** The Electric Power Station No 713127 is located in the wildfire hazard area. **Solution:** The city will work with the facility owner to determine the risk from wildfires and identify possible property	Yes	None	Within 6 months for outreach	Administration	<$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the Electric Power Station from	City Budget	High	EAP	PI

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				maintenance actions that can help protect the facility.						potential wildfire damage				
2022- City of Lackawanna -009	Protect the critical facilities in the City of Lackawanna from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	**Problem:** All of the critical facilities in the City of Lackawanna may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	City of Lackawanna Public Safety	<$100 for outreach, TBD by engineering study	Continuity of operations in place	City Budget	High	LPR	ES
2022- City of Lackawanna -010	City Hall Building Replacement	1, 2	All Hazards	**Problem:** The current City Hall is suspended on steel columns showing signs of structural deterioration. If they further destabilize before replacement, City Hall operations will be disrupted, which will affect ability to coordinate any disaster response. **Solution:** The city will determine the feasibility to replace the City Hall building due to the structural instability of the front pillars. The city will implement cost-effective measures identified. Extreme weather conditions, such as severe snow storms, pose the most	Yes	No	1 year	Engineering	High	High, ensures continuity of operations	Municipal Budget, BRIC	High	SIP	PP

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				common threat to the community and travelers. The new city hall can provide a warming station for stranded travelers or displaced residents.										
2022- City of Lackawanna -011	Bridge Upgrades	1, 2	Flood	**Problem:** Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge. **Solution:** The city will seek funding for the following upgrades: • Warsaw Bridge – replace the bridge and raise the roadway and new bridge above the floodplain. Engineers are currently inspecting and conducting a structural review of sections of the Bridge with NYS DOT to determine level of disrepair and deterioration. The city will seek funding to preform a complete rehabilitation of the bridge. It currently is closed to vehicle traffic until repairs are complete.	Yes	No	1 year	Engineering	High	High	FEMA BRIC, BRIDGE NY, Municipal Budget	High	SIP	PP

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				• Electric Ave Bridges – repair and replace the bridges crossing Smoke Creek • McKinley Bridge – needs to be dismantled										
2022- City of Lackawanna -012	Highview Circle Beaver Dam	1, 2	Flood	**Problem:** There is a beaver dam off of Smoke Creek behind residences on Highview Circle, which results in flooding. **Solution:** The city will work to relocate/eliminate the beaver population in the area and break up dams when they are formed. The city will work with residents in the area to monitor the waterways for new beaver dams.	No	Yes, permit may be necessary	1-2 years	Engineering	Medium	High, reduces flooding to homes	Municipal Budget, NYSDEP	High	NSP	NR
2022- City of Lackawanna -013	Temporary and Permanent Housing	1, 2	All Hazards	**Problem:** The city does not have identified temporary or permanent housing locations. **Solution:** The city will work with Erie County to identify and designate locations for temporary and permanent housing, as well as assessing the capacity of the emergency shelter, and increasing this capacity or adding additional shelters as needed.	No	None	6 months	Emergency Management	Low	High	City Budget	High	LPR	ES
2022- City of	RL Property Outreach	1, 2, 3	Flood	**Problem:** There are 164 homeowners living within the SFHA.	No	None	6 months	Floodplain Administrator	Low	High	City Budget	High	EAP	PI

Table 9.30-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Lackawanna -014				**Solution:** The city will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the city will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.30-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City of Lackawanna-001	Work with the Bethlehem Steel Station #212 owner on how they can protect their facility to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -002	Protect the Seal Street Pump Station to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -003	Assess the flood risk at the Wastewater Pump Station near Hamburg Turnpike (Unnamed)	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -004	Assess the flood risk at the Wastewater Pump Station near Highway 5 (Unnamed)	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -005	Protect the Wastewater Pump Station near Smoke Creek (Unnamed) to the 0.2% annual chance flood event	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -006	Assess the flood risk at the Wilmuth Avenue Pump Station	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -007	Work with the private building owners in the city to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High

Table 9.30-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	protect them from earthquakes																
2022- City of Lackawanna -008	Work with the Electric Power Station No 713127 owner to protect the facility from wildfires	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -009	Protect the critical facilities in the City of Lackawanna from HazMat incidents	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -010	City Hall Building Replacement	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022- City of Lackawanna -011	Bridge Upgrades	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022- City of Lackawanna -012	Highview Circle Beaver Dam	1	1	1	1	1	1	-1	0	1	1	0	1	1	1	10	High
2022- City of Lackawanna -013	Temporary and Permanent Housing	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2022- City of Lackawanna -014	RL Property Outreach	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.30.9 Action Worksheets

The following action worksheets have been developed by the City of Lackawanna to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	City Hall Building Replacement		
Project Number:	2022- City of Lackawanna -010		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Current City Hall is suspended on Steel columns showing signs of structural deterioration. If they further destabilize before replacement City Hall operations will be disrupted, which will affect ability to coordinate any disaster response.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will determine the feasibility to replace the City Hall building due to the structural instability of the front pillars.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures continuity of operations
Useful Life:	50 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Municipal Budget, BRIC
Responsible Organization:	Engineering	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Replace steel columns	$500,000	Possibility to deteriorate in future and problem re-occurs
	Relocate City Hall	N/A	No available land

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	City Hall Building Replacement	
Project Number:	2022- City of Lackawanna -010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Prevents building collapse
Property Protection	1	Protects critical facility
Cost-Effectiveness	1	
Technical	1	
Political	1	City supports
Legal	1	
Fiscal	-1	Will seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Bridge Upgrades		
Project Number:	2022- City of Lackawanna -011		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Numerous bridges throughout Lackawanna are deteriorating and in poor condition, including Warsaw Bridge, two bridges on Electric Avenue, and McKinley Bridge.		
Action or Project Intended for Implementation			
Description of the Solution:	The city will seek funding for the following upgrades: • Warsaw Bridge – replace the bridge and raise the roadway and new bridge above the floodplain. Engineers are currently inspecting and conducting a structural review of sections of the Bridge with NYS DOT to determine level of disrepair and deterioration. The city will seek funding to preform a complete rehabilitation of the bridge. It currently is closed to vehicle traffic until repairs are complete. • Electric Ave Bridges – repair and replace the bridges crossing Smoke Creek • McKinley Bridge – needs to be dismantled		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	High
Useful Life:	50 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA BRIC, BRIDGE NY, Municipal Budget
Responsible Organization:	Engineering	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadway	$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Bridge Upgrades	
Project Number:	2022- City of Lackawanna -011	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	
Property Protection	1	Ensures function of essential roadways
Cost-Effectiveness	1	Will seek best solutions based on BCA
Technical	1	DPW can implement
Political	1	City supports
Legal	1	
Fiscal	-1	
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	Flood is main issue
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 69-Section-9.30-Lackawanna-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.31 TOWN OF LANCASTER

This section presents the jurisdictional annex for the Town of Lancaster. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Lancaster's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.31.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Lancaster's hazard mitigation plan primary and alternate points of contact. The Town of Lancaster followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Disaster Coordinator, Supervisor, and Code Enforcement Officer. The Disaster Coordinator represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.31-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ronald Rozler, Disaster Coordinator Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 684-1232 Email: rrozler@lancasterny.gov	Name/Title: Ronald Ruffino Sr, Supervisor Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 683-1610 Email: rruffino@lancasterny.gov
NFIP Floodplain Administrator	
Name/Title: Matt Fischione, Code Enforcement Officer Address: 21 Central Ave #1, Lancaster, NY 14086 Phone Number: (716) 684-4171 Email: mfischione@lancasterny.gov	

9.31.2 Municipal Profile

The Town of Lancaster is in the north central portion of Erie County. The town is bounded by the Town of Clarence to the north, the Town of Elma to the south, the Town of Alden to the east, and the Town of Cheektowaga to the west. The town contains both the Village of Lancaster and the Village of Depew. The town is located approximately 11 miles east of downtown Buffalo and is 37 square miles in size. Cayuga Creek and Ellicott Creek run through the town.

The Town of Lancaster was first settled by members of the Erie Indian tribe and later by the Seneca Indians. In the early 1800s, white settlers displaced the Seneca. The town was originally called Cayuga Creek when it was formed from a part of the original Town of Clarence, the town incorporated in 1833 and then in 1857, the town's southern half was taken to form the Town of Elma. An important part of Lancaster's history has included

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

immigration from different nations. German and Dutch and later eastern Europe and Italy immigrants arrived in waves over the years. Five major railroads were developed in the town during the 19th and 20th centuries. The town's first schoolhouse was constructed in 1868 and the town continued to experience rapid growth. Most residents were farmers and most of the land was cleared for farming. Twelve buildings in the town are on the National Register of Historic Places.

During the Second World War, war materials were produced in the town. By 1950, Lancaster's population reached 18,471; with most development situated in the two Villages of Lancaster and Depew. The 1960 census showed a population of 25,605. In the 1980s, the population growth slowed. For several decades Lancaster has served as a bedroom community of Buffalo. Lancaster High School is Erie County's largest school in both student population and square footage. The New York State Thruway, US Route 20 and NYS 33 and 78 pass through the town. (Town of Lancaster 2020)

According to the U.S. Census, the 2010 population for the Town of Lancaster was 25,865. The estimated 2019 population was 27,625, a 6.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 17.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.31.3 Jurisdictional Capability Assessment and Integration

The Town of Lancaster performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.31.3). The Town of Lancaster's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Lancaster. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.31-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Adopted 7-16-1984 by Local Law Number 1-1984. Chapter 140 – Uniform Construction Code.	Local	Building Department / Code Enforcement Officer
Comment: *The following is meant to provide information on the intent of the building permits:* *The building permits are required for bonfires and burning of rubbish; and storage of underground tanks, explosives, cryogenic liquids.* *The Building Inspector may address dangerous or unsafe buildings or structures pursuant to the code and the terms of this article.* *Whenever the Fire Inspector finds a building or structure, or part thereof, to be an imminent danger to life and safety of the public as a result of a fire or explosion, the Fire Inspector shall report the same to the Building Inspector, and the Building Inspector may cause it to be demolished and removed or may cause work to be done in and about the building or structure as may be necessary to remove the danger.*					
Zoning Code	Yes	No	Adopted by the Town Board of the Town of Lancaster 11-16-2020 by Local Law Number 1-2020. Chapter 400, Zoning.	Local	Planning Board
Comment: *The purpose and intent of this Zoning Law is to provide for the orderly growth of the Town and to promote and protect to the fullest extent permissible the environment of the Town and the public health, safety, convenience, comfort, prosperity and general welfare of its residents by regulating the use of buildings, other structures and land for residences, open space, public facilities, business, services, industry or other purposes; by regulating and restricting the bulk, height, design, lot coverage and location of structures, by regulating and limiting population density; and, for the aforesaid purposes, to divide the land within the limits of the Town into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan; and to provide procedures for the administration and amendment of said Zoning Law.* *The town has an environmental resource protection overlay district (ERPOD). The purpose of this district is to provide special controls for development in significant sensitive environmental areas within the Town of Lancaster, as determined by the Town Board. These regulations are superimposed over general zoning district provisions and should be considered as additional requirements to be met by the applicant or developer prior to project approval. These regulations are in addition to the requirements for floodplain development contained in Town Code, Chapter 182, Flood Damage Prevention, as well as any wetlands regulations and permit requirements promulgated by the federal or state government. There are four ERPODs – wetlands, watercourses, steep slopes, and woodlots. Any proposed development in these districts need to be reviewed by the Planning Board as part of the subdivision or site review process.*					
Subdivision Ordinance	Yes	No	Chapter 400-38 - Subdivision.	Local	Planning Board
Comment: *These regulations for the subdivision of land were enacted to provide for the orderly growth and coordinated development of the Town of Lancaster (the "Town") and its subdivisions, to ensure the comfort, convenience, safety, health, and welfare of Town residents. Any proposed subdivisions must be approved by the Planning Board.*					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 300 - Stormwater Management and Erosion and Sediment Control.	Local	Stormwater Management Officer
Comment: *The purpose of this chapter and Chapter 400, Article XIII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 300-1 hereof. This chapter and Chapter 400, Article XIII, seeks to meet those purposes by achieving the following objectives:* *A. Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* *B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* *D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* *E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* *F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 400-75 Article XIV Administration and Enforcement.	Local	Planning Board
Comment: *The intent of site plan review is to evaluate specified land uses in terms of their suitability to natural site conditions, their compatibility with surrounding land uses and their conformance with overall plans for the community, thus minimizing possible adverse effects on the health, safety and welfare of local residents.*					
Environmental Protection Ordinance	Yes	Yes	400 -26, Environmental Protection Overlay District.	Local	Planning Board
Comment: *The purpose of this section is to provide special controls for development in significant sensitive environmental areas within the Town of Lancaster, as determined by the Town Board. These regulations are superimposed over general zoning district provisions and should be considered as additional requirements to be met by the applicant or developer prior to project approval. These regulations are in addition to the requirements for floodplain development contained in Town Code, Chapter 182, Flood Damage Prevention, as well as any wetlands regulations and permit requirements promulgated by the federal or state government.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 182 – Flood Damage Prevention	Local	Building Inspector
Comment: *It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.* *C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages.* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.* *F. Qualify for and maintain participation in the National Flood Insurance Program.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 300 Stormwater Management and Erosion and Sediment Control	Local	Stormwater Management Officer
Comment: *The purpose of this chapter and Chapter 400, Article XIII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 300-1 hereof. This chapter and Chapter 400, Article XIII, seeks to meet those purposes by achieving the following objectives:* *A. Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* *B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* *D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* *E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* *F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.*					

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Emergency Management Ordinance	Yes	Yes	Chapter 70 – Alarm Systems. Adopted by the Town Board of the Town of Lancaster 5-6-2013	Local	Town Board
Comment: *It is the intent of this chapter to protect and promote the health, safety and general welfare of the residents of the Town of Lancaster by reducing the number of avoidable alarms of fire, intrusion, holdup or other emergencies which contribute to ineffective utilization of police, fire and medical emergency agencies; and which require emergency responses which are susceptible to high accident rates, interfere with genuine emergencies (responses) and produce unnecessary alarm noise to the surrounding community.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster Comprehensive Plan Adopted February 2018	Local	Planning Board
Comment: *The goals and intent of the comprehensive plan include the following: 1) Prioritize a list of critical open spaces to preserve the Town's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements. 2) Allow conservation development in the Town code. 3) The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features. 4) The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities. 5) Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities. 6) Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought. 7) Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters. 8) Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects. 9) The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	Yes	No	Stormwater Management Plan - May 2018.	Local	Stormwater Management Officer
Comment: *The intent of the plan include the following: 1) Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions. 2) Develop a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most current technical standards. 3) Develop a law, ordinance or other regulatory mechanism to require post-construction runoff*					

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
controls from new development and redevelopment projects to the extent allowable under State law that meet the State's most current technical standards.					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No/ NA	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2020 – *Town of Lancaster Emergency Management*	Local	Town OEM
Comment: *The intent and goals of the department and plan include the following:* • *Provide comprehensive guidance on hazard mitigation initiatives within the municipality.* • *Outline the various roles and intent of the departments during a hazard event.* • *Provide the community to conduct strategic planning to reduce exposure to hazards and mitigate risk.*					

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Lancaster to oversee and track development.

Table 9.31-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Department – before any person erects, constructs, alters, moves, demolishes or commences to erect, constructs, alters, moves or demolishes any building or structure in the town or village, a building permit must be applied for and approved by the Building Inspector.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Yes
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The town is relatively built out and is suburban in characteristic.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Lancaster and their current responsibilities which contribute to hazard mitigation.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.31-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Town of Lancaster Planning Board reviews all development projects which take place in the Town and makes recommendations to the Town Board based on its findings. The Planning Board may also generate or review proposed ordinances that may become part of Town law and make the appropriate recommendations to the Town Board. Public Hearings for proposed subdivisions will be held before the Planning Board. The Planning Board is therefore seen as a referral and advisory body.
Zoning Board of Adjustments	Yes	The Town Clerk attends all meetings of the Zoning Board of Appeals and must keep a complete and accurate record of all official actions of the Zoning Board.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Town of Lancaster Highway Department performs year-round maintenance on 154 lane miles of Town roads. The Highway Department is under contract with Erie County for 16 miles of County roads in the Town of Lancaster for snow and ice removal. Listed below are the services provided by the Highway Department. • Brush Pick up • Carcass Removal • Ditch Clean Up • Leaf Pick up • Paving and Pot Hole Repair (Town roads only) • Snow Plowing/Snow Removal • Roadside culvert pipe installation • Road Sweeping • Drainage • County/State Road List
Construction/Building/Code Enforcement Department	Yes	The main function of the Building Department is to issue and inspect issued building permits for the Town and Village of Lancaster. The department enforces the IBC, fire codes, local zoning codes, and federal floodplains. The department also receives resident complaints with regard to building and zoning issues.
Emergency Management/Public Safety Department	Yes	The main functions of emergency management include: • Support all Emergency Services organizations in the Town. • Provides Public Education to residents – FEMA Emergency Preparedness classes. • Emergency Operations Center used during large incidents and State of Emergency. • Table-top training area available for all departments to run scenarios. • Performs emergency planning for the Town. • Available for mutual aid to surrounding communities.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED - The secure, customized Community Notification Enrollment (CNE) page allows residents and businesses to add or update their contact information to ensure they will be included when a message is sent – unlisted numbers, mobile numbers, TDD/TTY requirements can all be entered.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Fire
Other		-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineering
Planners or engineers with an understanding of natural hazards	Yes	Town Engineering
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector
Surveyor(s)	No	-
Emergency Manager	Yes	Disaster Coordinator
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Lancaster.

Table 9.31-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	None

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Lancaster.

Table 9.31-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Clerk
Personnel skilled or trained in website development	Yes	Clerk
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	The town uses CodeRED to issue emergency warnings and notifications to residents.
Natural disaster/safety programs in place for schools	No	-
Other	None	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Lancaster.

Table 9.31-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.31-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong – NA
Cyber Attack	Moderate
Earthquake	Strong – NA
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Strong
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.31.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Matt Fischione, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Lancaster.

Table 9.31-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Lancaster	74	52	$366,231	10	41

Source: *FEMA 2020a, FEMA 2020b*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

There are various areas within the municipality that flood and are addressed in the mitigation actions. Currently there is no inventory of properties damaged by flooding. The town does not have a list of property owners interested in flood mitigation as mitigation is not a topic of interest to residents or business owners outside of avoiding Flood Insurance requirements. There are no RiskMAP projects underway. The town makes substantial damage determinations through visual inspections conducted by the building inspector. Currently there is no inventory of damaged properties from flood events as historically this has not been a significant concern in the municipality. Thus, there are been no property mitigation projects in recent years. The only project that was related to flood mitigation was Stony Road Bridge replacement conducted by Erie County Highway Department. Current flood maps adequately address existing areas of concern in the municipality.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The Town of Lancaster Building Department is responsible for floodplain management and has certified floodplain managers on staff. The department has adequate resources to address flood concern from climate change. The department is currently seeking public outreach and planning board training opportunities regarding floodplain management. The department capabilities include floodplain permit review and enforcement of the NFIP program. Substantial improvement is determined if the property is new construction or substantial value in terms of repair and replacement with consideration to the overall property value. Current property owners and funding is lacking. The most recent Community Assistance Visit (CAV) was on October 6, 2016. The local law number for FDPO is Town Code, Chapter 182 (Flood Damage Prevention) May 6, 2019 and the existing program meets minimum standards. Other programs, ordinances, and plans that support floodplain management includes the Planning Board. The town is not interested in joining the CRS program, though there are preliminary discussions occurring regarding the program.

9.31.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Lancaster has identified the following routes and procedures to evacuate residents prior to and during an event.

- East and West Evacuation: Broadway, Walden Avenue, and Green Street
- North and South: Transit Road, Central Avenue, Bowen Road, Pavement Road, and Town Line Road.

Sheltering

The Town of Lancaster has identified the following designated emergency shelters within the town.

Table 9.31-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	No	Yes	Yes	Immediate Care	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Lancaster has identified the following sites suitable for placing temporary housing units.

Table 9.31-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Senior Center	100 Oxford Ave, Lancaster, NY 14086	200	Lot	All	Unknown

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Lancaster has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.31-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unknown	Park	All	Will need to work with County/ State to clarify town's needs

9.31.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.31-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.31-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	149	0	106	0	76	0	80	0	82	0	107	0
Multi-Family	19	0	23	0	2	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	5	0	13	0	6	0	8	0	9	0	6	0
Total Permits Issued	173	0	142	0	84	0	88		91	0	114	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Hidden Meadows	Residential	88	Aurora St	SFHA, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area	Half developed
Pleasant Meadows	Residential	89	Pleasant View Dr	SFHA, Wildland-Urban Intermix Hazard Area	Completed
Summerfield Farms Ph 6,7 &8	Residential	152	William St	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Final phase completion
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Windsor Ridge South	Residential	200	127.01-3-22	1-percent Annual Chance Flood Event Hazard Area, 0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
Windsor Ridge South	Residential	200	127.01-2-21	Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
185 Siebert/CMK	Residential	20	127.01-1-35.1	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Soil Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, Expansive Soils Hazard Area	Pos Dec/Draft EIS
Stutzman Rd. Subdivision	Residential	20	93.10-1-5.2	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Pos Dec/Draft EIS

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

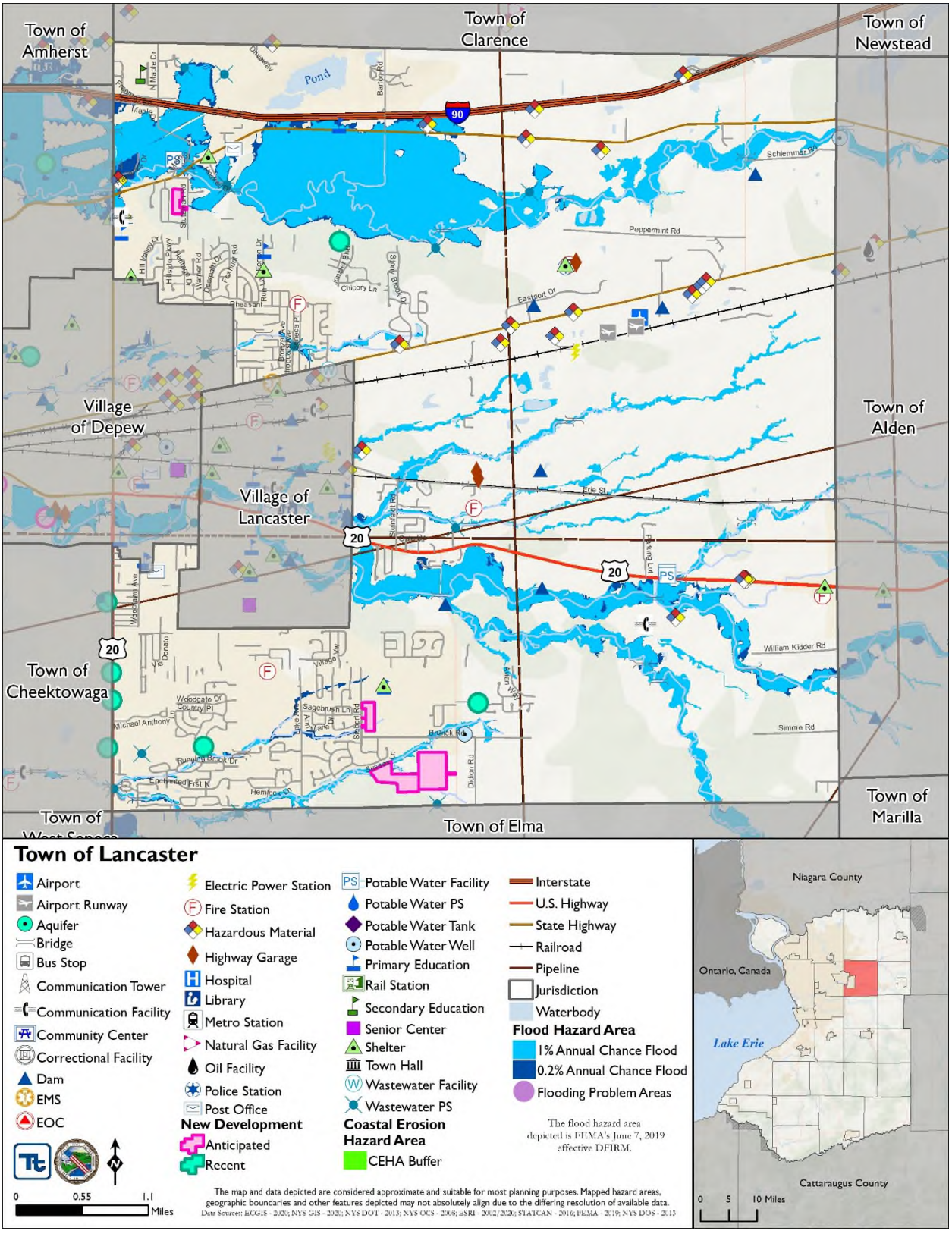
9.31.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Lancaster's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Lancaster has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

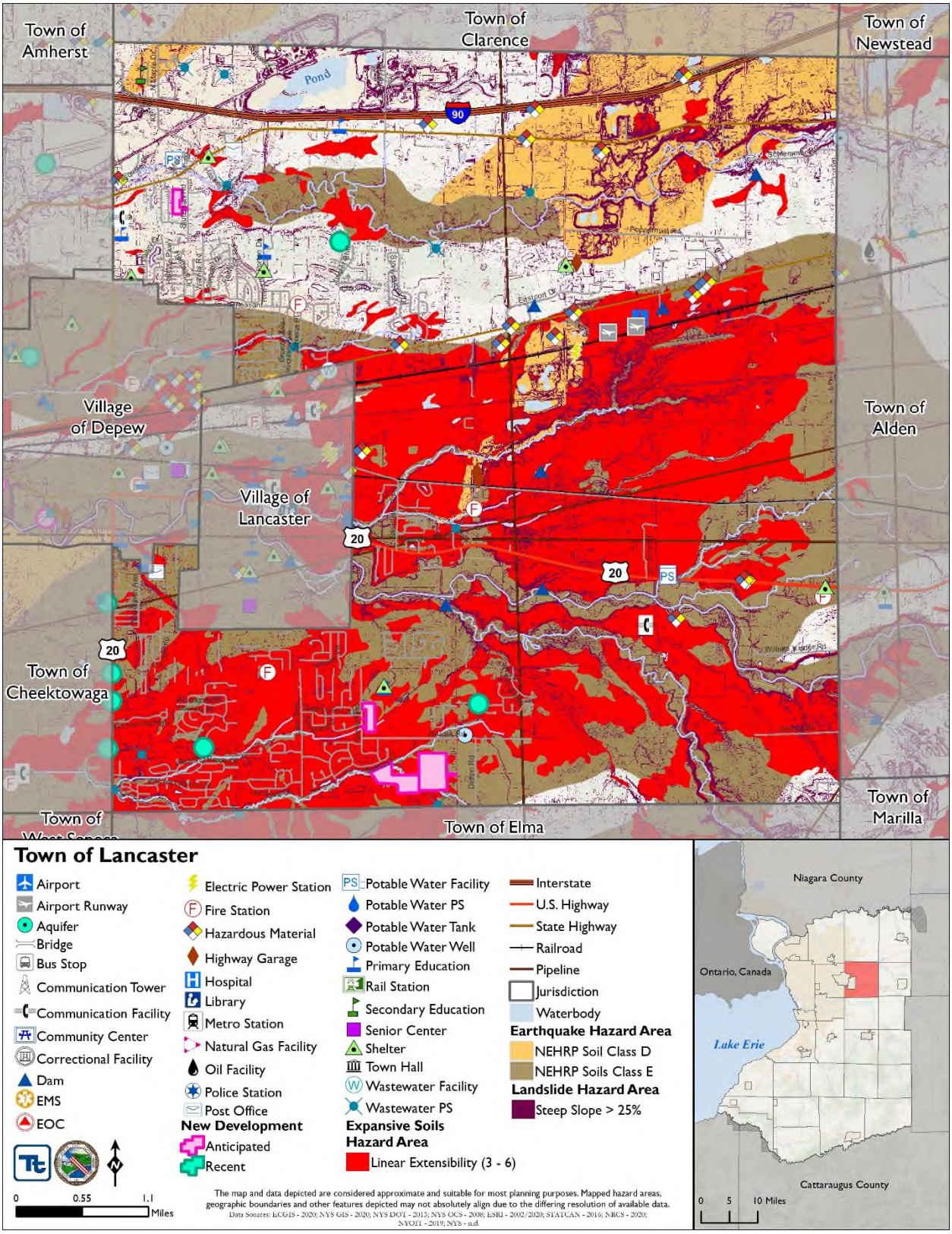
Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.31-1. Town of Lancaster Hazard Area Extent and Location Map 1



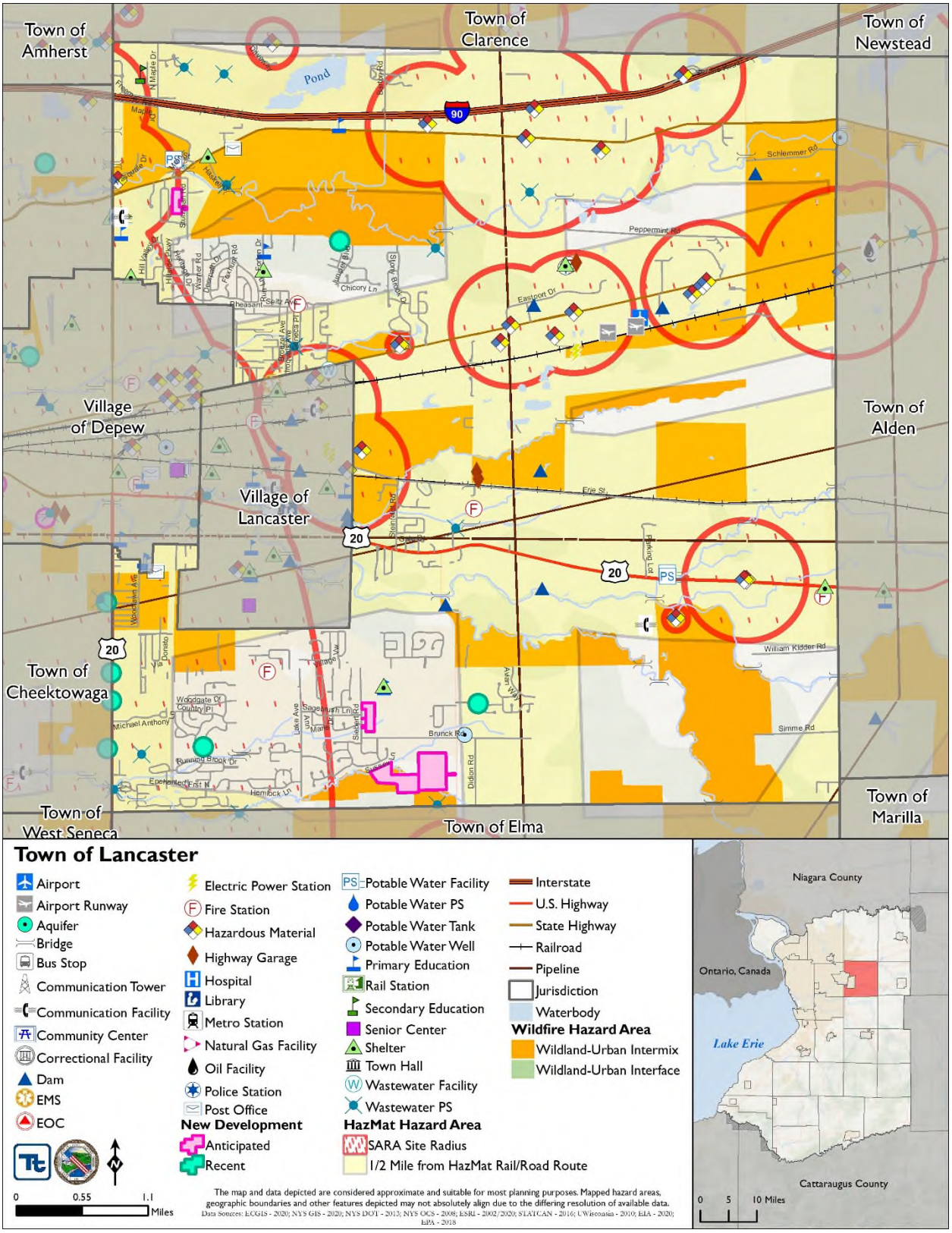
Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.31-2. Town of Lancaster Hazard Area Extent and Location Map 2



Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.31-3. Town of Lancaster Hazard Area Extent and Location Map 3



Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Lancaster's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.31-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.31-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	*No*	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	While this event impacted Erie County, the town did not identify losses or damages.
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	While this event impacted Erie County, the town did not identify losses or damages.
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	While this event impacted Erie County, the town did not identify losses or damages.
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	While this event impacted Erie County, the town did not identify losses or damages.
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara	While this event impacted Erie County, the town did not identify losses or damages.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	While this event impacted Erie County, the town did not identify losses or damages.
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	While this event impacted Erie County, the town did not identify losses or damages.
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	While this event impacted Erie County, the town did not identify losses or damages.
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	While this event impacted Erie County, the town did not identify losses or damages.
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	While this event impacted Erie County, the town did not identify losses or damages.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In	While this event impacted Erie County, the town did not identify losses or damages.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	While this event impacted Erie County, the town did not identify losses or damages.
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	While this event impacted Erie County, the town did not identify losses or damages.
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	While this event impacted Erie County, the town did not identify losses or damages.
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	While this event impacted Erie County, the town did not identify losses or damages.
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	While this event impacted Erie County, the town did not identify losses or damages.
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	While this event impacted Erie County, the town did not identify losses or damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	While this event impacted Erie County, the town did not identify losses or damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	While this event impacted Erie County, the town did not identify losses or damages.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3–5-hour period in the cold advection behind the cold front.	While this event impacted Erie County, the town did not identify losses or damages.
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	While this event impacted Erie County, the town did not identify losses or damages.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	While this event impacted Erie County, the town did not identify losses or damages.
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Lancaster's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Lancaster. The Town of Lancaster has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town did not provide any feedback on the following hazard rankings.

- Earthquakes are not a significant hazard in the town and thus will be re-ranked from a high to a medium.
- While expansive soils might be present in the town, the municipality has been working to mitigate this hazard and thus has expanded capacity and will re-ranked this from a high to medium.
- Flooding has caused significant damage to the community and will be re-ranked from a low to high.
- Hazardous material has posed numerous threats to the community with heavy thru traffic and will be re-ranked from low to medium.
- Wildfires have previously posed threat to the community and will be re-ranked from low to medium.

Table 9.31-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Medium	Medium	High	Medium

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.31-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure 1% Event	Exposure 0.2% Event	Addressed by Proposed Action
Lancaster Country Club Dam	Dam	X	X	2022-Town of Lancaster-001
Bowmansville Fire Station	Fire Station	X	X	2022-Town of Lancaster-002
Main St Potable Water Facility	Potable Water Facility	X	X	2022-Town of Lancaster-003
Bowmansville #3 Pump Station	Wastewater Pump Station	X	X	2022-Town of Lancaster-004

Source: GIS 2020

Identified Issues

After review of the Town of Lancaster's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Lancaster has identified the following vulnerabilities within their community:

- The Lancaster Country Club Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Bowmansville Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Main Street Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Bowmansville #3 Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Lancaster Airport, dams, hazardous material facilities, private schools, and the Trocaire College are located in the earthquake hazard area.
- There are several private critical facilities in the town that are located in the wildfire hazard area.
- Several of the critical facilities in the Town of Lancaster may be at risk of being exposed to hazardous materials incidents.
- Ansel Morris Pond Dam, Dolatowski Pond Dam, Lancaster Country Club Dam, Lynn Wanamaker Pond Dam Tops Markets Distribution Center, and United Silicone Inc are located on steep slopes and at risk of landslides.
- There are several communication facilities, dams, and Hazardous Material facilities located on expansive soils and may be at risk of experiencing damages caused by expansive soils.
- The channel of Ellicott Creek Corridor has been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.
- The channel of Slate Bottom Creek and Plum Bottom Creek have been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.
- The Town of Lancaster has two landfills within the jurisdiction as well as rail lines and major routes like Interstate 90 that often have vehicles that contain/ carry hazardous waste. Naturally, the town is

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

vulnerable to the potential failure of these various entities due to severe storm, severe winter storm, earthquake/ ground failure, flooding, and other natural hazards. While for most municipalities, these events would only bring minor property damage to the community, for the Town of Lancaster, any of these events that have the ability to cause property damage/ vehicular accidents, could lead to catastrophic scenarios where the entire town would need to evacuate due to hazardous waste spillage facility failure, and thus causing temporary or even permanent contamination and damage to the entire community.

- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

9.31.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.31-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Road repair/ culvert reconstruction – various locations County-wide	Flooding	Not Identified	Town Highway	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
2	Debris Removal from Creeks & Streams – various locations County-wide	Flooding	Not Identified	Town Highway	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. Ongoing 3. Ongoing
3	NOAA Storm Watcher and Storm Ready Programs	Natural events	Not Identified	Emergency Services	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
4	Tree removal & trimming along various County roads to prevent power outages and road closures.	Severe storms, tornadoes, winter storms, high winds, ice storms	Not Identified	Town Highway	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
5	Replace & upgrade storm drainage system along various County roads to reduce flood risks.	Flooding	Property Damage	Town Highway	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
6	Inter-operable table radio communications improvements to all Town	All Hazards	Not Identified	Emergency Management	Complete	Cost Level of Protection	- -	1. Discontinue 2.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	agencies and Department radio systems to have the availability to communicate with each other					Damages Avoided; Evidence of Success	-	3. All Fire, EMS & Police have the ability to communicate with each other
7	Reduce damage to roads and private property by cleaning all small streams and creeks; Cleaning of large creeks must start downstream through several jurisdictions to be effective	Flood	Flood damage to roads and private property	Town Engineering	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
8	Buy out homes and effected business in the flood plain resulting in the demolition of homes	Flood	Protect 80-100 families and 50-75 employees from repetitive flooding	Federal Government	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
9	Mitigation of Bowmansville Vol. Fire house by building approx. 700' long x 5' high berm around sides and rear, evacuate and fill-in basement	Flood	Critical facility at 36 Main St, Bowmansville, NY 14026	Bowmansville Vol. Fire Association	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing
10	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Building & Code Enforcement	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
11	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building & Code Enforcement	Ongoing Capability	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Ongoing

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Lancaster has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The town continues to maintain and upgrade existing stormwater and road infrastructure to reduce threat to flooding.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Lancaster participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.31-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils				X			X			
Extreme Temperature										
Flood		X	X	X		X	X	X		X
Hazardous Materials		X		X			X			X
Landslide				X			X			
Pandemic										
Severe Storm		X	X					X		X
Severe Winter Storm		X	X					X		X
Utility Failure		X								X
Wildfire				X			X			

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.31-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Lancaster would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.31-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Lancaster-001	Lancaster Country Club Dam Flood Prevention	1,2	Flood	**Problem**: The Lancaster Country Club Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of Lancaster-002	Protect the Bowmansville Fire Station to the 0.2% annual chance flood event	1,2	Flood	**Problem**: The Bowmansville Fire Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Bowmansville Fire Station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-Town of Lancaster-003	Protect the Main Street Potable Water Facility to the 0.2% annual	1,2	Flood	**Problem**: The Main Street Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant	High	EAP	PI

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	chance flood event			**Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.							Program, EMPG			
2022-Town of Lancaster-004	Protect the Bowmansville #3 Pump Station to the 0.2% annual chance flood event	1,2	Flood	**Problem**: The Bowmansville #3 Pump Station is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what floodproofing measures are needed at the pump station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	None	Within 5 years	FPA, Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI
2022-Town of	Earthquake Structural Assessment	All	Earthquake	**Problem**: The Lancaster Airport, dams, hazardous material facilities, private	Yes	None	Within 6 months for outreach	FPA, Engineer, facility manager	<$100 for outreach, TBD by	The facility owners are aware of	Town Budget	High	EAP	PI

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Lancaster-005				schools, and the Trocaire College are located in the earthquake hazard area. **Solution**: Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes. Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes					engineering study	options to protect the facilities facility from potential earthquake damage				
2022-Town of Lancaster-006	Work with the private facility owners to protect the facilities from wildfires	All	Wildfire	**Problem:** There are several private critical facilities in the town that are located in the wildfire hazard area. **Solution:** Work with facility owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facilities.	Yes	None	Within 6 months for outreach	FPA, Engineer, facility manager	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Lancaster-007	Protect the critical facilities on the Town of Lancaster from HazMat incidents	All	Hazardous Materials Incidents	**Problem:** Several of the critical facilities in the Town of Lancaster may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Lancaster-008	Work with private facility owners to protect the facilities from landslides	All	Landslide	**Problem:** Ansel Morris Pond Dam, Dolatowski Pond Dam, Lancaster Country Club Dam, Lynn Wanamaker Pond Dam Tops Markets Distribution Center, and United Silicone Inc are located on steep slopes and at risk of landslides. **Solution:** Work with private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI
2022-Town of Lancaster-009	Work with private facility owners to protect the facilities from expansive soils	All	Expansive Soils	**Problem:** There are several communication facilities, dams, and Hazardous Material facilities located on expansive soils and may be at risk of experiencing damages caused by expansive soils. **Solution:** Work with the facility owners to determine if risk exists and assess the structure and determine necessary mitigation measures to protect them from expansive soils.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities from expansive soils	Town Budget	High	EAP	PI
2022-Town of Lancaster-010	Ellicott Creek Bank Stabilization	1,2	Flood, Severe Storm, Severe Winter Storm	**Problem:** The channel of Ellicott Creek Corridor has been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation	No	No	3 years	Town Highway	$1 million	Flood Mitigation	HMGP, BRIC	High	NSP	NR

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed. **Solution:** The town will conduct a comprehensive assessment of the banks of the creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town will work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.										
2022-Town of Lancaster-011	Slate Bottom and Plum Bottom Creek Bank Stabilization	1,2	Flood, Severe Storm, Severe Winter Storm	**Problem:** The channel of Slate Bottom Creek and Plum Bottom Creek have been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks. **Solution:** The town will conduct a comprehensive assessment of the banks of the	No	No	3 years	Town Highway	$1 million	Flood Mitigation	HMGP, BRIC	High	NSP	NR

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town will work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.										
2022-Town of Lancaster-012	HazMat Accident Preparation due to severe storms	1,2,4	Severe Storm, Severe Winter Storm, Flood, Hazardous Waste, Utility Failure	**Problem:** The Town of Lancaster has two landfills within the jurisdiction as well as rail lines and major routes like Interstate 90 that often have vehicles that contain/ carry hazardous waste. Naturally, the town is vulnerable to the potential failure of these various entities due to severe storm, severe winter storm, earthquake/ ground failure, flooding, and other natural hazards. While for most municipalities, these events would only bring minor property damage to the community, for the Town of Lancaster, any of these events that have the ability to cause	Yes	Yes	3 years	Town OEM, Highway, and County	High	Mitigation of permanent environmental damage	USDOT Hazardous Material Grant Program (HMEP, ALERT, HMIT, SPST, and CS); NYS Hazardous Materials Emergency Planning Grant (HMEP); HMGP	High	SIP, LPR	ES, PR

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				property damage/ vehicular accidents, could lead to catastrophic scenarios where the entire town would need to evacuate due to hazardous waste spillage facility failure, and thus causing temporary or even permanent contamination and damage to the entire community. **Solution:**. The town will increase the overall capacity of existing emergency services as well as HazMat needs. The town will also consider developing proper emergency evacuation procedures for community members when a hazardous waste accident does occur at these specific routes/ sites. And finally, the town would also need to install a warning system that can facilitate the emergency response when a hazardous waste accident does occur during a storm.										
2022-Town of Lancaster-013	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and	No	No	Within 3 years	FPA, Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	EAP	PI

Table 9.31-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood - prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV *Community Assistance Visit*
CRS *Community Rating System*
Town Highway *Department of Public Works*
EHP *Environmental Planning and Historic Preservation*
FEMA *Federal Emergency Management Agency*
FPA *Floodplain Administrator*
HMA *Hazard Mitigation Assistance*
N/A *Not applicable*
NFIP *National Flood Insurance Program*
OEM *Office of Emergency Management*

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Potential FEMA HMA Funding Sources:

FMA *Flood Mitigation Assistance Grant Program*
HMGP *Hazard Mitigation Grant Program*
BRIC *Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Lancaster-001	Lancaster Country Club Dam Flood Prevention	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-002	Protect the Bowmansville Fire Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-003	Protect the Main Street Potable Water Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-004	Protect the Bowmansville #3 Pump Station to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	0	0	0	0	1	1	8	Medium
2022-Town of Lancaster-005	Earthquake Structural Assessment	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-006	Work with the private facility owners to protect the facilities from wildfires	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-007	Protect the critical facilities on the Town of Lancaster from HazMat incidents	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-008	Work with private facility owners to protect the facilities from landslides	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-009	Work with private facility owners to protect the facilities from expansive soils	1	1	0	0	0	0	1	1	0	0	0	1	1	1	7	Medium
2022-Town of Lancaster-010	Ellicott Creek Bank Stabilization	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Lancaster-011	Slate Bottom and Plum Bottom Creek Bank Stabilization	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.31-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Lancaster-012	HazMat Accident Preparation due to severe storms	1	1	1	0	1	0	-1	1	1	1	1	1	1	1	10	High
2022-Town of Lancaster-013	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.31.9 Action Worksheets

The following action worksheets have been developed by the Town of Lancaster to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Ellicott Creek Bank Stabilization		
Project Number:	2022-Town of Lancaster-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The channel of Ellicott Creek Corridor has previously been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of Ellicott Creek. The neighboring Town of Alden is also experiencing similar issues around bank erosion, and thus sediment accumulation downstream. While the town has previous tried to deal with this issue using dredging and stream clearing, it is not a sustainable solution and thus proper mitigation measures are needed.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would conduct a comprehensive assessment of the banks of the creek within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town would work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Flood Mitigation
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$1 Million	**Mitigation Action Type:**	Natural System Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, BRIC
Responsible Organization:	Town Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Redirect Stream	Extremely Expensive	Nearly impossible
	Riparian Buffer restoration	Expensive	Best solution

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Ellicott Creek Bank Stabilization	
Project Number:	2022-Town of Lancaster-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is most cost effective in the long run
Technical	1	This is technically feasible
Political	1	No political opposition
Legal	1	No legal opposition
Fiscal	-1	Not enough resources
Environmental	1	Positive environmental impact
Social	1	Positive social impact
Administrative	1	No administrative barriers
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	Town Highway
Other Community Objectives	1	Flood Mitigation and nature conservation
Total	12	
Priority (High/Med/Low)	High	

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Slate Bottom and Plum Bottom Creek Bank Stabilization		
Project Number:	2022-Town of Lancaster-011		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The Channel of Slate Bottom Creek and Plum Bottom Creek have previously been cleaned many times due to sediment accumulation. This is the result of the erosion of the banks of these two creeks.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would conduct a comprehensive assessment of the banks of the two creeks within the town and determine the priority areas that need erosion mitigation measures. Once these sites are determined, the town would work with the necessary stakeholders such as the SWCD and DEC to determine the appropriate mitigation measures that can be taken. Such bank stabilization measures could include riparian buffer restoration, use of green infrastructure technology to stabilize banks, concrete walls to mitigate severely eroding areas, and even re-routing stream corridors that are experiencing major land destabilization due to erosion.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Flood Mitigation
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$1 Million	**Mitigation Action Type:**	Natural System Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, BRIC
Responsible Organization:	Town Highway	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Redirect Stream	Extremely Expensive	Nearly impossible
	Riparian Buffer restoration	Expensive	Best solution

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Slate Bottom and Plum Bottom Creek Bank Stabilization	
Project Number:	2022-Town of Lancaster-011	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This project is most cost effective in the long run
Technical	1	This is technically feasible
Political	1	No political opposition
Legal	1	No legal opposition
Fiscal	-1	Not enough resources
Environmental	1	Positive environmental impact
Social	1	Positive social impact
Administrative	1	No administrative barriers
Multi-Hazard	1	Addresses multiple hazards
Timeline	1	Timeline is feasible
Agency Champion	1	Town Highway
Other Community Objectives	1	Flood Mitigation and nature conservation
Total	12	
Priority (High/Med/Low)	High	

Attachment: 70-Section-9.31-Lancaster-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.32 Village of Lancaster

This section presents the jurisdictional annex for the Village of Lancaster. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Lancaster's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.32.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Lancaster's hazard mitigation plan primary and alternate points of contact. The Village of Lancaster followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Director of Emergency Management, Assistant Disaster Coordinator, Department of Public Works Superintendent. The Director of EM represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.32-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Scott M. Kuhlmey, Director of Emergency Management Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 861-7933 Email: skuhlmey@lancastervillage.org	Name/Title: Scott M. Robinson, Assistant Disaster Coordinator Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 430-7530 Email: srobinson@lancastervillage.org
NFIP Floodplain Administrator	
Name/Title: William G. Cansdale/ DPW Superintendent Address: 5423 Broadway, Lancaster, NY 14086 Phone Number: (716) 683-1028 Email: wcansdale@lancastervillage.org	

9.32.2 Municipal Profile

The Village of Lancaster is in the western part of the Town of Lancaster and is 2.7 square miles in size. The village is surrounded by the Town of Lancaster on three sides and by the Village of Depew on its west border. The Cayuga Creek flows through the village and US Route 20 is the village's main road. Bowmansville is a hamlet in the northwest part of town.

The village area was first settled by the Erie Indian and later by the Seneca Indians. After the Revolutionary War, the Holland Land Company sold former Indian reservation lands to immigrants from New England and Europe. The village area at that time was known as Cayuga Creek. The 1825 opening of the Erie Canal spurred more rapid settlement of the village because farmers could ship their crops outside the region. In the 1830s,

large numbers of German immigrants moved into the Lancaster area followed in the 1840s by immigrants from Ireland and Britain who worked on the railroad. The village incorporated in 1849.

Four railroads; Erie RR, Lehigh Valley RR, Delaware, Lackawanna and Western RR, and New York Central Railroads once traversed the village, but today only two remain. Each railroad had a station on Central Ave. (Wikipedia Village of Lancaster, accessed 2020). During succeeding decades, the growing industrial community attracted immigrants from Poland, Italy, Greece and Lithuania. Population growth accelerated during the 1920s but slowed during the Great Depression. The Second World War quickly revived the village's economy as factories produced war materials. (Town of Lancaster, Village of Lancaster, Village of Depew Comprehensive Plan 2000)

According to the U.S. Census, the 2010 population for the Village of Lancaster was 10,352. The estimated 2019 population was 10,144, a 2.0 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.7 percent of the population is 5 years of age or younger and 16.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.32.3 Jurisdictional Capability Assessment and Integration

The Village of Lancaster performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.32.3). The Village of Lancaster's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Lancaster. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.32-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	VC Chapter 156-7, 1970 BOCA	Local	Village Building Department

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *The main purpose of building codes is to protect public health, safety, and general welfare as they relate to the construction and occupancy of buildings and structures.*					
Zoning Code	Yes	No	VC Chapter 350 Amended 4-27-1981 by Local Law Number 2-1981 – Zoning	Local	Village Building Department and Zoning Board
Comment: *The comprehensive zoning plan set forth in the text and maps which constitute this chapter is adopted in order to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets to secure safety from fire, flood, panic and other dangers; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.*					
Subdivision Ordinance	Yes	No	VC Chapter 301, 1976 Adopted by the Board of Trustees of the Village of Lancaster 3-22-1965 – Subdivision of Land	Local	Village Building Department and Zoning Board
Comment: *The regulations herein contained are adopted for the purpose of providing for the sound growth and development of the Village and of affording adequate sites and facilities for transportation and for the safety, health and welfare of its population and for providing reasonable and equitable requirements in the interests of developers, investors and homeowners so as to ensure stable property values, all pursuant to § 334 of the Real Property Law and Article 6-A of the Village Law. No subdivision of land shall be made, nor shall any contract be made for the sale of any part thereof and no permit for the erection of a structure in any proposed subdivision shall be granted and no street, sanitary sewer or water main shall be laid out, constructed, opened or dedicated except in accordance with the provisions of these regulations.*					
Stormwater Management Ordinance	Yes	Yes – for county	VC Chapter 292, 2019. Stormwater Management	Local	Stormwater Management Officer
Comment: *The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in the village. It is hereby determined that:* *A. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;* *B. This stormwater runoff contributes to increased quantities of waterborne pollutants, including siltation of aquatic habitats for fish and other desirable species;* *C. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitats;* *D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation;* *E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;* *F. Substantial economic losses can result from these adverse impacts on the waters of the municipality;* *G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;* *H. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety;* *I. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Site Plan Review	Yes	Yes	VC Chapter 350-56 1-9-1978 by Local Law Number 1-1978; amended 1-22-2007 by Local Law Number 4-2007	Local	Village Planning Commission/ Town Building Department
Comment: *The village planning board reviews the new site in order to improve the functionality or mitigate any potential adverse impacts of the proposed development on neighboring properties. The end result of the process is for the applicant to obtain a special use permit.*					
Environmental Protection Ordinance	Yes	Yes	LL6-1979. Adopted by the Board of Trustees of the Village of Lancaster 6-25-1979 by Local Number 6-1979; amended 1-22-2007 by Local Law Number 4-2007 – Environmental Quality Review	Local	Planning
Comment: *The village to implement SEQR and NYCRR 618. The purpose of this chapter is to implement for the Village of Lancaster SEQR and Part 617.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 160 (Flood Damage Prevention); amended 4/22/2019	Local	DPW Superintendent
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and* *F. Qualify and maintain for participation in the National Flood Insurance Program.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 292 (Stormwater Management); adopted 11/26/2006	Local	Village Dept. Public Works
Comment: *The purpose is to provide for the health, safety, and general welfare of the citizens of the Village of Lancaster through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This Part 2 establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this Part 2 are:* *A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, as amended or revised;* *B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;* *C. To prohibit illicit connections, activities and discharges to the MS4;* *D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Part 2; and* *E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.*					
Emergency Management Ordinance	Yes	Yes	Emergency Regulations – Various sections of Chapter 160 and 325.	Local	Village OEM
Comment: *It is hereby found and declared to be in the best interest and welfare of the general public to expedite the removal of snow, reduce driving hazards and to ensure open roads for the movement of emergency vehicles during snowstorms, flood, serious fire or other extreme public emergency.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Lancaster, Village of Lancaster, Village of Depew Joint Comprehensive Plan. 5/21/18	Local	Village Planning
Comment: *1) Prioritize a list of critical open spaces to preserve the Town's important environmental features, such as stream corridors, wetlands and forested lands, through a variety of tools from acquisition to conservation easements. 2) Allow conservation development in the Town code. 3) The communities should invite the participation of land trusts to help obtain the preservation of valuable land; this could include the Penora Woods area. Land trusts may also play an important role in the acquisition of public access along stream corridors or conservation easements to protect other sensitive environmental or aesthetic features. 4) The Town of Lancaster and Villages of Lancaster and Depew should consider developing a coordinated storm water management plan for the three communities. 5) Storm water drainage plans for proposed new developments should be reviewed by representatives of potentially affected communities. 6) Existing storm water problem areas should be jointly addressed. Such areas include erosion problems along Zurbrick Road in Depew, siltation problems along Scajaquada Creek and seasonal overflows of tributaries to Cayuga Creek. The Zurbrick Road area has recently received funding to improve the erosion problems and additional funding should be sought. 7) Continue to include an assessment of creek cresting patterns when reviewing new development. The cresting patterns determine the expected timing of floods and will enable the communities to plan for flooding situations. This information will also enable the communities to provide appropriate storm water detention for creek waters. 8) Consider soil conditions, topography, floodplains and other environmental conditions when it reviews new development projects. 9) The Town of Lancaster and Villages of Lancaster and Depew should require a drainage plan and detention/retention ponds as appropriate before approving individual site developments. The communities should ensure that site drainage will not adversely affect the property or adjacent properties before granting approval.*				
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Shoreline Management Plan	No	Yes for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	2020 Village CEMP	Local	Emergency Management
Comment: *The plan includes information on how the community can increase capabilities and resilience to severe weather events, human caused disasters, and other acute disasters that occur.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Other	No	No	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Lancaster to oversee and track development.

Table 9.32-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	This is done by the Town of Lancaster's Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	NA	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Lancaster and their current responsibilities which contribute to hazard mitigation.

Table 9.32-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Commission
Zoning Board of Adjustments	Yes	Zoning Board of Appeals
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Village Department of Public Works - Sewer Inspections, Snow Plow Permits, Curb Cut Permits, Leaf Pick Up, Banner and sign reservations, and other services.
Construction/Building/Code Enforcement Department	Yes	Lancaster (Town) Building Dept.-Administer/Enforce State and Local Code
Emergency Management/Public Safety Department	Yes	The Village of Lancaster Office of Emergency Management is actively involved in preparedness activities such as community hazard assessments, multi-jurisdictional hazard mitigation planning, maintaining National Incident Management System NIMS training compliance, maintenance of a special needs registry, drills/exercises, public/private outreach, and emergency planning for events in the Village of Lancaster Special Events Series.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		The Village of Lancaster OEM operates out of the Lancaster Municipal Building located at 5423 Broadway in Lancaster. This building also serves as the Emergency Operations Center (EOC) for use during emergencies. The OEM office is equipped with backup generator power and essential equipment and resources necessary for operations. The Village of Lancaster OEM automatically responds to major incidents and alarms involving at-risk facilities and is capable of deploying mobile resources to assist with emergency operations. Emergencies requiring assets beyond the scope of our agency are supplemented through mutual aid agreement, including neighboring towns and villages, Erie County Emergency Services, and public/private partnership.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW
Mutual aid agreements	Yes	Fire and DPW
Other	NA	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Lancaster Building Dept. NYS CEDAR Program
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	William G. Cansdale/ DPW Superintendent
Surveyor(s)	No	-
Emergency Manager	Yes	Scott M. Kuhlmey, Director of Emergency
Grant writer(s)	Yes	Sarah Meredith
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Lancaster.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.32-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes – for sewer rents only
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Lancaster.

Table 9.32-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk's Office manages website and social media
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	https://www.lancasteroem.org/
Social media for hazard mitigation education and outreach	Yes	Facebook/ Twitter
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Education Outreach events to community and children.
Warning systems for hazard events	Yes	Code RED
Natural disaster/safety programs in place for schools	Yes	Each school has its own under guidance of OEM.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Lancaster.

Table 9.32-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	-
NYSDEC Climate Smart Community	Yes	Registered	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

The Village of Lancaster would like the impacts of climate change to be considered in the 2022 update of the Erie County Hazard Mitigation Plan. Climate change may affect a community's vulnerability to flooding, wildfire, drought, and extreme temperatures. Impacts such as power outages during summer heat waves; increased home, street, and sewer flooding due to heavy precipitation and increased structural damage and impaired operations of critical infrastructure are possible. The Village of Lancaster encourages identification of mitigation actions that reduce these risks and vulnerabilities.

Table 9.32-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong – NA
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.32.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Floodplain Administrator (FPA)

William G. Cansdale/ DPW Superintendent

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Lancaster.

Table 9.32-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Lancaster	16	5	$4,698	0	5

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The village does not maintain a list of flood damaged properties. Existing levees have been built in the late 1930s and are prone to flooding. A steering committee has been formed by the town to work with FEMA, USACE, and DEC to coordinate floodplain mapping updates. There are no risk maps underway nor are there any methods to determine substantial damage determinations. No properties have been mitigated. The flood maps adequately address existing floodplains.

NFIP Compliance

The village DPW deals with floodplain management but there are no certified floodplain managers working for the municipality. The municipality believes they have adequate resources to determine and address flooding issues due to climate change. The village would like assistance with floodplain management certification. No administrative services are provided by the village NFIP program. The Town of Lancaster's Building Department determines substantial damage determination. The village determined that cost is a substantial barrier to running an adequate NFIP program. The most recent Community Assistance Visit (CAV) was on October 6, 2016. The NFIP flood damage prevention ordinance law number is in Chapter 160, Amended in April 2019. The program meets basic requirements. The village site plan review process does account for flood vulnerability. The municipality does not wish to participate in CRS.

9.32.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Evacuations involve several factors, including characteristics of the hazard or threat itself, the magnitude, intensity, speed of onset, duration, and impact on the Village of Lancaster.

These factors will determine the number of people to be evacuated, time available in which to effect the evacuation, and the time and distance of travel necessary to ensure safety. Evacuees are moved from their homes to a designated area within the Village or a neighboring jurisdiction not impacted by the hazard that caused the evacuation.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Sheltering

The Village of Lancaster has identified the following designated emergency shelters within the village.

Table 9.32-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Village of Lancaster Municipal Building	5423 Broadway, Lancaster, New York 14086	Unsure	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Lancaster has identified the following sites suitable for placing temporary housing units.

Table 9.32-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unsure	Park	Water	Electricity

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Lancaster has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.32-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Como Lake Park	2220 Como Park Blvd, Lancaster, NY 14086	Unknown	Park	All	Will need to work with County/ State to clarify town's needs

9.32.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.32-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.32-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	0	0	1	0	2	0	0	0	6	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	2	0	0	0	1	1
Total Permits Issued	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**7**	**1**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Lancaster Village Center	Mixed Use	3 Bldgs.	11 W. Main St. SBL#104.74-4-1.21	Zone AE	Site Plan approved

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

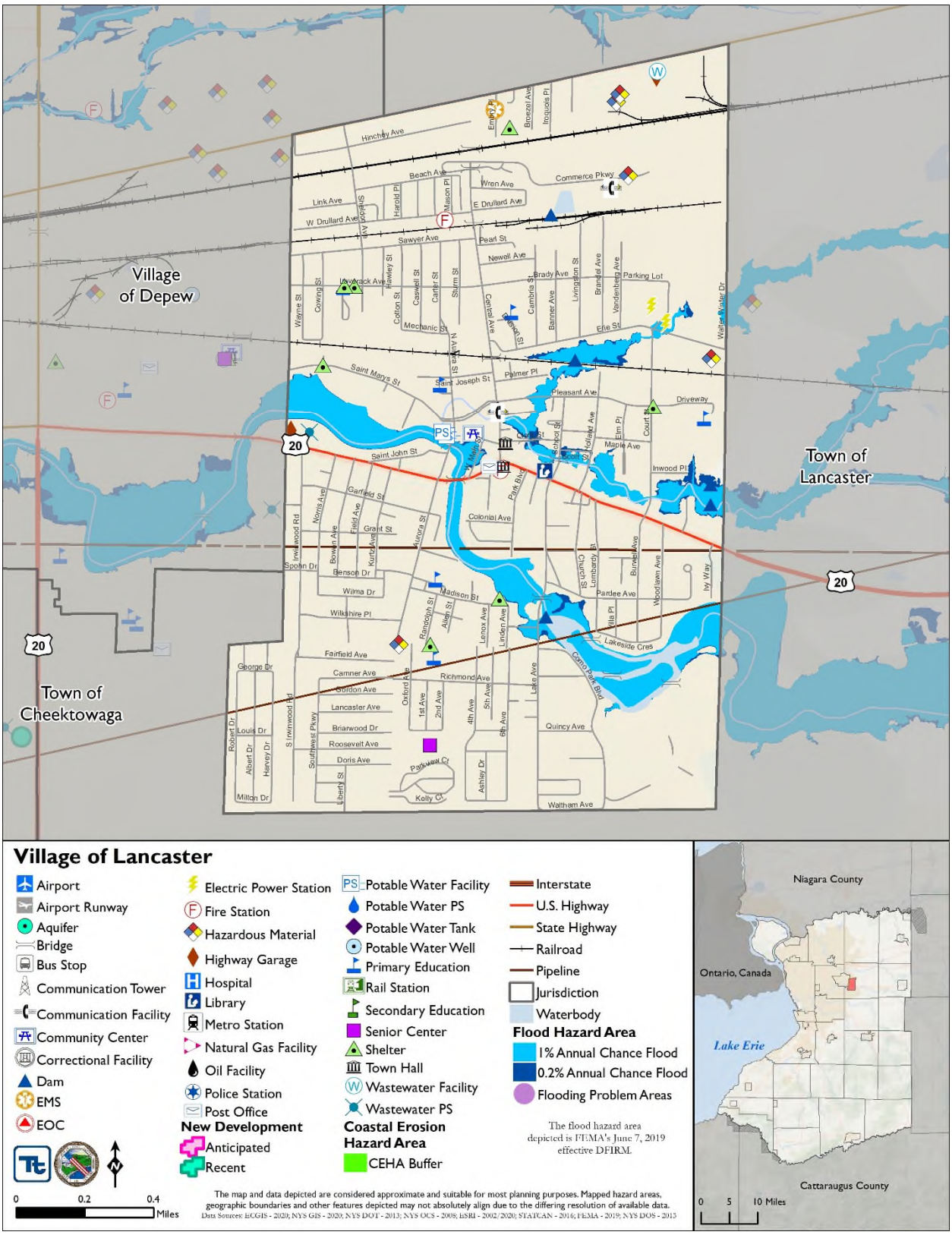
9.32.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Lancaster's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Lancaster has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

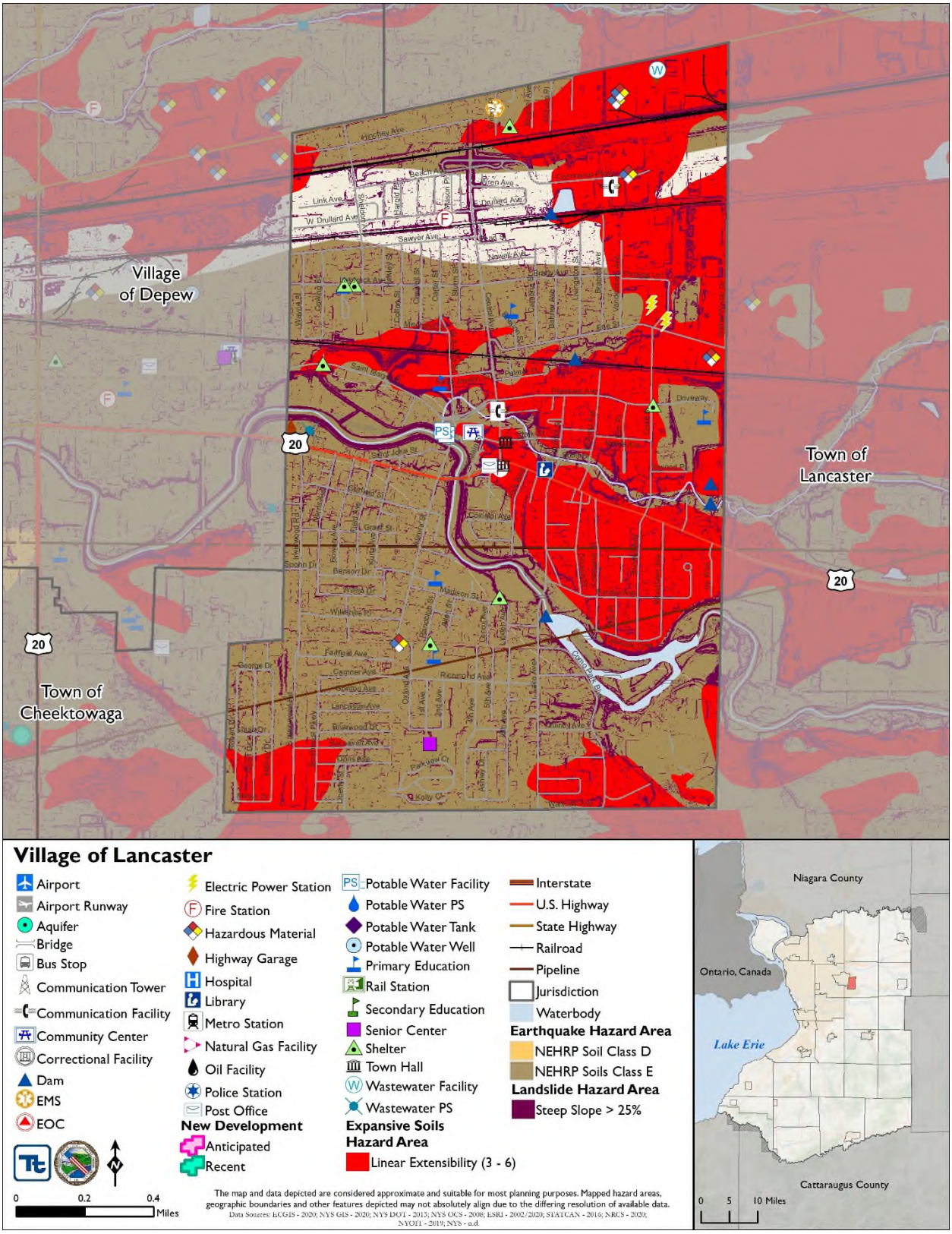
Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.32-1. Village of Lancaster Hazard Area Extent and Location Map 1



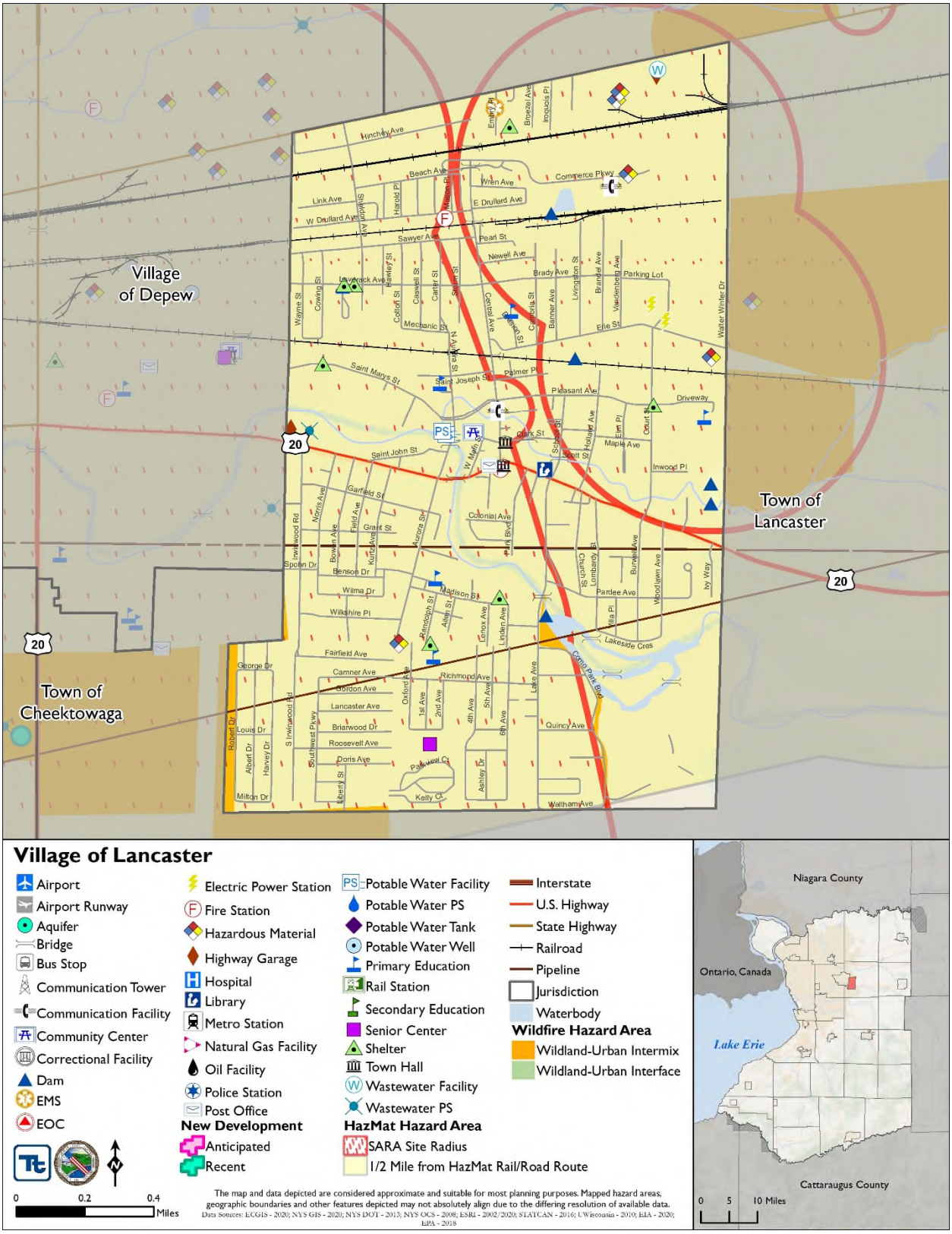
Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.32-2. Village of Lancaster Hazard Area Extent and Location Map 2



Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.32-3. Village of Lancaster Hazard Area Extent and Location Map 3



Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Lancaster's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.32-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.32-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning	While this event impacted portions of Erie County, the village did not

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	identify any losses or damages associated with this event.
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3–5-hour period in the cold advection behind the cold front.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	While this event impacted portions of Erie County, the village did not identify any losses or damages associated with this event.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Village of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Lancaster's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Lancaster. The Village of Lancaster has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The Village has significant risk to flooding and thus would like to re rank Flood from low to high.
- Hazardous materials pose a significant threat due to hazardous material being transported through the village and would like to re rank the hazard from low to high.
- Utility failure is an issue, but the town has capabilities to address this so will re rank from high to medium.

Table 9.32-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Medium	Medium	High	High

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	Medium	Low

Note: *The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction*

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.32-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Erie County Park Commission Dam	Dam	X	X	001
Mook Dam	Dam		X	No
Palmers Dam	Dam	X	X	003
Soemans Dam	Dam	X	X	004

Source: GIS 2020

Identified Issues

After review of the Village of Lancaster's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Lancaster has identified the following vulnerabilities within their community:

- The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.
- The Mook Dam is in the 0.2% annual chance flood event.
- The Palmers Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- The Soemans Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.
- Verizon, YMCA, several dams, electric power stations, hazardous material facilities, Lancaster post office, and private schools in the village are in the earthquake hazard area.
- All of the critical facilities in the Village of Lancaster may be at risk of being exposed to hazardous materials incidents.
- Several private facilities are located on steep slopes and at risk of landslides
- Communications facilities, YMCA, dams, electric power stations, post office, hazardous materials facilities, and private schools may be at risk of experiencing damages caused by expansive soils.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.32.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.32-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Stream channel enhancement/mitigation of Plumb Bottom Creek for flood hazard reduction through measures such as sediment removal, debris clearance, and bank stabilization.	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Stream channel enhancement/mitigation of Spring Creek for flood hazard reduction through measures such as sediment removal, debris clearance, and bank stabilization.	Flooding	Not Identified	DPW	No Progress	Cost	-	1. Discontinue 2. 3. This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Ongoing inspections of the Village of Lancaster Flood Control Project, as completed by the US Army Corps of Engineers in 1948, with repairs/ improvements/mitigation undertaken as needed to ensure system functionality and continued flood protection in the Village.	Flooding	Not Identified	DPW	No Progress	Cost	-	1. Discontinue 2. 3. This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Code Enforcement	Ongoing Capability	Cost	-	1. Discontinue 2. 3. This needs to be an on-going review and dialogue to maintain a level of protection.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Update/revise floodplain management ordinances	Flood	Not Identified	Code Enforcement	No Progress	Cost	-	1. Discontinue

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	to be consistent with potential future new FIRMs					Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. This needs to be an on-going review and dialogue to maintain a level of protection.
6	Join the Community Rating System (CRS)	Flood	Not Identified	Village Board	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2.
						Damages Avoided; Evidence of Success	-	3. Noe enough community support

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Lancaster has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Lancaster participated in a mitigation action workshop in March 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.32-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion										
Cyber Attack										
Earthquake				X			X			
Expansive Soils				X			X			
Extreme Temperature										
Flood		X		X		X	X		X	
Hazardous Materials				X			X			
Landslide				X			X			
Pandemic										
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.32-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Lancaster would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.32-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.32-19. Proposed Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Lancaster - 001	Erie County Park Commission Dam Flood Mitigation Outreach	1,3,4	Flood	**Problem**: The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI
2022-Village of Lancaster-002	Assess the flood risk at the Mook Dam	1,3,4	Flood	**Problem**: The Mook Dam is in the 0.2% annual chance flood event. **Solution:** The FPA will conduct outreach and contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	Ensures continuity of operations of the facility	Village Budget	High	EAP	PI
2022-Village of Lancaster-003	Palmers Dam Flood Mitigation	1,3,4	Flood	**Problem**: The Palmers Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will conduct outreach and contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Lancaster-004	Soemans Dam Flood Mitigation	1,3,4	Flood	**Problem**: The Soemans Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will conduct outreach and contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach, TBD by engineering study	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Village Budget	High	EAP	PI
2022-Village of Lancaster-005	Earthquake Hazard Mitigation	1,3,4	Earthquake	**Problem**: Verizon, YMCA, several dams, electric power stations, hazardous material facilities, Lancaster post office, and private schools in the village are in the earthquake hazard area. **Solution**: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes. Work with the private building owners in the village to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	Yes	None	Within 6 months for outreach	Village of Lancaster	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Village Budget	High	EAP	PI
2022-Village of Lancaster-006	Hazmat Mitigation	1,3,4	Hazardous Materials Incidents	**Problem:** All of the critical facilities in the Village of Lancaster may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can	Yes	None	Within 6 months for outreach	Village of Lancaster	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Village Budget	High	EAP	PI

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.										
2022-Village of Lancaster-007	Landslide Mitigation	1,3,4	Landslide	**Problem:** Several private facilities are located on steep slopes and at risk of landslides. **Solution:** Work with private facility owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.	Yes	None	Within 6 months for outreach	Village of Lancaster	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Village Budget	High	EAP	PI
2022-Village of Lancaster-008	Expansive Soil Mitigation	1,3,4	Expansive Soils	**Problem:** Communications facilities, YMCA, dams, electric power stations, post office, hazardous materials facilities, and private schools may be at risk of experiencing damages caused by expansive soils. **Solution:** Work with the facility owners to determine if risk exists and to assess the structure and determine necessary mitigation measures to protect the facility from expansive soils.	Yes	None	Within 6 months for outreach	Village of Lancaster	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the post office from expansive soils	Village Budget	High	EAP	PI
2022-Village of Lancaster-009	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-	No	No	Within 3 years	Village FMA	TBD per cost and number of properties to be mitigated.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.32-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Lancaster -001	Erie County Park Commission Dam Flood Mitigation Outreach	1	1	1	0	1	0	-1	1	1	1	0	1	1	1	9	High
2022-Village of Lancaster-002	Assess the flood risk at the Mook Dam	1	1	1	0	1	1	1	1	1	1	0	1	1	1	12	High
2022-Village of Lancaster-003	Palmers Dam Flood Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-004	Soemans Dam Flood Mitigation	1	1	1	1	1	0	0	1	1	1	0	1	1	1	11	High
2022-Village of Lancaster-005	Earthquake Hazard Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-006	Hazmat Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-007	Landslide Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Lancaster-008	Expansive Soil Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-Village of Lancaster-009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.32.9 Action Worksheets

The following action worksheets have been developed by the Village of Lancaster to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Erie County Park Commission Dam Flood Mitigation Outreach		
Project Number:	2022-Village of Lancaster -001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Erie County Park Commission Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event. Once the needs have been identified, the village shall work with the owner to determine the adequate funds needed to retrofit the existing facility. The actions will be implemented as identified over the course of 2 years.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☒	No ☐	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 years storm	**Estimated Benefits (losses avoided):**	Flood Mitigation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$100,000-$500,000	**Mitigation Action Type:**	Structural and Infrastructure Project, Education and Awareness Program
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, Climate Smart Communities Grant Funding, Municipal Budget
Responsible Organization:	FPO and Village	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Divert water from dam	High	Very costly and difficult
	Facility upgrade	High	Less costly

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Erie County Park Commission Dam Flood Mitigation Outreach	
Project Number:	2022-Village of Lancaster -001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	0	The technical issues have not yet been identified
Political	1	No political issues
Legal	0	Legal issues have not been identified
Fiscal	-1	Inadequate resources
Environmental	1	Positive impact
Social	1	Positive impact
Administrative	1	Have administrative capabilities
Multi-Hazard	0	Addresses flooding
Timeline	1	Feasible timeline
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	9	
Priority (High/Med/Low)	High	

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Residential Property Flood Mitigation.		
Project Number:	2022-Village of Lancaster-009		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	100-year flood	**Estimated Benefits (losses avoided):**	Remove residents and homes from the flood threatened homes
Useful Life:	To be determined	**Goals Met:**	1
Estimated Cost:	TBD per cost and number of properties to be mitigated	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	BRIC, HMGP, FMA, cost share by homeowners
Responsible Organization:	Village FMA	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Enhance overall outreach program	$1,000	Does not reach a specific area vulnerable to flooding
	Residential property flood mitigation outreach	Staff Time	Selected project
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Residential Property Flood Mitigation.	
Project Number:	2022-Village of Lancaster-009	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective in the long run
Technical	1	
Political	1	
Legal	1	
Fiscal	1	Have fiscal resources to conduct outreach
Environmental	1	
Social	1	
Administrative	1	Have administrative capabilities
Multi-Hazard	0	Addresses flooding
Timeline	1	To be completed within 3 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 71-Section-9.32-Lancaster-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.33 Town of Marilla

This section presents the jurisdictional annex for the Town of Marilla. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Marilla's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.33.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Marilla's hazard mitigation plan primary and alternate points of contact. The Town of Marilla followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager and Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.33-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Brian Nolan, Emergency Manager Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 857-0103 Email: bnolan@townofmarilla.com	Name/Title: Earl Gingerich, Jr, Supervisor Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 310-7907 Email: egingerich@townofmarilla.com
NFIP Floodplain Administrator	
Name/Title: Scott Rider, CEO Address: 1740 Two Rod Rd, Marilla, NY Phone Number: (716) 857-0103 Email: srider@townofmarilla.com	

9.33.2 Municipal Profile

The Town of Marilla is 27.5 square miles in size and the town is located on Erie County's east and central portion. The Town of Alden forms the north boundary while on the west is the Town of Elma and the Town of Wales borders to the south.

Marilla was first settled by Europeans in 1827 and was originally part of the Buffalo Creek Indian Reservation. The land was opened to general settlement shortly after the Treaty of Buffalo Creek was finalized in 1842. (Town of Marilla 2020) White settlers began arriving to the area in 1832, particularly in the Porterville hamlet area. The town was organized in 1853 from portions of the towns of Alden and Wales and incorporated in 1854. The town's name town is derived from Marilla Rogers, an early schoolteacher. (Town of Marilla 1998) Excellent soils supported widespread agricultural development. In 1937, the Town experienced the worst flooding on

record, which did considerable damage to crops In the latter half of the century, more people began moving out of Buffalo and Marilla now serves as a bedroom community to Buffalo.

According to the U.S. Census, the 2010 population for the Town of Marilla was 5,327. The estimated 2019 population was 5,378, a one percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.1 percent of the population is 5 years of age or younger and 21.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.33.3 Jurisdictional Capability Assessment and Integration

The Town of Marilla performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.33.3). The Town of Marilla's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Marilla. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.33-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 209 (Uniform Construction Codes)	Local	Building Department and Code Enforcement
Comment: *This article provides for the administration and enforcement of the International Codes (the Uniform Code), the State Energy Conservation Construction Code (the Energy Code) and the Code of the Town of Marilla (the Code) in this Town. This article is adopted pursuant to Section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this article. The Code Enforcement Officer administers and enforces the provisions of Chapter 209.*					
Zoning Code	Yes	No	Local Law Number 1-1999 – Zoning. Chapter 700.	Local	Code Enforcement Officer
Comment: *For the purpose of promoting the health, safety and general welfare of the people of the Town of Marilla, this chapter is adopted pursuant to Article 16 of the Town Law of the State of New York. Its purpose is to regulate and restrict the height, number of stories and size of buildings and other structures; the percentage of lot that may be occupied; the size of yards, courts and other open space; the density of*					

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
population and the location and use of buildings, structures and land for business, industry, agriculture, residence or other purposes. This chapter and the Zoning Map, which is a part of this chapter, are designed to lessen congestion in the streets; to secure safety from fire and other dangers; to provide adequate light and air; to provide for solar access and the implementation of solar energy systems; to prevent the overcrowding of land and to avoid undue concentration of population; to facilitate the efficient and adequate provision of public facilities and services; and to provide the maximum protection to residential areas from the encroachment of adverse environmental influences. This chapter and the Zoning Map were made after reasonable consideration, among other things, as to the character of the Town and its peculiar suitability for particular uses and with a view to conserving property values and natural resources and encouraging the most appropriate use of land throughout the Town.					
Subdivision Ordinance	Yes	No	Local Law Number 1-1997 Chapter 644 Town of Marilla Subdivision Law	Local	Code Enforcement Officer
Comment: *The purpose of the town's subdivision is to amend the Code of the Town of Marilla to add a new provision governing the subdivision of land within the Town of Marilla and to protect the public health, safety and general welfare while allowing for cost-saving efficiencies.*					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
Comment:					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	No	Yes	-	-	-
Comment:					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment:					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 559 (Flood Damage Prevention); adopted 4/11/2019	Local	Code Enforcement Officer
Comment: *It is the purpose of this chapter for the Code Enforcement Officer to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages:* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and;* *F. Qualify for and maintain participation in the National Flood Insurance Program.*					

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
An enclosed area beneath the lowest elevated floor, 18 inches or more in height, which is used to service the underside of the lowest elevated floor. The elevation of the floor of this enclosed area, which may be of soil, gravel, concrete or other material, must be equal to or above the lowest adjacent exterior grade. The enclosed crawl space area shall be properly vented to allow for the equalization of hydrostatic forces which would be experienced during periods of flooding.					
Municipal Separate Storm Sewer System (MS4)	No – not within MS4.	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	Adopted by the Town Board of the Town of Marilla 10-9-2008 by L.L. No. 4-2008. Alarm Devices.	Local	Town Supervisor
Comment: *The purpose of this chapter is to protect and promote the health, safety and general welfare of the residents of the Town of Marilla by reducing the number of avoidable alarms of fire, intrusion, holdup or other emergencies which contribute to ineffective utilization of police and fire emergency agencies, require emergency responses which are susceptible to high accident rates, interfere with genuine emergencies (responses) and produce unnecessary alarm noise to the surrounding community.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Comprehensive Plan Town of Marilla Erie County, New York - 1998. Updated 2018	Local	Town Planning
Comment: *The Town prepared the original Comprehensive Plan in 1982, which was updated in 1998 and 2018. Since that time, the Town has maintained its rural and agricultural character and current views and policies for future land use planning and management have necessitated this update of the Comprehensive Plan. Goals and projects within the comprehensive plan include the following: 1) Coordinate drainage planning efforts with neighboring towns that share drainage basins. Carefully evaluate the effects on drainage of all proposals for development. 2) Require developers to dedicate easements along creeks and other major drainage was to allow for their maintenance and to reduce the risk of flood damages. 3) Prohibit drainage, filling, and development in wetland areas.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No -NA	Yes	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	Yes	No	Town of Marilla Agricultural and Farmland Protection Plan - 2013	Town	Town Board
Comment: *The intent of the plan includes the protection of existing farmland and the overarching goal to create a healthy and safe community through conservation and land protection to mitigate the effects of climate change, development, and other factors that threaten the community.*					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Erie County Comprehensive Emergency Management Plan Date Unknown	County	County Emergency Management and Town of Marilla Supervisor.
Comment: *The intent of the comprehensive emergency management plan (especially the evacuation annex) is meant to provide municipalities and community members the necessary means to prepare for and coordinate during hazard events and minimize avoidable damage.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Marilla to oversee and track development.

Table 9.33-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement Officer
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	No – the town is relatively rural and sparsely populated and would like to keep it that way.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Marilla and their current responsibilities which contribute to hazard mitigation.

Table 9.33-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The ultimate goal of this planning board is to ensure that the long-range planning and land use objectives of the community can be achieved.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals as per Chapter 704 of the municipal code
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Board was established to preserve and improve the quality of the natural and manmade environment within the town. The board

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		consists of seven regular members and three alternates. The powers and duties of the board include: A. Advise the Town Board on matters affecting the preservation, development and use of the natural and man-made features and conditions of the Town insofar as beauty, quality, biologic integrity and other environmental factors are concerned and, in the case of man's activities and developments, with regard to any major threats posed to environmental quality, so as to enhance the long-range value of the environment to the people of the Town. B. Develop and, after receiving general approval by resolution of the Town Board, conduct a program of public information in the community which shall be designed to foster increased understanding of the nature of environmental problems and issues and support for their solutions. C. Conduct studies, surveys and inventories of the natural and man-made features within the Town of Marilla and such other studies and surveys as may be necessary to carry out the general purposes of this chapter and submit copies of the same to the Town Board. D. Maintain an up-to-date inventory or index of all open spaces in public or private ownership within the Town of Marilla, including, but not limited to, natural landmarks, glacial and other geomorphic or physiographic features; streams and their floodplains, swamps, marshlands and other wetlands; unique biotic communities; scenic and other open areas of natural or ecological value and of the ownership, present use and proposed use of such open areas, so as to provide a base of information for recommendations by the Board for their preservation and/or use and submit copies of the same to the Town Board. E. Seek to coordinate, assist and unify the efforts of private groups, institutions and individuals within the Town of Marilla in accordance with the purpose of this chapter. F. Maintain liaison with public and private agencies and organizations of local, state and national scope whose programs and activities have an impact on the quality of the environment or who can be of assistance to the Board. G. Working in cooperation with the Town Planning Board, recommending from time to time to the Town Board features, plans and programs relating to environmental improvement for inclusion in the Master Plan of the Town of Marilla and, similarly, recommend to the Town Board appropriate and desirable changes in local laws and ordinances relating to environmental control. H. Carry out such other duties as may be assigned from time to time by the Town Board or as set forth under § 239-x of the General Municipal Law.
Open Space Board/Committee	Yes	See above for description of the Conservation Advisory Board
Economic Development Commission/ Committee	No	-
Public Works/Highway Department	Yes	The Marilla Highway Department is responsible for 13.61 miles of town roads. This includes sweeping, mowing, snow plowing, and any maintenance of these roads. The department also snow plows 47.96 lane miles of Erie County Roads. The Highway Superintendent oversees the Sanitation Department, the Town Park, and all Town Buildings. The department currently employs six full-time employees and several seasonal, part-time employees. The town currently has in use two sanitation trucks for garbage collection and three trucks for snow removal on town and county roads.
Construction/Building/Code Enforcement Department	Yes	The Building Inspector issues building permits. The Code Enforcement Officer supports the compliance with Town Of Marilla ordinances and building codes. The Building Inspector must issue a Certificate of Occupancy before residents can move into new homes.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department - sweeping, mowing, snow plowing, and maintenance of town-owned roadways
Mutual aid agreements	Yes	Local Fire Company/Towns/County/State
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer Firm
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Marilla.

Table 9.33-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, Town Board
Capital improvements project funding	Yes, Town Board
Authority to levy taxes for specific purposes	Yes, Town Board
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	Yes, Town Board
Stormwater utility fee	Yes, Town Board
Incur debt through general obligation bonds	Yes, Town Board
Incur debt through special tax bonds	Yes, Town Board
Incur debt through private activity bonds	Yes, Town Board
Withhold public expenditures in hazard-prone areas	Yes, Town Board
Other federal or state Funding Programs	Yes, Town Board
Open Space Acquisition funding programs	Yes, Town Board
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Marilla.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.33-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Supervisor, Director Coordinator, Fire Company
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	The town maintains a website that contains information on the local government, departments, businesses, residents, and events. The website also has a community billboard where they post emergency notifications
Social media for hazard mitigation education and outreach	Yes	The town has a website and Facebook page that can be used to inform residents of hazards and mitigation efforts.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Town-wide newsletter Code Red/Website
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	ICS is in charge of this program
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Marilla.

Table 9.33-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.33-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Moderate
Expansive Soils	NA
Extreme Temperature	Moderate
Flood	Strong
Hazardous Materials	Moderate
Landslide	*NA*
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Utility Failure	Moderate
Wildfire	Moderate

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.33.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Scott Rider, CEO

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Marilla.

Table 9.33-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Marilla	2	1	$15,190	0	0

Source: FEMA 2020a, FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town did not identify any barriers to running an effective NFIP program in the community. The town does not have any outstanding NFIP compliance violations. The local law number of the flood damage prevention ordinance is 559.1 Marilla Town Code; Chapter 559. The flood management program meets the minimum requirements. There are other local ordinances and plans that support the floodplain management program.

The town does not maintain a list of properties that have been damaged by flooding and they do not maintain a list of property owners interested in flood mitigation. No RiskMAP projects are currently underway. The town identified they do not make Substantial Damage determinations. No properties have been mitigated in the town. The town's flood hazard maps adequately address the flood risk.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

NFIP Compliance

The Code Enforcement and Town Engineer are responsible for floodplain management and the Town Engineer Firm has certified floodplain managers. The Town of Marilla has access to resources to determine possible future flooding conditions from climate change. The town's floodplain management staff does not need assistance or training to support the floodplain management program. The last Community Assistance Visit was April 9, 2010.

9.33.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Marilla has identified the following routes and procedures to evacuate residents prior to and during an event.

- Two Rod Road (North/South)
- Bullis Road (East/West)

Sheltering

The Town of Marilla has identified the following designated emergency shelters within the town.

Table 9.33-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Marilla Fire Co.	1950 West Ave, Marilla, NY 14102	100	Yes	Yes	Yes	First Aid	Kitchen
Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	500	Yes	Yes	Yes	First Aid	Kitchen
Community Center	1810 Two Rod Road	100	Yes	Yes	Yes	First Aid	Kitchen

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Marilla has identified the following sites suitable for placing temporary housing units.

Table 9.33-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Marilla Primary School	11683 Bullis Rd, Marilla, NY 14102	25-30	Lot	All	None
Fireman's Grounds	West Ave.	30-35	Lot	All	None

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Marilla has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.33-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – mitigation action number 005					

9.33.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.33-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.33-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	11	0	13	0	10	0	13	0	6	0	13	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**12**	**0**	**13**	**0**	**10**	**0**	**13**	**0**	**6**	**0**	**14**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None completed					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.33.7 Jurisdictional Risk Assessment

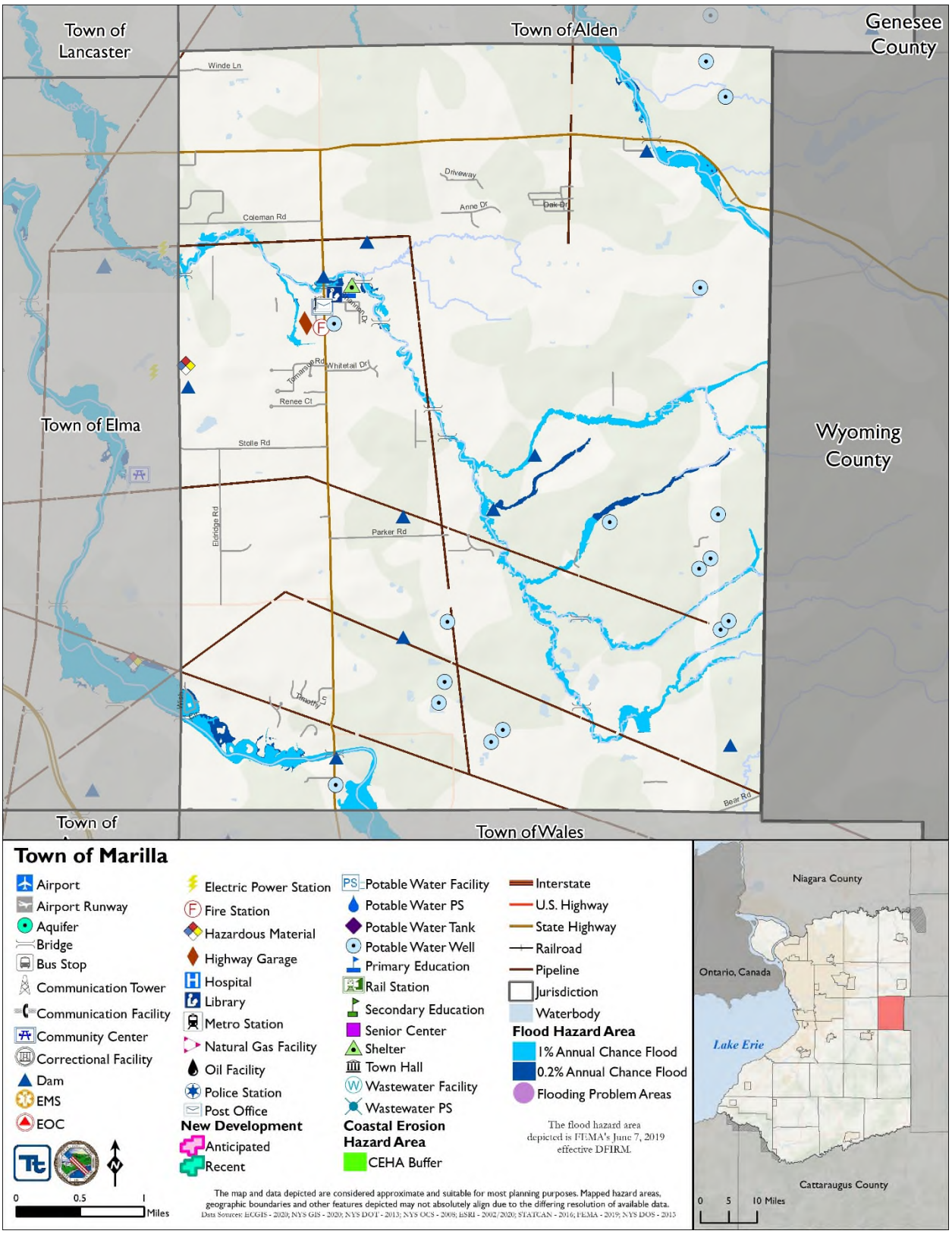
The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Marilla's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Marilla has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

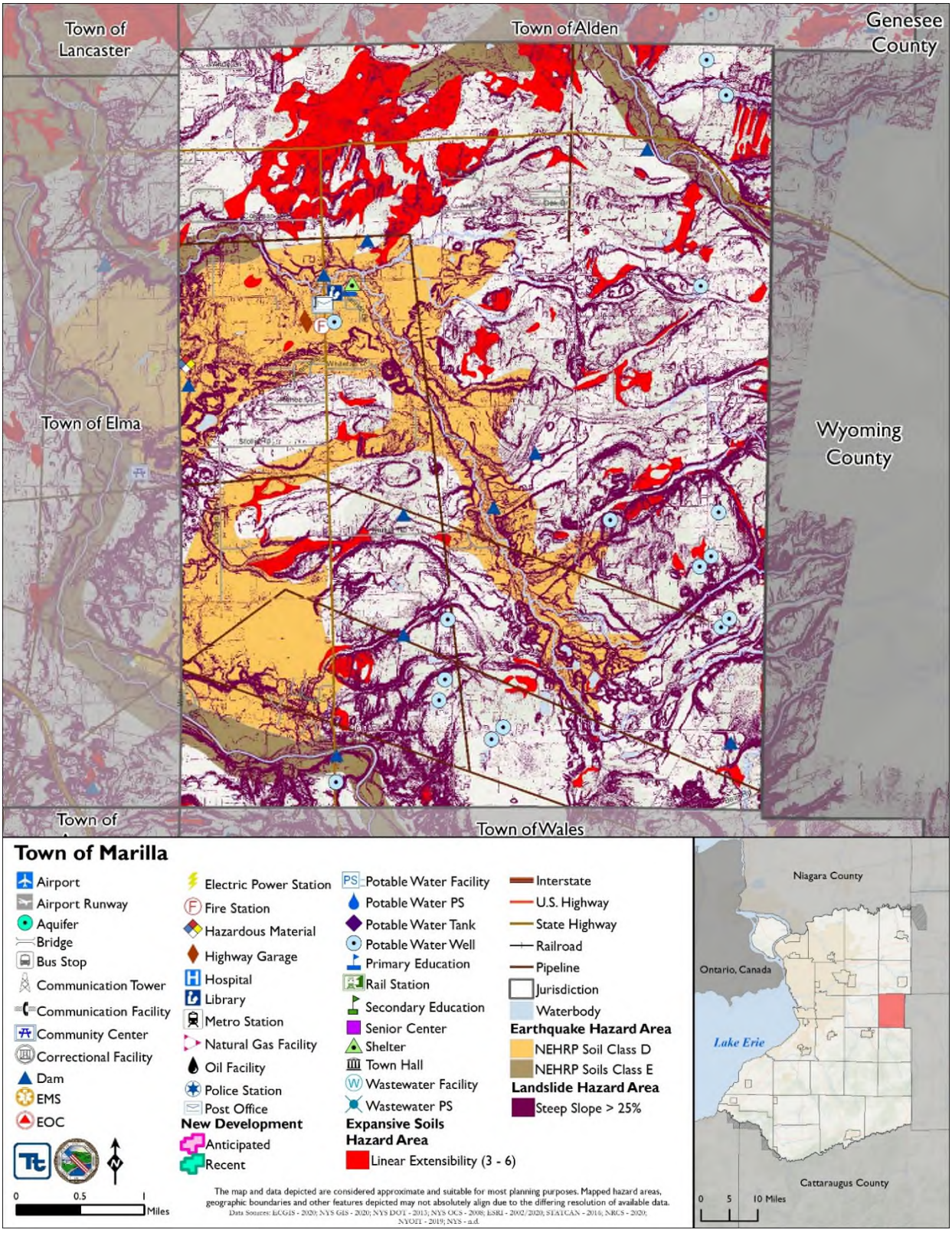
Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.33-1. Town of Marilla Hazard Area Extent and Location Map 1



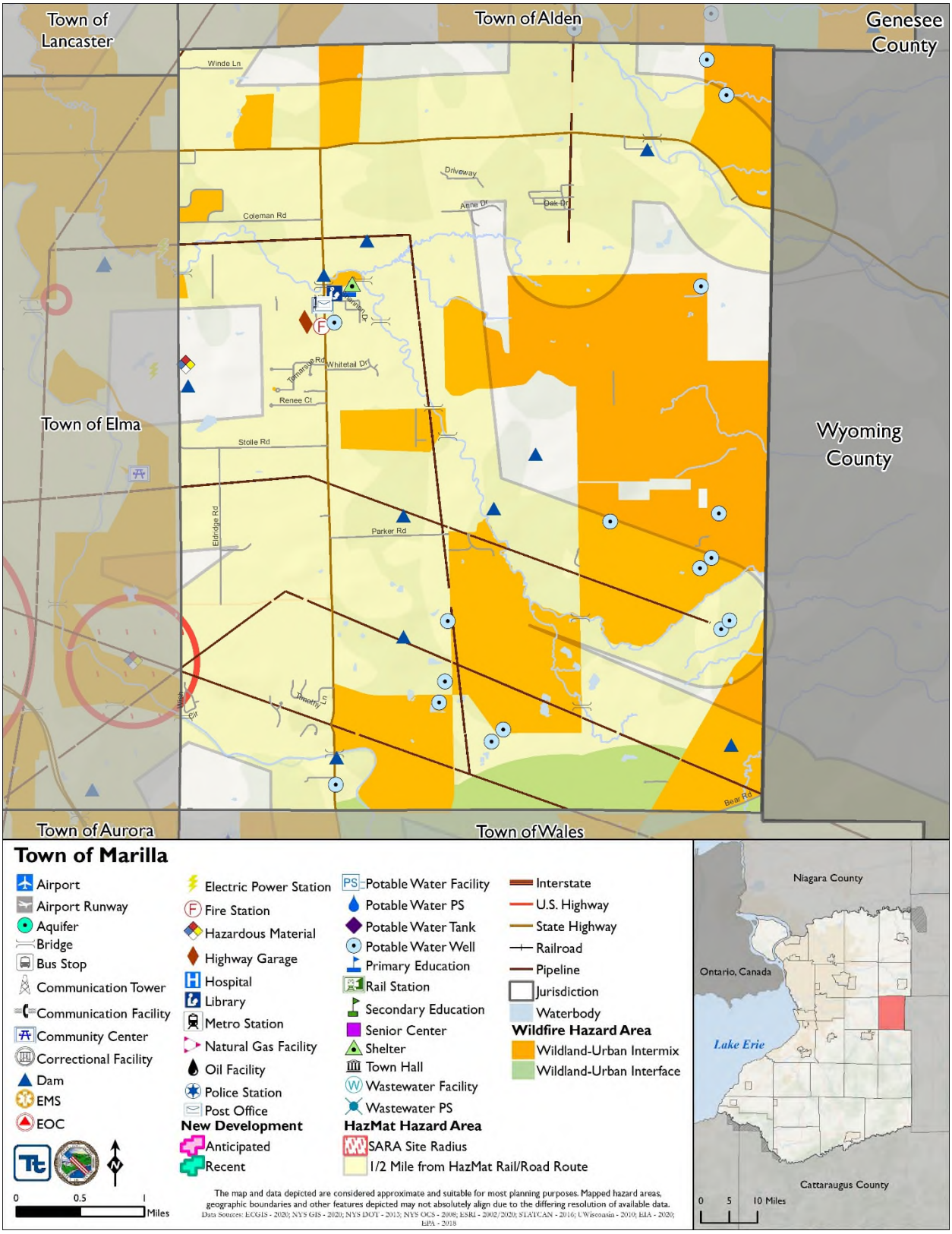
Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.33-2. Town of Marilla Hazard Area Extent and Location Map 2



Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.33-3. Town of Marilla Hazard Area Extent and Location Map 3



Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Marilla's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.33-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.33-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	The Town of Marilla did not report any damages.
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	The Town of Marilla did not report any damages.
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Marilla's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Marilla. The Town of Marilla has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town changed the coastal erosion hazard ranking from low to not applicable since they are not on the coast
- The town changed the cyber-attack hazard ranking from medium to low given this has never happened before.
- The earthquake hazard ranking was changed from high to medium due to lack of such events.
- Severe storm and severe winter storm were changed from high to medium due higher community resilience.
- Wildfire was changed from high to low given the low frequencies of the event.

Table 9.33-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Low	Medium	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	High	Low

Note: *The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction*

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.33-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
No critical facilities located in the floodplain				

Source: GIS 2021

Identified Issues

After review of the Town of Marilla's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Marilla identified the following issues in the community:

- The Marilla Community Center, Handy Bros Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and the NYSEG - Stolle Road Substation are in the earthquake hazard area.
- The Mark Andol Dam is located in the wildfire hazard area.
- Clayton Hopper Marsh Dam, Cornelius Eiss Farm Pond Dam, Haungs Dam, Mark Andol Pond Dam, Pierce Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and Marilla Post Office may be at risk of being exposed to hazardous materials incidents. Pierce Pond Dam, Porterville Aurora Milling Co Dam, and the Wood Spring Farm Pond Dam are located on steep slopes and at risk of landslides.
- The town of Marilla currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort.
- The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses a threat to private property and can cause interruption to traffic and other services.
- The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.
- The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, the grounds does not have a temporary backup water system for temporary housing location. Without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.33.8 Mitigation Strategy and Prioritization

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.33-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Flood and erosion control through upgrades/ improvements to culverts and ditches on Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr	Flood, Erosion	Not Identified	Marilla Highway Dept.	No Progress	Cost	-	1. Include in the 2022 HMP 2. 2022- Town of Marilla-006 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Town Board	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Compliance	
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Town Board	Complete	Cost	Low	1. Discontinue 2. 3. Complete
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Compliance	
	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Town Board	No Progress	Cost	-	1. Discontinue 2. 3. Town Opposition
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Marilla has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Marilla participated in a mitigation action workshop in June 2021, and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.33-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X		X			X		X	
Expansive Soils		X							X	
Extreme Temperature		X							X	
Flood		X	X			X		X	X	
Hazardous Materials		X		X			X		X	
Landslide		X		X			X		X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X		X			X		X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.33-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Marilla would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.33-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Marilla -001	Earthquake Hazard Mitigation	All	Earthquake	**Problem**: The Marilla Community Center, Handy Bros Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and the NYSEG - Stolle Road Substation are in the earthquake hazard area. **Solution**: Conduct necessary outreach to property owners and assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes	Yes	None	Within 6 months for outreach	Town of Marilla	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of Marilla -002	Wildfire Mitigation	All	Wildfire	**Problem:** The Mark Andol Dam is located in the wildfire hazard area. **Solution:** Conduct outreach and work with facility owners to determine the risk from wildfires and identify possible property maintenance actions that can help protect the dam.	Yes	None	Within 6 months for outreach	Town Budget	<$100 for outreach, TBD by engineering study	The facility owner is aware of options to protect the facility from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of Marilla -003	HazMat Incident Mitigation	All	Hazardous Materials Incidents	**Problem:** Clayton Hopper Marsh Dam, Cornelius Eiss Farm Pond Dam, Haungs Dam, Mark Andol Pond Dam, Pierce Pond Dam, Porterville Aurora Milling Co Dam, Wood Spring Farm Pond Dam, and Marilla Post Office may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.	Yes	None	Within 6 months for outreach	Town of Marilla	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	EAP	PI
2022-Town of	Landslide Mitigation	1,3,4	Landslide	**Problem:** Pierce Pond Dam, Porterville Aurora Milling Co Dam, and the Wood	Yes	None	Within 6 months	Town of Marilla	<$100 for outreach, TBD	Continuity of	Town Budget	High	EAP	PI

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Marilla -004				Spring Farm Pond Dam are located on steep slopes and at risk of landslides. **Solution:** Conduct outreach and work with the dam owners to determine if landslide risk exists and to assess the structures and determine necessary mitigation measures to protect them from landslides.			for outreach		by engineering study	operations in place				
2022-Town of Marilla -005	Permanent Housing Location	1,2	All	**Problem**: The town of Marilla currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort. **Solution**: The town will conduct an assessment of existing sites across the town that are best suited for permanent housing relocation. These sites should have access to all utilities. The town would then need to work with the land owner to acquire the property, if not yet owned by the town. The town would then apply for FEMA funding to acquire the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the town board and town DPW/ OEM.	No	Yes	5 years	Town of Marilla OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP, ES
2022-Town of Marilla -006	Flood Erosion Control	1,2	Flood	**Problem:** The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses a threat to private property and can cause interruption to traffic and other services. **Solution:** Working with Erie County and the town DPW, a feasibility study will be	No	No	3 years	Town DPW	$100,000	Flood Mitigation	HMGP, BRIC	High	NSP, SIP	PP, NR, ES

Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				done to understand the existing stormwater flooding issues. As part of the study, the town will determine culverts that need to be upgraded and those that need to be repaired. In the event the study determines that the stormwater infrastructure needs to be expanded, the town will hire external design expertise to identify the needs of the system. This may include installing/ building a retention basin and installation of green infrastructure across the town stormwater system.											
2022-Town of Marilla -007	Temporary Housing Generator	1,2	All	**Problem:** The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location. **Solution:** The town will install backup generators on this site. Given this is located on the fireman's grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what energy demands are needed for temporary housing. Once the proper size generator and fuel source is identified, the town will apply for grant funding on behalf of the fire department to purchase and install.	Yes	No	1 year	OEM	$100,000	Adequate backup power	HMGP	High	SIP	SP
2022-Town of Marilla -008	Temporary Housing Potable Water	1,2	All	**Problem:** The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, the grounds does not have a temporary backup water system for temporary housing location.	Yes	No	1 year	OEM	$100,000	Adequate water supply	HMGP	High	SIP	SP

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.33-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location. **Solution:** The town would like to install potable water tank facility on this site. Given this is located on the fireman's grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what water demands are needed for temporary housing. The town would them use HMGP funding to secure these assets and install on site.										
2022-Town of Marilla -009	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Town Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations: *Potential FEMA HMA Funding Sources:* *Timeline:*

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*
FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.33-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Marilla -001	Earthquake Hazard Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -002	Wildfire Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -003	HazMat Incident Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -004	Landslide Mitigation	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022- Town of Marilla -005	Permanent Housing Location	1	1	1	1	1	0	-1	1	1	0	1	1	1	1	10	High
2022- Town of Marilla -006	Flood Erosion Control	1	1	1	1	1	0	-1	1	1	0	0	1	1	1	9	High
2022- Town of Marilla -007	Temporary Housing Generator	1	1	1	1	1	0	-1	1	1	1	1	1	1	1	11	High
2022- Town of Marilla -008	Temporary Housing Potable Water	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022- Town of Marilla -009	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.33.9 Action Worksheets

The following action worksheets have been developed by the Town of Marilla to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Temporary Housing Generator		
Project Number:	2022- Town of Marilla -007		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	Fireman's grounds does not currently have backup power for temporary housing location. The Fireman's Grounds has been identified as a primary temporary housing location if and when a disaster were to occur. However, without the proper equipment and facilities, this site would no longer be suitable as a temporary housing location.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to install backup generators on this site. Given this is located on the fireman's grounds, the main point of contact would need to be the fire department as well as any relevant municipal officials. This group of individuals would need to decide what energy demands are needed for temporary housing. The town would them use HMGP funding to secure these assets and install on site.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	**Estimated Benefits (losses avoided):**	Stable Electric Supply
Useful Life:	50 years	**Goals Met:**	1,2
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP
Responsible Organization:	Town Board/ OEM	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation and Preparedness

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Weather Dependent
	Install Generator	Moderate	Best Option

Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Temporary Housing Generator	
Project Number:	2022- Town of Marilla -007	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This protects property
Cost-Effectiveness	1	This is cost effective
Technical	1	This is technically feasible
Political	1	There are no political issues
Legal	0	There are no legal issues identified at this time
Fiscal	-1	This project requires external funding
Environmental	1	No issues
Social	1	No issues
Administrative	0	Not identified
Multi-Hazard	1	Multiple hazards
Timeline	1	Feasible given timeline
Agency Champion	1	Town OEM
Other Community Objectives	1	Mitigation
Total	10	
Priority (High/Med/Low)	High	

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Flood Erosion Control		
Project Number:	2022- Town of Marilla -006		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The following roads experience recurrent flooding and erosion: Marion Lane, Parker Rd, Renee Ct, Anne Dr, S. Anne Dr, Winchester Dr, Timothy Ln, & Meadowvale Dr. This poses threat to private property and can cause interruption to traffic and other services.		
Action or Project Intended for Implementation			
Description of the Solution:	The town needs to work with the DPW and county to address existing stormwater flooding issues. The first step would be for the town to determine specific culverts that need upgrading and those that need to be repaired. Additionally, the stormwater infrastructure might also need to be expanded for capacity. This includes installing/ building a retention basin and installation of green infrastructure across the town stormwater system. Such projects might require external design expertise which would be contracted out as needed.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500- year storm	**Estimated Benefits (losses avoided):**	Flood Reduction
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	High	**Mitigation Action Type:**	Natural System Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, BRIC
Responsible Organization:	Town DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Mitigation

Three Alternatives Considered (including No Action)			
	Action	**Estimated Cost**	**Evaluation**
Alternatives:	No Action	$0	Problem continues.
	Close all roads	Low	Long term expenses are high
	Stormwater reconstruction	High	Best option in the long run

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Flood Erosion Control	
Project Number:	2022- Town of Marilla -006	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This protects property
Cost-Effectiveness	1	This is cost effective
Technical	1	This is technically feasible
Political	1	There are no political issues
Legal	0	There are no legal issues identified at this time
Fiscal	-1	This project requires external funding
Environmental	1	No issues
Social	1	No issues
Administrative	1	The town has administrative support to implement this project
Multi-Hazard	0	Flood
Timeline	1	Feasible given timeline
Agency Champion	1	Town DPW
Other Community Objectives	1	Mitigation
Total	9	
Priority (High/Med/Low)	High	

Attachment: 72-Section-9.33-Marilla-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.34 Town of Newstead

This section presents the jurisdictional annex for the Town of Newstead. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Newstead's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.34.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Newstead's hazard mitigation plan primary and alternate points of contact. The Town of Newstead followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Clerk's office and the Supervisor's office. The Supervisor and Town Clerk represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.34-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Cummings, Supervisor Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 Email: dcummings@townofnewstead.com	Name/Title: Dawn D Izydorczak, Town Clerk Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 #2 Email: dizydorczak@townofnewstead.com
NFIP Floodplain Administrator	
Name/Title: David Miller, CEO Address: Town Hall 5 Clarence Center Road Akron, NY Phone Number: 716-542-4573 #4 Email: dmiller@townofnewstead.com	

9.34.2 Municipal Profile

The Town of Newstead is in Erie County's northeast corner and is 51 square miles in size. The town's borders are Genesee County to the east, Niagara County (to the north, the Town of Clarence to the west and Town of Alden to the south. The Village of Akron is located near the geographic center of the town. The central business district and town government offices are situated in the Village of Akron. A portion of the Tonawanda Indian Reservation is in the town's northeast corner.

The town was first settled around 1801. The town of Newstead was established in 1823 as the "Town of Erie" and was formed from the large original Town of Clarence. The town name was changed later in the 1800s and is reportedly derived from Newstead Abbey in England. Historically, the Town of Newstead has been an agricultural community. Approximately 40 percent of the town's land is still used for agriculture, however

several farms are now fallow or have been developed to low-density dwelling units. Interstate 90, and NYS Routes 5 and 93 traverse the town (Town of Newstead and Village of Akron Comprehensive Plan, 2001).

According to the U.S. Census, the 2010 population for the Town of Newstead was 5,726. The estimated 2019 population was 5,804, a 1.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.5 percent of the population is 5 years of age or younger and 18.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.34.3 Jurisdictional Capability Assessment and Integration

The Town of Newstead performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.34.3). The Town of Newstead's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Newstead. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.34-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 150, Construction Codes, Uniform	Local	CEO/Building Department
Comment: This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code), the State Energy Conservation Construction Code (the Energy Code) and the Code of the Town of Newstead (the Code) in this Town. High quality construction will be resistant to hazard impacts.					
Zoning Code	Yes	No	LL2-1988, Chapter 450, Zoning	Local	CEO/Building Department
Comment: The purpose of this Zoning Law is to promote and protect, to the fullest extent permissible, the environment of Newstead and its public health, safety, convenience, comfort, prosperity and general welfare by regulating the use of buildings, other structures and land: by regulating and restricting the bulk, height, design, lot coverage and location of structures; and by regulating and limiting population density and, for the aforesaid purposes, to divide the land within the limits of Newstead into districts of such number and dimensions in accordance with the objectives of the Comprehensive Plan and to provide procedures for the administration and amendment of said Zoning Law.					

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Individual lots shall be graded in a manner which will avoid surface water runoff on adjacent lots, and which will divert water away from buildings, prevent standing water and soil saturation detrimental to structures and lot use.					
Subdivision Ordinance	Yes	Yes	Chapter 360, Subdivision	Local	CEO/Building Department
Comment: The purpose of this chapter is to amend the Code of the Town of Newstead to add a new provision governing the subdivision of land within the Town of Newstead outside of the village and to protect the public health, safety and general welfare while allowing for cost-saving efficiencies. Subdivided land shall be safe from flood or other menace; drainage and other needed improvements will be provided. The development shall be laid out to avoid adversely affecting groundwater and aquifer recharge; to reduce cut and fill; to avoid unnecessary impervious cover; to prevent flooding; to provide adequate access to lots and sites; and to mitigate adverse effects of shadow, noise, odor, traffic, drainage, and utilities on neighboring properties. Land subject to flooding and land deemed to be uninhabitable for other reasons shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life or property or aggravate a flood hazard.					
Stormwater Management Ordinance	Yes	No	LL2-1996, Chapter 349, Stormwater Management and Erosion Control	Local	Highway Department
Comment: In order to protect, maintain and enhance both the immediate and the long-term health, safety, and general welfare of the citizens on the town, this chapter has the following objectives: A. To prevent decreases in groundwater recharge and stream base flow to maintain aquatic life, assimilative capacity, and potential water supplies. B. To maintain the integrity of stream geometry to sustain the hydrologic functions of streams. C. To facilitate the removal of pollutants in stormwater runoff to perpetuate the natural biological functions of streams. The granting of a variance will not: increase or decrease the rate or volume of surface water runoff; have an adverse impact on a wetland, watercourse, or water body; contribute to the degradation of water quality.					
Post-Disaster Recovery Ordinance	No	Yes	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	Yes	No	Town of Newstead Comprehensive Plan, 2003	Local	Town Board and Planning Board
Comment: Comprehensive Plan contains guidance on achieving growth management that considers to risks of hazard exposure.					
Site Plan Review	Yes	No	Chapter 450 Zoning, Article XII Site Plan Review	Local	CEO and Building Department
Comment: The intent of this article is to set forth additional general standards applying to certain land uses and activities. The nature of these uses and activities requires special consideration of their impacts upon surrounding properties, the environment, community character and the ability of the Town of Newstead to accommodate development consistent with the objectives of the Comprehensive Plan and with this chapter. Site plan review of proposed development includes assessment of hazard exposure risks.					
Environmental Protection Ordinance	Yes	Yes	State SEQRA laws	State	Planning Board
Comment: The town includes SEQR review in its land use development processes.					
Flood Damage Prevention Ordinance	Yes	Yes	LL1-2019, Chapter 202,Flood Damage Prevention Ordinance	Local	Floodplain Administrator
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages;					

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
E. Regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Newstead and Village of Akron Joint Comprehensive Plan Update	Local	Town Board
Comment: The Comprehensive Plan sets objectives to 1) Establish a program to identify, prioritize and protect or preserve the locally and regionally important scenic and natural resources of the community. 2) Promote a regional focus on the communities' resources, such as the different watersheds that transect the communities. 3) Continue to employ erosion and sediment control ordinances.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	Yes	No	Erie County Agriculture and Farmland Protection Plan, 2012. Erie County Agricultural Districts	County	County Department of Environment and Planning
Comment: The Agriculture and Farmland Protection Plan address storage of manure and other hazmat on farms. The Plan also provides guidance on land preservation and open space protection which mitigate against flood risks. Agricultural Districts are renewed on a ten-year cycle.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Erie County Comprehensive Plan, 1995	County	County Department of Environment and Planning
Comment: Erie County Comprehensive Plan provides a strategy for economic development, including infrastructure and hazard mitigation.					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Post-Disaster Recovery Plan	Yes	No	Erie County Post Disaster Recovery Plan	Local	County OEM
Comment: The Plan guides emergency response throughout the county with guidance specific to the Town of Newstead.					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Newstead to oversee and track development.

Table 9.34-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Floodplain development permits issued by the Building Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	82% buildout currently

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Newstead and their current responsibilities which contribute to hazard mitigation.

Table 9.34-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven Planning Board members. Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Five members and two alternates of Zoning Board of Appeals. Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Two staff members focus upon planning work, including supporting the Planning Board.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Conservation Advisory Council is a seven-person board charged with assisting the town in any matter that involves conservation and environmental issues.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department. Eight staff at the Department. Department staff ensure safe passage over village roads and regularly maintain a variety of facilities.
Construction/Building/Code Enforcement Department	Yes	Building Department. Two staff members. Code Enforcement office provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Emergency Services. Three members. The Emergency Management/Disaster Coordinators handle the coordination of services in the event of an emergency in the Akron-Newstead area. They work closely with local officials and County, State and Federal officials to set up any necessary command centers and shelters. The coordinators are highly trained local volunteer firemen who are cross trained in incident command management.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Emergency Broadcast System, Cooperative with Akron Central School System
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Highway Department and FPA
Mutual aid agreements	Yes	Between village/town/county and state
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Consulting planners, Wendel Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Consulting planners, Wendel Engineers
Planners or engineers with an understanding of natural hazards	Yes	Contract planners/engineers, Wendel Engineers
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Contract with Wendel Engineers and three in-house staff
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	Daniel Kowalik, Emergency Services Coordinator
Grant writer(s)	Yes	Contract with Rotella Grant Management
Resilience Officer	No	-

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Newstead.

Table 9.34-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Newstead.

Table 9.34-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk and Emergency Management Coordinator
Personnel skilled or trained in website development	Yes	Town Clerk and Assessor's Clerk
Hazard mitigation information available on your website	Yes	Town website includes a link to the countywide Hazard Mitigation Plan process https://www2.erie.gov/exec/index.php?q=press/erie-county-continuing-update-hazard-mitigation-plan
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Emergency Management and Conservation Advisory Committee
Other programs already in place that could be used to	Yes	Emergency Management

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
communicate hazard-related information		
Warning systems for hazard events	Yes	Cooperative with Akron Central School System
Natural disaster/safety programs in place for schools	Yes	Akron Central School System
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Newstead.

Table 9.34-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4 commercial and 4 residential	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	5	Unknown
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.34-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.34.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

David Miller, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Newstead.

Table 9.34-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Newstead	11	8	$26,190	2	6

Source: FEMA 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town did not identify areas that are prone to flooding. The town does not maintain a list of properties that have been damaged by flooding. The town does not maintain a list of property owners interested in flood mitigation. There are not any Risk MAP projects currently underway in the town. The town stated that no properties have been mitigated. The town's flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

Town Code Enforcement staff are responsible for floodplain administration however, there are not any certified floodplain managers on staff. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that floodplain management staff would benefit from assistance or training to support its floodplain management program. The town provides a comprehensive permit review process that involves both the Building Department and the Town Engineer. The town has localized GIS capabilities specific to the municipality to help with inspections of any project within the Town of Newstead. The town refers to state and federal authorities for their NFIP administration services as well as how to determine if proposed development on an existing structure would qualify as a substantial improvement. The town's floodplain management program meets minimum requirements. Site plan review by the Town Engineer is required of all substantial development associated with a floodplain development permit. The Zoning Board of Appeals reviews variance applications for floodplain development. Grading and drainage plans are reviewed by the Town Engineer and the Planning Board when applicable. The town does not participate and is not interested in participating in the Community Renewal System.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

The Town of Newstead does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in May 2010.

9.34.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Newstead has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 93 starting at Route 5 going north through the town and village up to the Niagara County line. This is a north/south route which is owned and plowed by NYSDOT
- Hunts Corner Road starting at Route 93 going west to the Town of Clarence line close to Salt Road. This is an east/west route. owned by Erie County & plowed by the Town of Newstead Highway Department.
- Route 5 from Genesee County line going east to the Town of Clarence line at Davison Road. This is an east/west route which is owned and plowed by the NYSDOT.
- North Millgrove Road from Route 5 going south to Route 33 in the Town of Alden. This is a north/south Route which is owned and plowed by the Erie County Highway Department.

Notification will be given to residents through local media, radio, & TV stations and/or a message through the public-school Emergency Broadcast System. The system will inform residents which evacuation routes to use.

Sheltering

The Town of Newstead has identified the following designated emergency shelters within the town.

Table 9.34-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Newstead Senior Center	5691 Cummings Road Akron, NY 14001	48	Yes	Yes	Yes	Basic First Aid	Food, heat, A.C., sleeping area
Newstead Fire Hall Station #1	5691 Cummings Road Akron, NY 14001	250	Yes	Yes	Yes	Paramedic services by Twin City Ambulance	Food, Heat, AC, Sleeping Area
Newstead Fire Hall Sta. #2	12012 Rapids Road, Akron, NY 14001	25	Yes	No	No	Basic First Aid	Warming Shelter

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Newstead has identified the following sites suitable for placing temporary housing units.

Table 9.34-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Veteran's Park	5929 Buell Street/Route 93 Akron, NY 14001	100 trailers	Open mowed field with a stone roadway	Water, electric	Permits and inspection
Newstead Sports complex	44 Skyline Drive Akron, NY 14001	100 trailers	Open mowed field with stone roadway	Water, electric	Permits and inspection
Town property	5750 Crittenden Road Akron, NY 14001	100 trailers	Open field mowed. No road	Water and electric available at the road	Permits and inspection

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Newstead did not identify any sites suitable for relocating homes outside of the floodplain.

Table 9.34-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with county staff to identify permanent housing locations, as specified in Proposed Action #2022-Town of Newstead-011					

9.34.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.34-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.34-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	12	0	12	0	22	0	7	0	23	0	15	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	4	0	4	0	11	0	1	0	8	0	4	0
Total Permits Issued	**16**	**0**	**16**	**0**	**33**	**0**	**8**	**0**	**31**	**0**	**19**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified by the town					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
MGA Research	Commercial	1	13311 Main Street, 651.00-4-49.111	None	Planning submission
Bedford Greenhouses	Commercial	Multiple	5675 Buell Road, 61.00-2-4.1	None	In Phase 1 of development
Arrowhead Motel	Commercial	35	12292 Clarence Center Road, 46.00-4-49.1	½ Mile Buffer from HazMat Pipelines	Planning submission

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

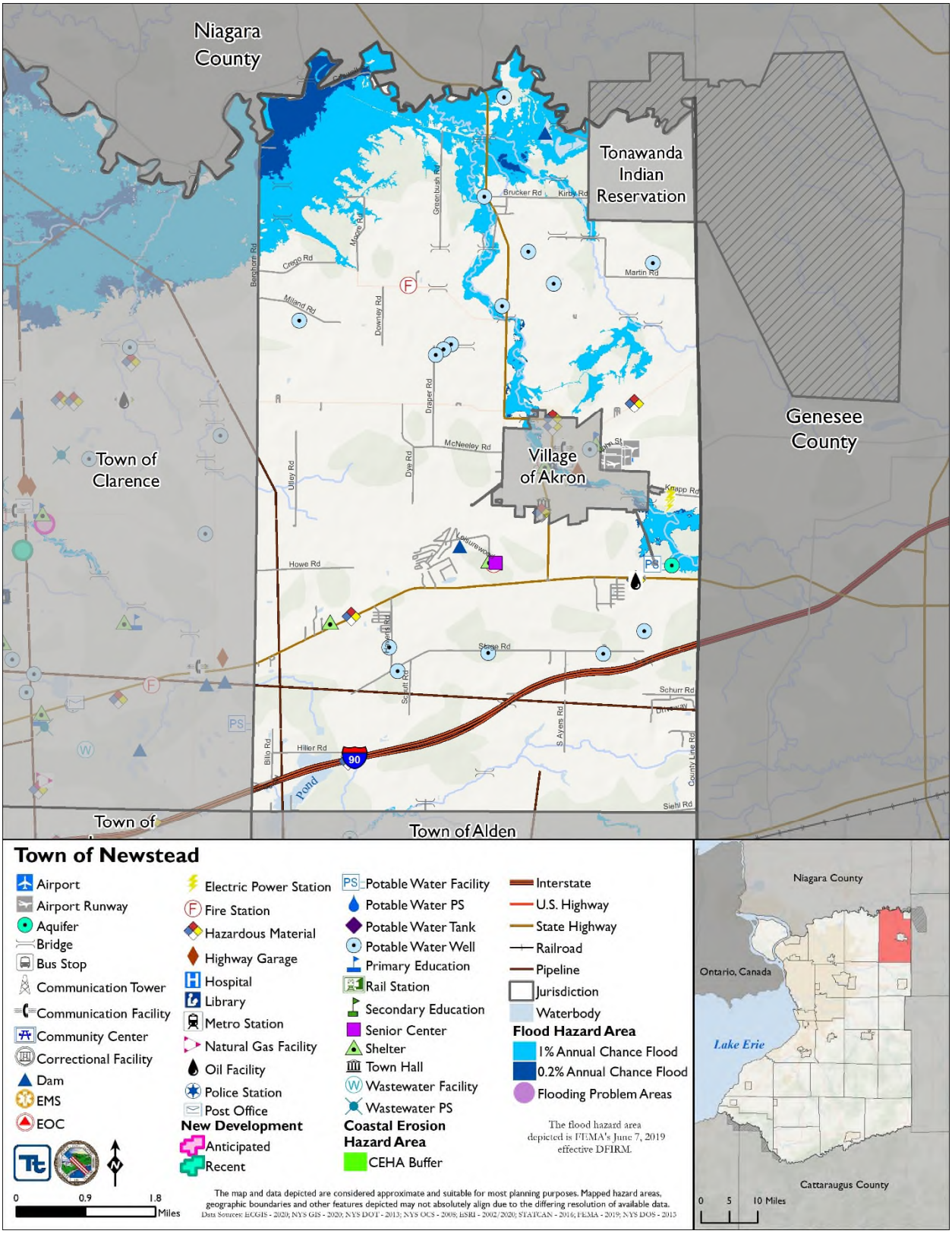
9.34.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Newstead's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Newstead has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

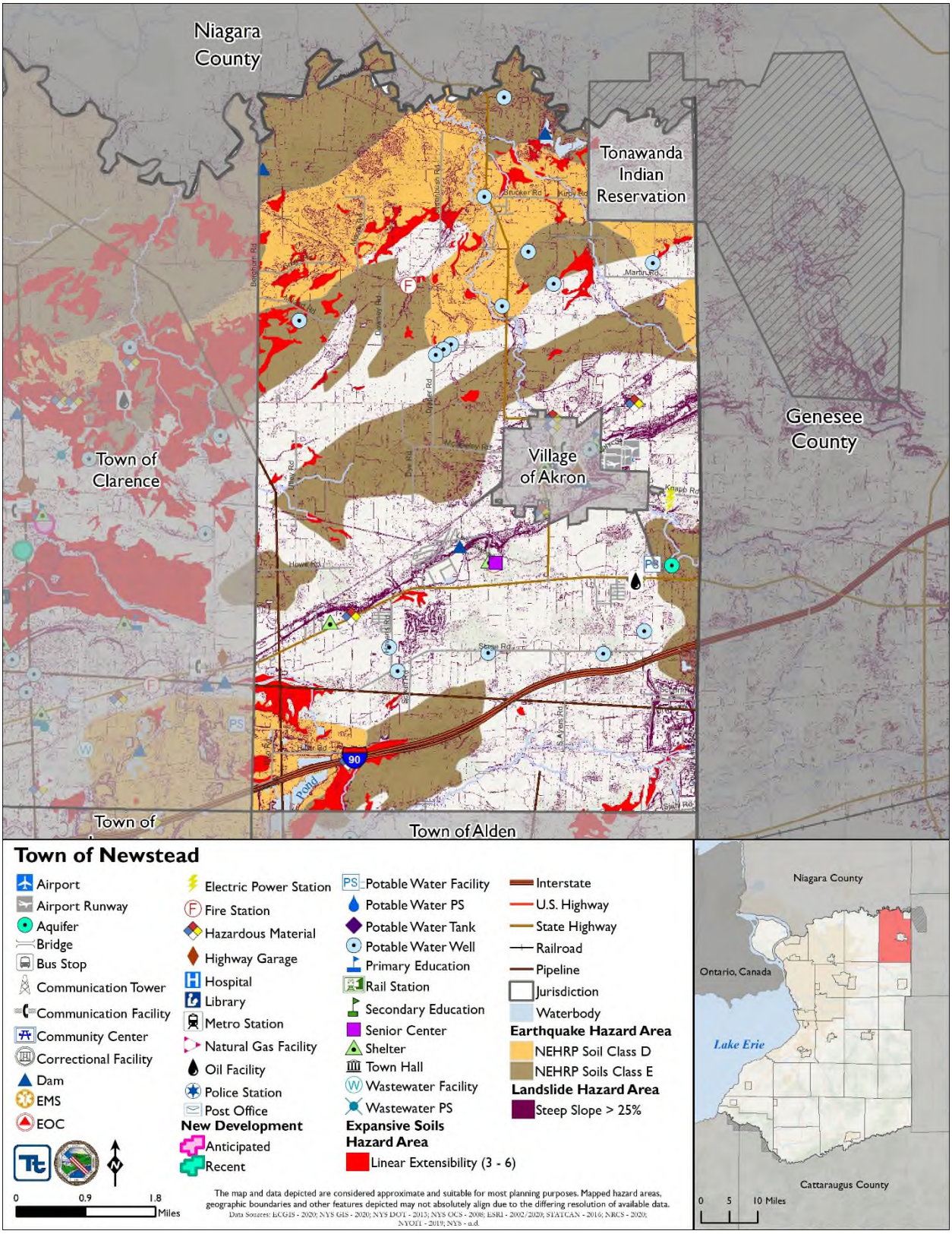
Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.34-1. Town of Newstead Hazard Area Extent and Location Map 1



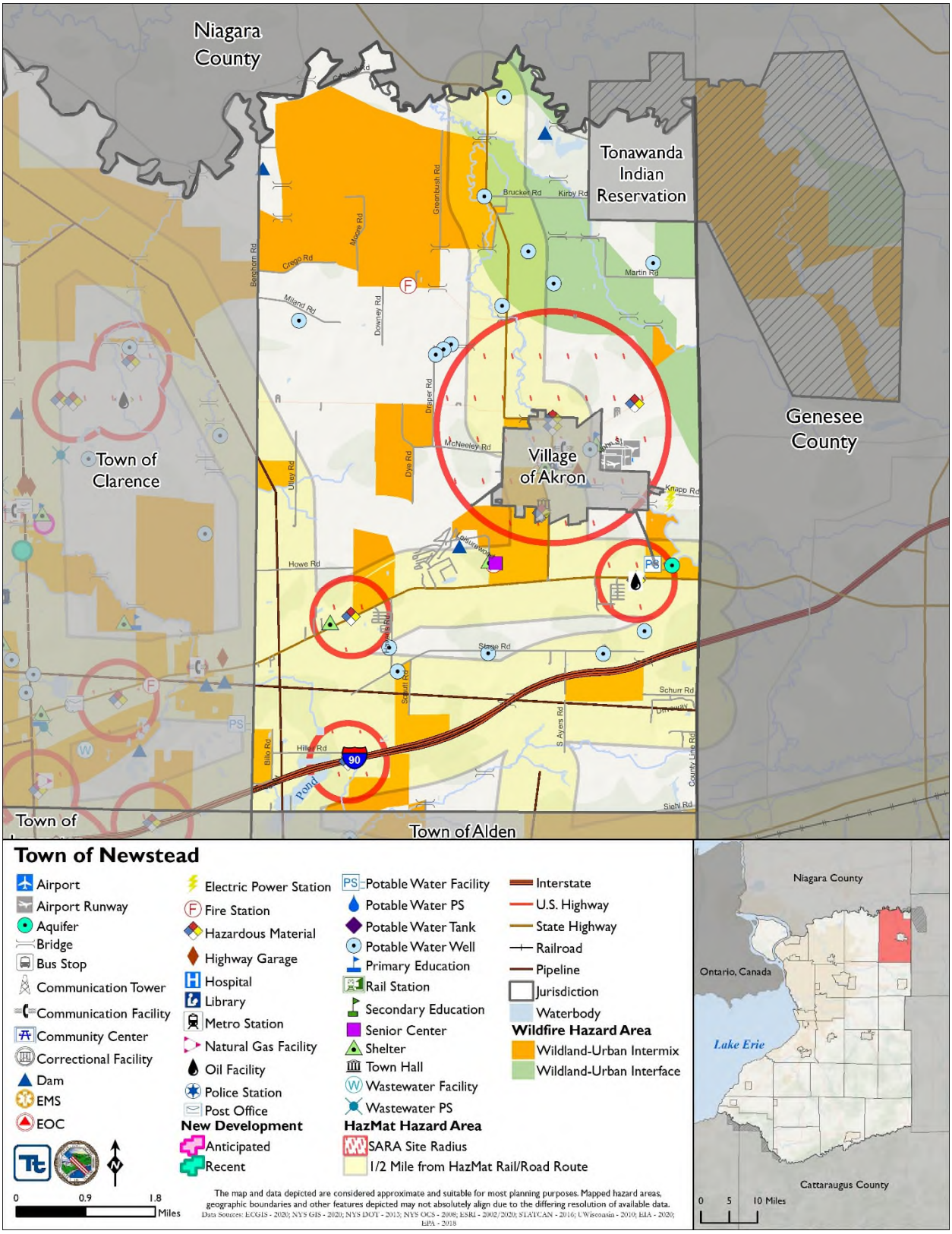
Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.34-2. Town of Newstead Hazard Area Extent and Location Map 2



Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.34-3. Town of Newstead Hazard Area Extent and Location Map 3



Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Newstead's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.34-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.34-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
August 11-15, 2015	Flash Flood	No	Although the county was impacted by this event, the town did not report any damage
October 28-29, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted by this event, the town did not report any damage
November 12, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
November 18, 2015	High Wind	No	Although the county was impacted by this event, the town did not report any damage
January 11, 2017	High Wind	No	Although the county was impacted by this event, the town did not report any damage
March 8, 2017	High Wind	No	Although the county was impacted by this event, the town did not report any damage
March 13, 2017	Winter Storm	No	Although the county was impacted by this event, the town did not report any damage
July 20, 2017	Tornado	No	Although the county was impacted by this event, the town did not report any damage
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted by this event, the town did not report any damage
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted by this event, the town did not report any damage
January 2, 2018	Blizzard	No	Although the county was impacted by this event, the town did not report any damage
October 6, 2018	Lightning	No	Although the county was impacted by this event, the town did not report any damage
February 24, 2019	High Wind	No	Although the county was impacted by this event, the town did not report any damage
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted by this event, the town did not report any damage
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted by this event, the town did not report any damage
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted by this event, the town did not report any damage
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Newstead's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Newstead. The Town of Newstead has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated that the Flood hazard risk ranking should be increased from Low to Medium.

Table 9.34-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Medium	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.34-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified.						

Source: FEMA 2021

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Identified Issues

After review of the Town of Newstead's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Newstead has identified the following vulnerabilities within their community:

- Spring / Fall flooding is regular in area of Cedar Street and Koepsel Road located in Zone A. and Burdick Road, Fletcher Road, Tonawanda Creek Road, and Kelkenberg Road in Zone B.
- Culverts and storm water channels become blocked with debris and contribute to flooding.
- The Tonawanda Creek is eroding the roadway at Bruning Road which results in need for regular repair.
- The Pohl Road Bridge has sustained damage from storm debris impacts.
- Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties.
- The Montgomery Marsh Dam is in the 0.2 percent floodplain.
- The town lacks a stockpile of sand piles, sandbags, dyke and plug material.
- Certain residential properties have flooded multiple times.
- Floodplain Management ordinances may not be consistent with FIRMs.
- Use of Geographic Information Systems could benefit the town's flood management efforts.
- The town was unable to identify permanent housing locations.

9.34.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.34-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Installation of backup generator at town of Newstead/Village of Akron joint DPW facility. (joint project between town and village - Town of Newstead to be lead agency)	Power Outage/ Storms	Will mitigate impact of severe storms and Disaster-related power outages by allowing Continuity of operations for DPW services and Response in town of Newstead/Village of Akron	Town Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Generator is in place and functional, just minor security and landscaping items remain to be finished.
	Open storm water channels and culverts and rremove debris from key drainage waterways to aaccommodate storm water/flooding	Flooding	Will mitigate the effects of flooding and high-water events	Town Hwy Dept	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Erosion mitigation Tonawanda Creek at Bruning Rd. – take action to stop	Flooding	Encroachment of creek to roadway; mitigate Eroding soils and undermining of road bed and threat to roadway	Town Board	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Pohl Rd Bridge improvements. Abutment strengthening, improve drainage capacity, mitigate bridge damage from debris	Flooding	Not Identified	Town Board	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	GIS system expansion – additional data layers and increased training to FD's. Increase training efforts to fire depts to allow maximum use of	HAZMAT/ Multi-Hazard	Will help to improve operational efficiency during disaster events and thus mitigate effects of disaster	GIS Dept	In Progress	Cost Level of Protection Damages Avoided;		1. Include in 2022 HMP 2. 3.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	system for emergency planning					Evidence of Success		
	Develop modest stockpile/easy access to sand piles, sandbags, dyke/plug materials at joint DPW facility; joint project with Village of Akron, Town Newstead to be lead	HAZMAT/ Flooding/ Storm	Will mitigate effects of future hazmat/flooding events by having supplies readily at hand and accessible to both municipalities to stop damage during disaster events	Hwy Dept	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Develop modern and efficient salt storage facility at joint DPW facility. Joint project with Village of Akron, Town of Newstead lead	Winter Storm	Will mitigate effects of future winter storms by allowing de-icing materials to be readily accessible and available to DPW	Town Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Project completed.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Building Dept	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. Currently reviewing FEMA regulation requirements 3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building Dept	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. Update to most recent FIRMS 3.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Newstead participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.34-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	-	-	-	-	-	-	X
Cyber Attack	X	X	-	-	-	-	-	-	-	X
Earthquake	X	X	-	-	-	-	-	-	-	X
Expansive Soils	X	X	-	-	-	-	-	-	-	X
Extreme Temperature	X	X	-	-	-	-	-	-	-	X
Flood	X	X	X		X	X		X		X
Hazardous Materials	X	X	-	-	-	-	-	-	-	X
Landslide	X	X	-	-	-	-	-	-	-	X
Pandemic	X	X	-	-	-	-	-	-	-	X
Severe Storm	X	X	-	-	-	-	-	-	-	X
Severe Winter Storm	X	X	-	-	-	X	-	-	-	X
Wildfire	X	X	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.34-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Newstead would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.34-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-001	Open storm water channels and culverts and remove debris from key drainage waterways to accommodate storm water/flooding	1	Flood, Severe Storm	**Problem**: Culverts and storm water channels become blocked with debris and contribute to flooding. Affected roads include Tonawanda Creek Road, Burdick Road, Koepsel Road, Martin Road, Cedar Street, Berghorn Road, Brackett Road, Bruning Road and Brucker Road. **Solution**: Remove debris from key drainage floodways to accommodate storm water surges.	No	No	1 year	Town Highway Department	Staff time	Reduce flooding hazard	Municipal budget	High	SIP	SP
2022-Town of Newstead-002	Mitigate erosion along Tonawanda Creek at Bruning Road	2	Flood	**Problem**: The Tonawanda Creek is eroding the roadway at Bruning Road which results in need for regular repair. **Solution**: Complete an engineering study. Design and install flood mitigation at this location. Such measures could include rip rap installation, floodwalls, and other measures.	No	No	2 years	Town Highway Department	Pending Engineering analysis	Reduce flooding and protect travel along Bruning Road	FEMA, HMGP, BRIC	High	NSP	NR

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-003	Protect the Montgomery Marsh Dam to the 0.2% annual chance flood event	1	Flood	**Problem:** The Montgomery Marsh Dam is in the 0.2% annual chance flood event **Solution**: The town will contact the facility managers of privately owned dams and discuss options for protecting the dams to the 0.2% annual chance flood event.	Yes	No	Within 5 years	Town Engineer	$1,000 staff time for outreach and coordination	Ensure the dam continues to provide flood protection services	FEMA, HMGP, BRIC, HMA	High	SIP	PR
2022-Town of Newstead-004	Protect the Pohl Road Bridge from damage caused by storm debris	1	Flood	**Problem**: The Pohl Road Bridge has sustained damage from storm debris impacts. **Solution**: The town will conduct a feasibility study to choose effective means to strengthen and improve drainage capacity and mitigate bridge damage from storm debris. The Town Highway Department will then implement these mitigation measures.	No	No	2 years	Town Highway Department	Pending engineering analysis	Protect bridge from further damage and protect travelers on the roadway	FEMA, HMGP, BRIC, HMA	High	SIP	PP

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Newstead-005	Floodplain Administrator to attend training on floodplain management	3	Flood	**Problem:** Floodplain Managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. **Solution:** Obtain/host training and certification for floodplain managers.	No	No	Within 5 years	ECDHSES, Town Emergency Manager	$3,000	Certified floodplain managers trained Floodplain management improved.	County	High	LPR	PR
2022-Town of Newstead-006	Protect Emergency Management offices from utility failure	1	All Hazards, Utility Failure	**Problem:** The new Emergency Management Office at 50 John Street lacks backup power and is vulnerable to power failure. **Solution:** Town will assess the cost and determine the proper size of a backup generator for the Emergency Management facility. The Highway Department will install the generator and necessary electrical components and be	Yes	No	Within 3 years	Town Emergency Management, Town Board	~$50,000	Permit Emergency Management services continue during a hazard event.	Town budget, EMPG	High	SIP	ES

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				responsible for maintenance.										
2022-Town of Newstead-007	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	1	Flood, HazMat	**Problem:** Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron **Solution:** Stockpile sand piles, bags, and associated equipment. Share cost and maintenance and access to material with Village Akron.	No	No	Within 1 year	Town Emergency Management, and Village of Akron Board	$100,000	Protect life and property from flooding and Hazmat danger	Town budget, EMPG	High	SIP	ES
2022-Town of Newstead-008	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share with homeowners	High	SIP	PP

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.										
2022-Town of Newstead-009	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	2	Flood	**Problem:** Floodplain management ordinance may not meet all requirements, including freeboard. **Solution:** Town Board will review and approve a floodplain management ordinance that addresses all of FEMA's requirements.	No	No	Within 1 year	Town Board, FPA	Staff time	Ensure community is protected from flooding	Municipal budget	High	LPR	PR
2022-Town of Newstead-010	Expand use of Geographic Information Systems into emergency response.	1	All Hazards, HazMat	**Problem:** The town is not maximizing the use of Geographic Information Systems into emergency	No	No	Within 5 years	Town Board, FPA, Town Highway Department	$50,000	Ensure town is maximizing the use of available emergency	Municipal budget, EMPG	High	LPR	ES

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				management services. **Solution:** GIS system expansion – additional data layers and increased training to Fire Departments. Increase training efforts to fire depts to allow maximum use of system for emergency planning						response tools				
2022-Town of Newstead-011	Identify Permanent Housing Locations	1	All Hazards	**Problem:** The town is not able to identify locations for permanent housing for use after a natural hazard. **Solution:** The town will work with the county to identify and potentially acquire locations for permanent housing.	No	No	Within 3 years	FPA, Town Board	Staff time	Ensure residents have access to a safe location to settle after a displacing hazard event.	Municipal budget	High	SIP	ES
2022-Town of Newstead-012	Reduce flooding along specified roadways	1	Flood	**Problem:** Spring / Fall flooding is regular in area of Cedar Street and Koepsel Road located in Zone A and Burdick Road, Fletcher Road, Tonawanda Creek Road, and Kelkenberg Road in Zone B.	No	No	2 years	Town Highway Department	TBD by engineering analysis	Preserve emergency vehicle access along important roadways	BRIC, HMGP, municipal budget	High	SIP	PR

Table 9.34-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Anticipated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: Town Highway Department will conduct an analysis to determine the best methods, including log removal, to reduce flooding form the stream.										

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:
The time required for completion of the project upon implementation

Cost:
The estimated cost for implementation.

Benefits:
A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:
Yes *Critical Facility located in 1% floodplain*

Mitigation Category:
- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as Storm Ready and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Newstead-001	Open storm water channels and culverts and remove debris from key drainage waterways to accommodate storm water/flooding	1	1	1	1	0	1	1	0	1	0	1	1	1	1	11	High
2022-Town of Newstead-002	Mitigate erosion along Tonawanda Creek at Bruning Road	1	1	1	1	1	1	1	1	0	0	0	1	1	1	11	High
2022-Town of Newstead-003	Protect the Montgomery Marsh Dam to the 0.2% annual chance flood event	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-Town of Newstead-004	Protect the Pohl Road Bridge from damage caused by storm debris	1	1	1	1	0	1	1	1	1	0	0	1	1	1	11	High
2022-Town of Newstead-005	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Town of Newstead-006	Protect Emergency Management from utility failure	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	High
2022-Town of Newstead-007	Develop stockpile of sand piles, sandbags, dyke and plug material at	1	1	1	1	0	1	1	0	1	1	1	1	1	0	11	High

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.34-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	joint DPW facility. Joint project with Village of Akron																
2022-Town of Newstead-008	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Town of Newstead-009	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	0	1	1	1	1	0	0	1	1	1	11	High
2022-Town of Newstead-010	Expand use of Geographic Information Systems into emergency response.	1	1	1	1	1	1	1	1	1	0	1	0	1	1	12	High
2022-Town of Newstead-011	Identify Permanent Housing Locations	1	1	1	1	0	1	1	1	1	0	1	0	1	1	11	High
2022-Town of Newstead-012	Reduce flooding along specified roadways	1	1	1	1	0	1	1	1	1	0	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.34.9 Action Worksheets

The following action worksheets have been developed by the Town of Newstead to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Newstead Action Worksheet			
Project Name:	Protect Emergency Management from utility failure		
Project Number:	2022-Town of Newstead-006		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure, All Hazards		
Description of the Problem:	The new Emergency Management Office at 50 John Street lacks backup power and is vulnerable to power failure.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town will assess the cost and determine the proper size of a backup generator for the Emergency Management facility. The Highway Department will install the generator and necessary electrical components and be responsible for maintenance.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against utility failure	**Estimated Benefits (losses avoided):**	Ensures continuity of operations at the town's municipal emergency management facility
Useful Life:	~20 Years	**Goals Met:**	1
Estimated Cost:	~$50,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town Emergency Management	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Potential loss of services from this critical facility
	Construct a solar farm	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect Emergency Management from utility failure	
Project Number:	2022-Town of Newstead-006	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided at this facility
Property Protection	1	Project will protect the emergency management office
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	The town the has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	1	
Social	1	
Administrative	0	
Multi-Hazard	1	All Hazards
Timeline	0	Within 3 years
Agency Champion	1	Town Board
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Newstead Action Worksheet			
Project Name:	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron		
Project Number:	2022-Town of Newstead-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, HazMat		
Description of the Problem:	Danger of hazmat spills and flooding throughout the town. Need to contain water and hazard materials. Share stockpile with Village of Akron		
Action or Project Intended for Implementation			
Description of the Solution:	Stockpile sand piles, bags, and associated equipment. Share cost and maintenance and access to material with Village Akron.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against damage from flooding and HazMat leaks	**Estimated Benefits (losses avoided):**	Ensures protection of life and property during hazard events
Useful Life:	Ongoing program once established	**Goals Met:**	1
Estimated Cost:	$100,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	Within 1 year	**Potential Funding Sources:**	Town Budget, EMPG
Responsible Organization:	Town Emergency Management, and Village of Akron Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Potential loss of services from this critical facility
	Remove all property from hazard exposure areas	Very High	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Develop stockpile of sand piles, sandbags, dyke and plug material at joint DPW facility. Joint project with Village of Akron	
Project Number:	2022-Town of Newstead-007	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect life safety throughout exposed areas of the town
Property Protection	1	Project will protect properties as needed.
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	The town has legal authority to complete the project.
Fiscal	1	Project requires funding support
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, HazMat
Timeline	1	1 year
Agency Champion	1	Town Emergency Management, and Village of Akron Board
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 73-Section-9.34-Newstead-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.35 Town of North Collins

This section presents the jurisdictional annex for the Town of North Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of North Collins's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.35.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of North Collins's hazard mitigation plan primary and alternate points of contact. The Town of North Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments. The Town Supervisor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.35-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: John M. Tobia, Town Supervisor Address:10569 Main St., North Collins, NY 14111 Phone Number: 716-337-3839 Email: jtobia@northcollinsny.org	Not Identified
NFIP Floodplain Administrator	
Name/Title: John M. Tobia, Town Supervisor Address:10569 Main St., North Collins, NY 14111 Phone Number: 716-337-3839 Email: jtobia@northcollinsny.org	

9.35.2 Municipal Profile

The Town of North Collins is in the south-central portion of Erie County. The town is approximately 43 square miles in size and contains the Village of North Collins. The town is bounded on the north by the Towns of Eden and Boston, on the east by the Town of Concord, to the south by the Town of Collins and on the west by the Town of Brant and the Cattaraugus Indian Reservation. North Collins was founded in 1852 as the "Town of Shirley", and was formed from the northern portion of the original Town of Collins. In 1853 the town adopted its current name and in incorporated in 1911. The village is the community's main settlement.

The first white settlers arrived in the area in 1809 and were primarily English Quakers from New England. The second wave of settlers arrived from Germany beginning about 1830. The third wave was mostly Italians, after 1900, from the City of Buffalo who came to work on town farms. The Town of North Collins is a predominantly rural community but improvements in transportation coupled with available, inexpensive land have drawn

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

residents seeking a rural lifestyle. Significant suburban residential development occurred in the town during the late 20th Century. (comp plan), U.S. Route 62 and NYS Routes 75 and 249 traverse the town. The south branch of Eighteen Mile Creek flows through the town on its way to Lake Erie (Town of North Collins website, accessed 2020).

According to the U.S. Census, the 2010 population for the Town of North Collins was 2,291. The estimated 2019 population was 2,130, a seven percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 15.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.35.3 Jurisdictional Capability Assessment and Integration

The Town of North Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.35.3). The Town of North Collins's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of North Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.35-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 114	Local	Code Enforcement
Comment: NYS Uniform and Energy Code 2020; The purpose of this chapter is to provide for the removal or repair of buildings in business, industrial and residential sections of the Town of North Collins that, from any cause, may now be or shall hereafter become dangerous or unsafe to the public, and which continue in violation of the Town Code and to also provide for a means of abatement and enforcement of Town Law regarding continuing violations of the Town Code.					
Zoning Code	Yes	Yes	Chapter 265	Local	Zoning Board
Comment: A comprehensive zoning plan is hereby established for the area of the Town of North Collins outside the incorporated area of the Village of North Collins by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The comprehensive zoning plan set forth in the text and map which constitute this chapter is adopted in order to					

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
promote and protect the public health, safety, comfort, convenience and prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. The comprehensive zoning plan also gives consideration to the recommendations contained in the Master Plan for the Town of North Collins prepared in 1969.					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 206	Local	Planning Board
Comment: The Town of North Collins Planning Board is hereby empowered to review, approve, approve with modifications or disapprove all site plans as required by § 206-12 of this chapter. The purpose of such site plan review and approval procedures is to ensure conformity and adequate adherence to the various provisions of this chapter and Chapter 265, Zoning, of the Town of North Collins; to ensure that uses of land so affected by these provisions meet design, function and layout criteria established by this chapter that will culminate in development that will protect the health, safety and general welfare of Town residents and are compatible with the intent of the Master Plan and its proposals and recommendations; and to ensure the ability of the Town to accommodate the growth resulting from the proposed use without undue adverse effect on the Town and its citizens and taxpayers and the protection of the health, safety and common welfare of the Town and its citizens.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	No	No	-	Local	-
Comment: The town does not participate in the NFIP.					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	Not Indicated	Local	Town Board/Planning Board
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	Yes	No	Not Indicated	Local	Town Board
Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	-	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	Yes	No	Not Indicated	Local	Town Board
Comment: None					
Other	No	-	-	-	-
Comment: None					

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Development and Permitting Capability

The table below summarizes the capabilities of the Town of North Collins to oversee and track development.

Table 9.35-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning/Zoning/Town Boards
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Town has land adjacent to park that could be used for housing/other projects

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of North Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.35-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	-Meetings are scheduled by the request of the Town Board.
Zoning Board of Adjustments	Yes	Board Meetings are scheduled by request of the petitioner.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	-
Construction/Building/Code Enforcement Department	Yes	Code Enforcement is responsible for permitting, zoning, and site plans.
Emergency Management/Public Safety Department	Yes	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	Yes	Not indicated
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	-

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Code Enforcement
Staff with expertise or training in benefit/cost analysis	Yes	Code Enforcement
Professionals trained in conducting damage assessments	Yes	Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	-
Grant writer(s)	Yes	-
Resilience Officer	No	-
Other	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of North Collins.

Table 9.35-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of North Collins.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.35-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Clerk
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	Yes	http://www.northcollinsny.org/default.html
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning and Zoning Boards
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red
Natural disaster/safety programs in place for schools	Yes	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of North Collins.

Table 9.35-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.35-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.35.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Tobia, Town Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of North Collins.

Table 9.35-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of North Collins	0	0	$0	0	0

Source: *FEMA, 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

The Town of North Collins has identified the New Oregon Park as being vulnerable to flooding, and that flood hazard maps adequately address the flood risk within the jurisdiction. There have been no previous Substantial Damage determinations within the village, nor any RiskMAP projects. The town does not maintain a lost of property owners interested in flood mitigation, due to low risk.

NFIP Compliance

The Town does not participate in the NFIP.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.35.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of North Collins has identified the following routes and procedures to evacuate residents prior to and during an event.

- Code Red is sounded to all residents giving directions for routes and shelters, specific to each event. The town also uses social media to reach residents.

Sheltering

The Town of North Collins has identified the following designated emergency shelters within the town.

Table 9.35-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Senior Center	Gowanda State Rd	100	No	Yes	No	None	Shelter/Kitchen
Langford Fire Dept.	Langford Rd	125	No	Yes	Yes	EMT	Food/Shelter
Town Hall	Gowanda State Rd	125	No	Yes	No	Sheriff/EMT	Shelter/Water

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of North Collins has identified the following sites suitable for placing temporary housing units.

Table 9.35-11. Temporary Housing Locations

Site Name	Site Address	Infrastructure /Utilities Available	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Fricano Park	Gowanda State Road	Yes	800	Park Grounds	Will need toilet facilities to accommodate big crowd
Langford Park	Langford Road	Water/electric	300	Park Grounds	Will need toilet facilities to accommodate big crowd
Tractor Pull Area	Sission Highway	Water/electric	500	Park Grounds	Will need toilet facilities to accommodate big crowd

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

requirements and floodplain laws. The Town of North Collins has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.35-12. Permanent Housing Locations

Site Name	Site Address	Infrastructure /Utilities Available	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Fricano Park area	Gowanda State Road	Nearby	30	Vacant unused park land	Everything would need to be brought to code

9.35.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.35-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.35-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	4	0	3	0	4	0	2	0	3	0	3	0
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-	0	-
Total Permits Issued	**4**	**0**	**3**	**0**	**4**	**0**	**2**	**0**	**3**	**0**	**3**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.35.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of North Collins's risk assessment results and data used to determine the hazard ranking discussed later in this section.

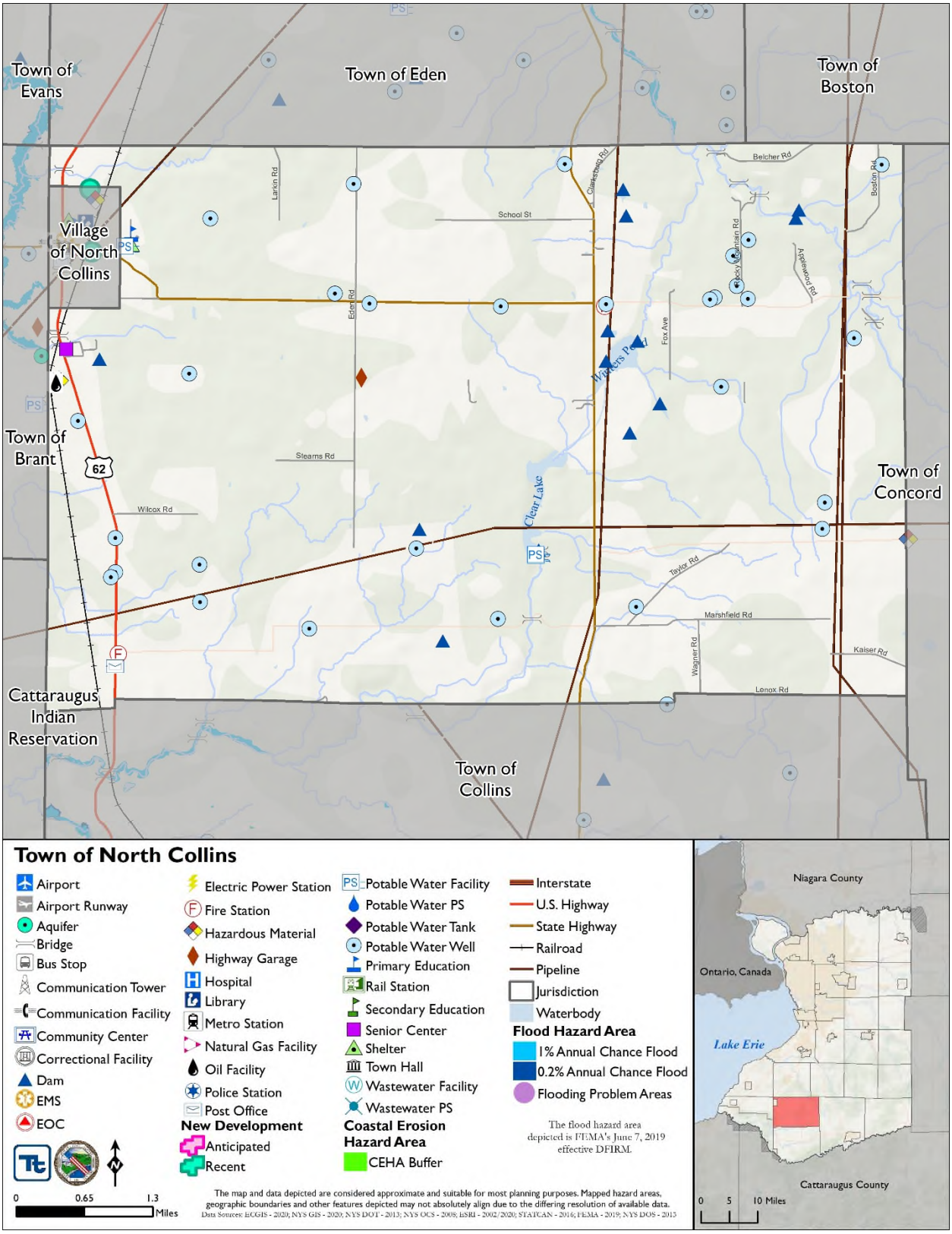
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

using mapping techniques and technologies and for which the Town of North Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

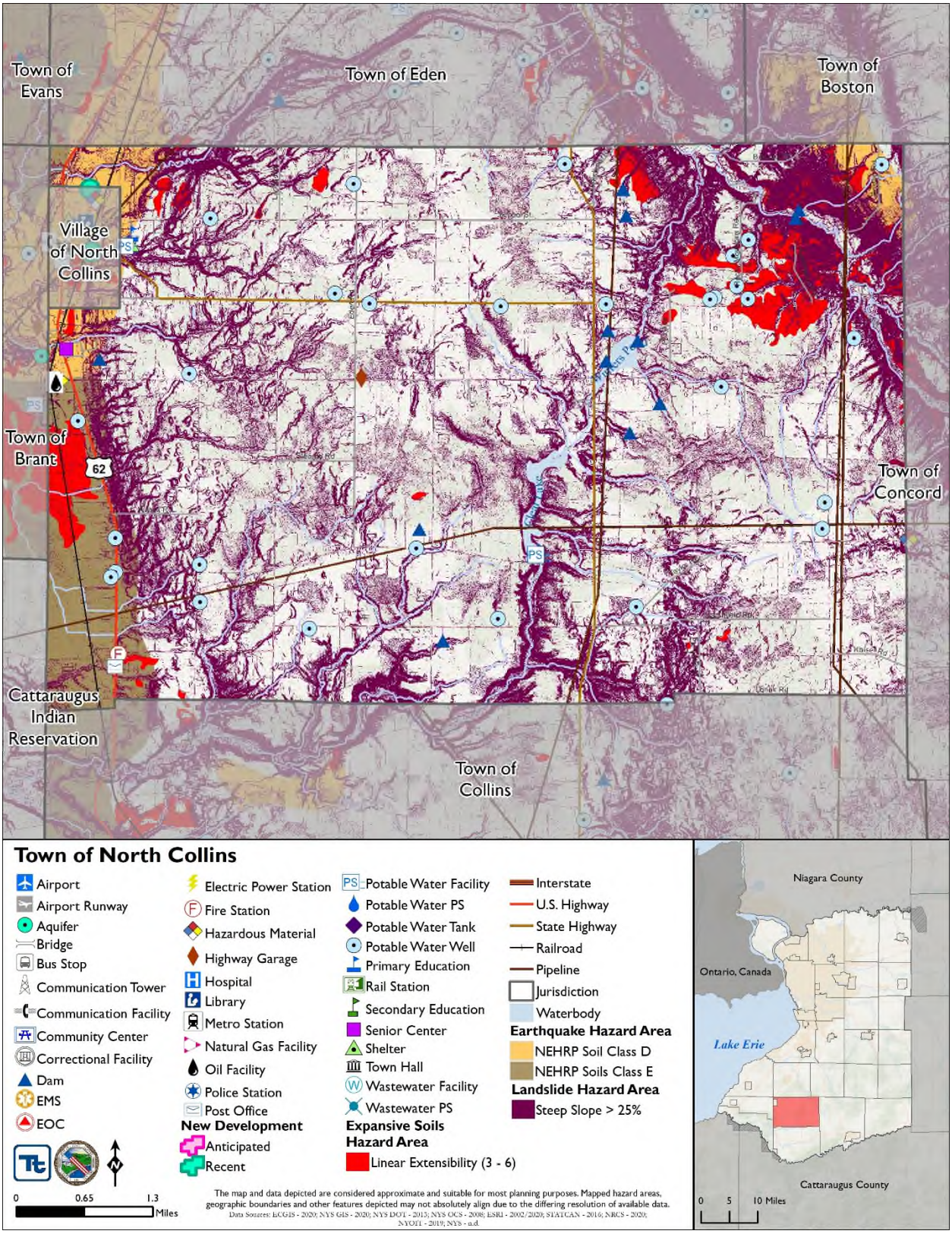
Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.35-1. Town of North Collins Hazard Area Extent and Location Map 1



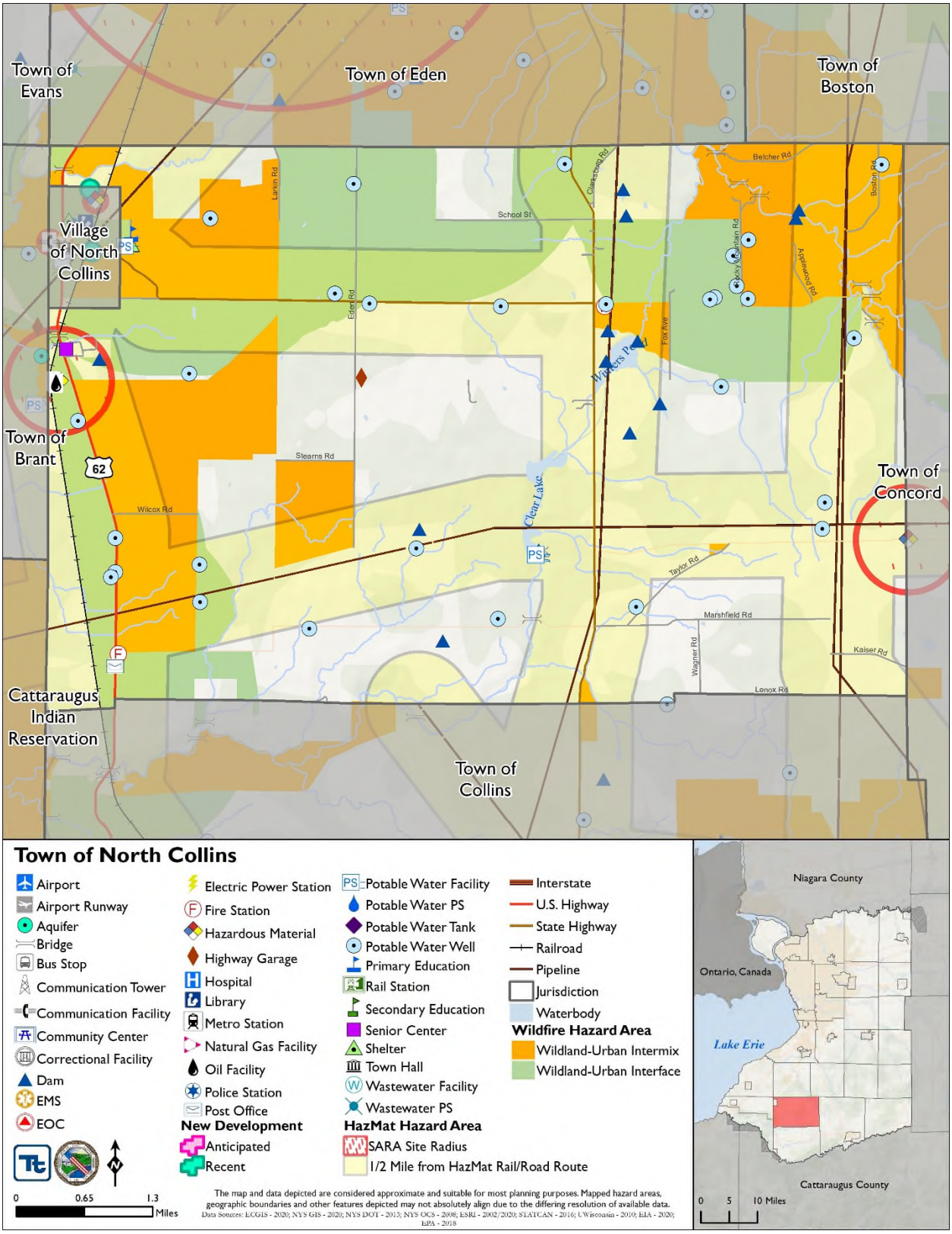
Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.35-2. Town of North Collins Hazard Area Extent and Location Map 2



Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.35-3. Town of North Collins Hazard Area Extent and Location Map 3



Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of North Collins's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.35-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.35-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the town did not report damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
November 12, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
November 18, 2015	High Wind	No	Although the county was impacted, the town did not report damages.
January 11, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 8, 2017	High Wind	No	Although the county was impacted, the town did not report damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the town did not report damages.
July 20, 2017	Tornado	No	Although the county was impacted, the town did not report damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the town did not report damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the town did not report damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the town did not report damages.
October 6, 2018	Lightning	No	Although the county was impacted, the town did not report damages.
February 24, 2019	High Wind	No	Although the county was impacted, the town did not report damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
October 27-November 1, 2019	Lakeshore Flooding High Wind DR-4472 NY	Yes	No

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the town did not report damages.
February 2020	COVID-19	Yes	Multiple ongoing costs to town - PPE

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of North Collins's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of North Collins. The Town of North Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town agreed that the calculated rankings accurately reflected the risk posed to the community

Table 9.35-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.35-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: FEMA DFIRM

Identified Issues

After review of the Town of North Collins's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of North Collins has identified the following vulnerabilities within their community:

- Town Hall and Evacuation Center (Senior Center) do not have backup power.
- New Oregon Road area experiences flooding issues.
- The town now has a water district and any power outages or flooding could cause problems.

9.35.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.35-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Storm water management to reduce the damage to the North East corner of North Collins Village. Diversion of stormwater in conjunction with village storm sewer repair.	Runoff Flooding	DPW	Not Identified	No Progress	Cost	-	1. Include in the 2022 HMP as 2022-T. North Collins-001. 2. The existing storm drainage system is inadequate for the needs of the town and village. 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of North Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of North Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.35-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X								X
Cyber Attack		X								X
Earthquake		X								X
Expansive Soils		X								X
Extreme Temperature		X								X
Flood		X	X					X	X	X
Hazardous Materials		X								X
Landslide		X								X
Pandemic		X								X
Severe Storm		X								X
Severe Winter Storm		X								X
Utility Failure		X								X
Wildfire		X								X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.35-19 summarizes the comprehensive range of specific mitigation initiatives the Town of North Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.35-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.35-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T. North Collins-001	Storm Drainage System Improvements	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: The existing storm drainage system is inadequate for the needs of the town and village. **Solution**: The village and town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce impacts of storms on the properties along Railroad Ave.	No	No	Short	Village of North Collins and Town of North Collins	High	High, property protections and reduces flooding and erosion	CDBG	High	SIP, NSP	SP, NR
2022-T. North Collins-002	Town Hall and Senior Center Generators	1, 2	All Hazards	**Problem**: The Town Hall and Evacuation Center (Senior Center) are critical facilities and do not have backup power. **Solution**: The Town of North Collins will seek funding to purchase and install automatic permanent generators at these facilities to ensure continuity of operations of government and life safety and use of the evacuation center. The town will ensure that both generators are installed outside of increased areas for additional hazard impacts (outside of floodprone areas, covered from storm impacts, etc.).	Yes	No	Short	Town of North Collins	High, estimated $75,000/ generator	High, ensures continual operations of government and life safety	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV Community Assistance Visit

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program

Timeline:

The time required for completion of the project upon implementation

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.35-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T. North Collins-001	Storm Drainage System Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High
2022-T. North Collins-002	Town Hall and Senior Center Generators	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.35.9 Action Worksheets

The following action worksheets have been developed by the Town of North Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Storm Drainage System Improvements		
Project Number:	2022-T. North Collins-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The existing storm drainage system is inadequate for the needs of the Town and Village.		
Action or Project Intended for Implementation			
Description of the Solution:	The village and town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce impacts of storms on the properties along Railroad Ave.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, property protections and reduces flooding and erosion
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	SIP, NSP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	As soon as funding is available
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	CDBG
Responsible Organization:	Village of North Collins and Town of North Collins	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadway	$500,000	Costly and may not solve problem
	Install sump pumps	$500,000	May not fully solve problem, needs to cover large area, not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Storm Drainage System Improvements	
Project Number:	2022-T. North Collins-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Protects homes
Property Protection	1	Protects property
Cost-Effectiveness	1	
Technical	1	
Political	1	Town and village Support project
Legal	1	
Fiscal	-1	Will need to seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	Combined project with Village of North Collins
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Town Hall and Senior Center Generators		
Project Number:	2022-T. North Collins-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	The Town Hall and Evacuation Center (Senior Center) are critical facilities and do not have backup power.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of North Collins will seek funding to purchase and install automatic permanent generators at these facilities to ensure continuity of operations of government and life safety and use of the evacuation center. The town will ensure that both generators are installed outside of increased areas for additional hazard impacts (outside of Floodprone areas, covered from storm impacts, etc.).		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	High, ensures continual operations of government and life safety
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	Estimated $75,000/generator	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediately after funding received
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town of North Collins	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Town Hall and Senior Center Generators	
Project Number:	2022-T. North Collins-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures 24/7 operation of shelter location
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Town DPW can install
Political	1	
Legal	1	
Fiscal	-1	Town will seek funding
Environmental	1	No Concerns
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 74-Section-9.35-North-Collins-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.36 Village of North Collins

This section presents the jurisdictional annex for the Village of North Collins. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of North Collins's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.36.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of North Collins's hazard mitigation plan primary and alternate points of contact. The Village of North Collins followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: The Mayor's office, Clerk/Treasurer, and Department of Public Works. The Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.36-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Vincent George, Mayor Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-570-5992 Email: NCMayor2020@gmail.com	Name/Title: Jan Hutchinson, Clerk/Treasurer Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-337-3160 Email: VillageClerk@VillageofNorthCollins.org
NFIP Floodplain Administrator	
Name/Title: Michael W. Perry, DPW Supervisor Address: 10543 Main St., PO Box 459, North Collins, NY Phone Number: 716-570-5991 Email: NCDPW@Yahoo.com	

9.36.2 Municipal Profile

The Village of North Collins is in the southwest portion of Erie County approximately 22 miles south of downtown Buffalo. The village is surrounded by the Town of North Collins to the north, east, and south and by the Town of Brant to the west. The village is 0.8 square miles (comp plan) in size. Big Sister Creek passes very close to the village border. US Route 62 and 249 traverse the town. The community was formerly known as "Rose's Corners" and "Kerr's Corners" (Village of North Collins, 2020).

According to the U.S. Census, the 2010 population for the Village of North Collins was 1,232. The estimated 2019 population was 2,130, a 72.8 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 8.2 percent of the population is 5 years of age or younger and 12.8

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.36.3 Jurisdictional Capability Assessment and Integration

The Village of North Collins performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.36.3). The Village of North Collins's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of North Collins. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.36-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Article II: Chapter 62	Local	Code Enforcement
Comment: NYS Uniform and Energy Code 2020; The Uniform Fire Prevention and Building Code of the State of New York shall be applicable in the Village of North Collins.					
Zoning Code	Yes	Yes	Article VIII: Section 181-51	Local	Board of Trustees
Comment: Pursuant to the authority conferred by Article 7 of the Village Law of the State of New York and for each of the purposes specified therein, the Village Board of the Village of North Collins, County of Erie and State of New York, has ordained and does hereby enact the following chapter, regulating and restricting the location, size and use of buildings and other structures and the use of land in the Village of North Collins.					
Subdivision Ordinance	Yes	Yes	Article II: Chapter 154	Local	Board of Trustees
Comment: The purpose of subdivision regulations in the Village of North Collins is to: • Enable the Planning Board to implement its authority and power to approve subdivision plats in the public interest. • Achieve the orderly, efficient and economical development of the village through subdivision. • Promote development in accordance with the Master Plan of the Village of North Collins. • D. Promote and protect the health, safety and welfare of the entire community.					
Stormwater Management Ordinance	Yes	Yes	Article V: Section 103-28	Local	Code Enforcement

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Storm drainage provisions: • Roofs and paved areas, including yards and courts, shall be drained. Storm drainage shall be conveyed to an adequate and approved system of stormwater disposal, where available. Storm drains shall be discharged in such manner that water will not flow onto sidewalks. • Where a drainage system may be subject to backwater, suitable provision shall be made to prevent its overflow into the building. • Leaders and gutters, if used, shall be constructed of noncombustible material. • Where storm drainage is interrupted by altering the ground level or contour or by any other means, adequate drainage must be provided to prevent flooding or an unnecessary accumulation of surface water, either up or down stream from the altered site.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Article I: Chapter 26-2	Local	Board of Trustees
Comment: The Planning Board is hereby authorized and empowered to approve plats showing lots, blocks or sites, with or without streets or highways, and to pass and approve the development of plats already filed in the office of the Clerk of the county if such plats are entirely or partially undeveloped.					
Environmental Protection Ordinance	No	No	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	No	Yes	-	-	-
Comment: The Village does not participate in the NFIP.					
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	No	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Updated January 2018	Local	Board of Trustees
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	No	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	N/A	No	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	No	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	-	-	-
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of North Collins to oversee and track development.

Table 9.36-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	Farmland purchased by developer to either subdivide or build apartment buildings

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of North Collins and their current responsibilities which contribute to hazard mitigation.

Table 9.36-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Joint Planning Board
Zoning Board of Adjustments	Yes	Zoning Board of Appeals
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Village DPW. Duties and services include: paving; plowing, streets and sidewalks; highway maintenance; brush and leaf pickup; and taking care of water system.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/Building Inspector. Duties and services include providing information and enforcement of village codes and issuing building permits.
Emergency Management/Public Safety Department	Yes	Emergency Manager
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED; outside Fire Alarm
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Managed by DPW
Mutual aid agreements	Yes	With Fire, Police, etc.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	One emergency manager
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of North Collins.

Table 9.36-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes; Clerk/Board of Trustees
Capital improvements project funding	Yes; Clerk/Board of Trustees
Authority to levy taxes for specific purposes	Yes, Board of Trustees
User fees for water, sewer, gas or electric service	Yes, Board of Trustees
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Clerk/Mayor
Incur debt through special tax bonds	Yes, Clerk/Mayor
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes, Clerk/Board of Trustees
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of North Collins.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.36-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Information available through Mayor and Clerk.
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	CodeRED and the outdoor fire siren
Natural disaster/safety programs in place for schools	Yes	Regular drills done at both schools.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of North Collins.

Table 9.36-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.36-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.36.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael W. Perry, DPW Supervisor

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of North Collins.

Table 9.36-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of North Collins	0	0	$0	0	0

Source: *FEMA, 2019*
Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The Village of North Collins is not participating in the NFIP Program. Flood risk to the village is minimal.

NFIP Compliance

Not applicable.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.36.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of North Collins has indicated that evacuation routes are specific to hazard event and routes will vary according to the location and type of event.

Sheltering

The Village of North Collins has identified the following designated emergency shelters within the Village.

Table 9.36-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with the county to identify and designate an Emergency Shelter. See Mitigation Action 2022-V. North Collins-#001							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of North Collins has identified the following sites suitable for placing temporary housing units.

Table 9.36-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-V. North Collins-#002					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of North Collins has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.36-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate temporary housing locations. See Mitigation Action 2022-V. North Collins-#002					

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.36.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.36-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.36-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	-	0	-	0	-	0	-	2	0	1	0
Multi-Family	0	-	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	2	0	1	0	0	-	2	0	0	-
Total Permits Issued	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**1**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Timberbuilt	Commercial	2	Eagle Drive	SFHA, NEHRP Soil Class D and E Hazard Area, Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Pipelines	Rebuilt and Expanded with new building
Tractor Supply	Commercial	1	Main Street	None	Demo existing building and rebuild new
Best Self Behavioral Health	Commercial	2	Spruce Street	Wildland-Urban Intermix Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Remodeled and expanded w/ engineering
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Cricket Meadows	Residential	1 or 2	Langford Rd	Possible flood or landslide areas due to no engineering consult	Possible apartment buildings
Subdivision of home lots	Residential	Up to 6	Langford Rd – upper	None	Housing Subdivision

SFHA *Special Flood Hazard Area (1% flood event)*

** Only location-specific hazard zones or vulnerabilities identified.*

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

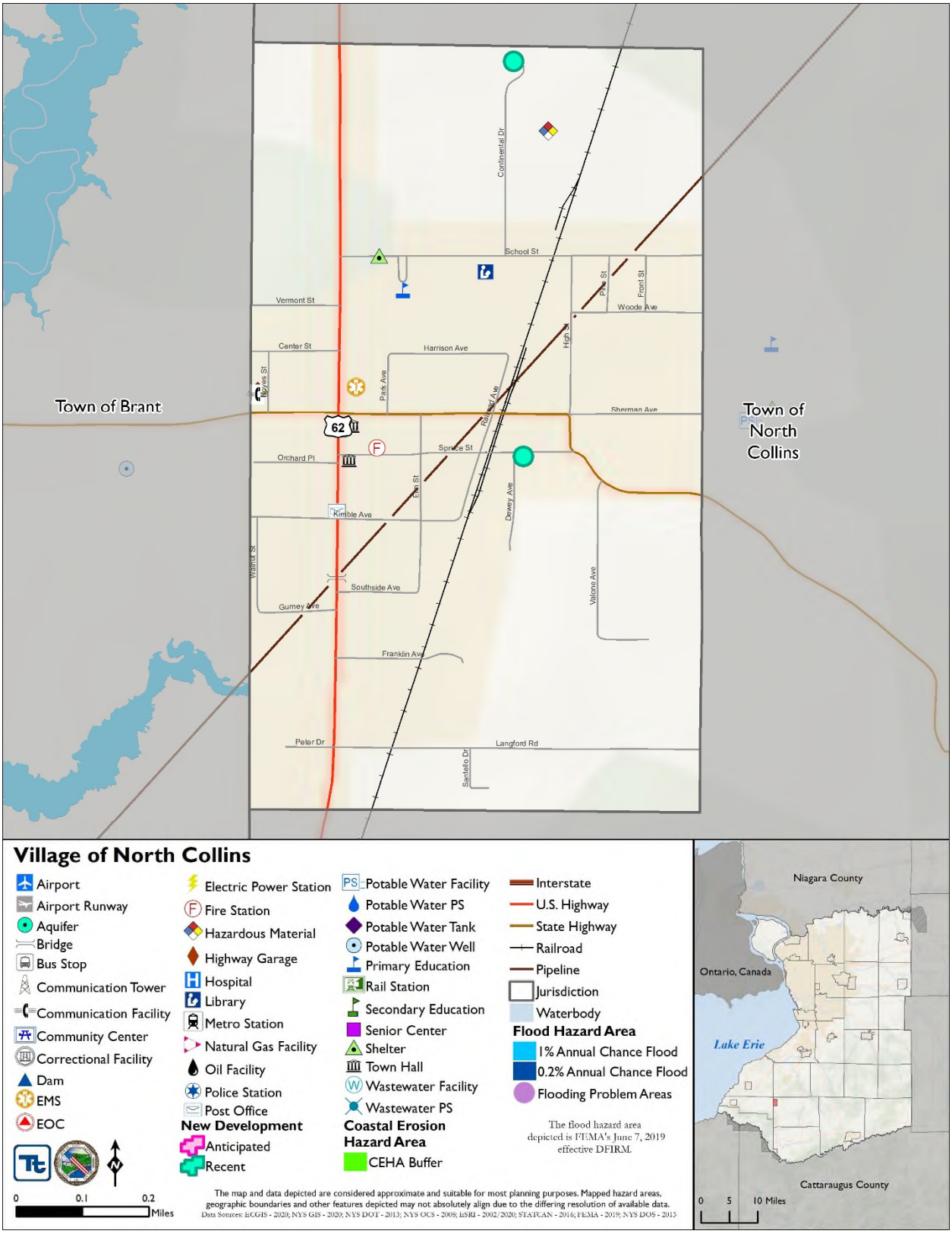
9.36.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of North Collins's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of North Collins has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

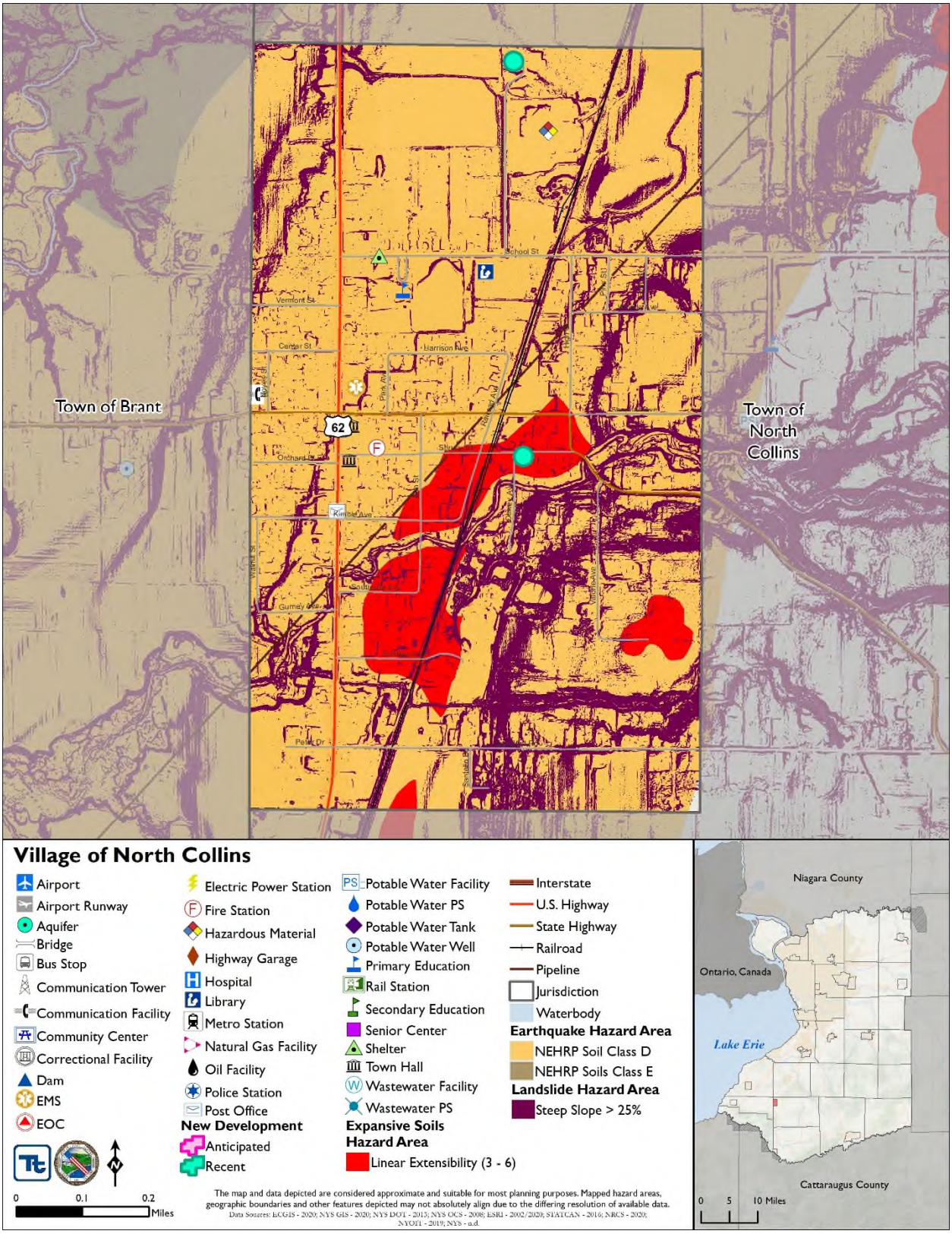
Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.36-1. Village of North Collins Hazard Area Extent and Location Map 1



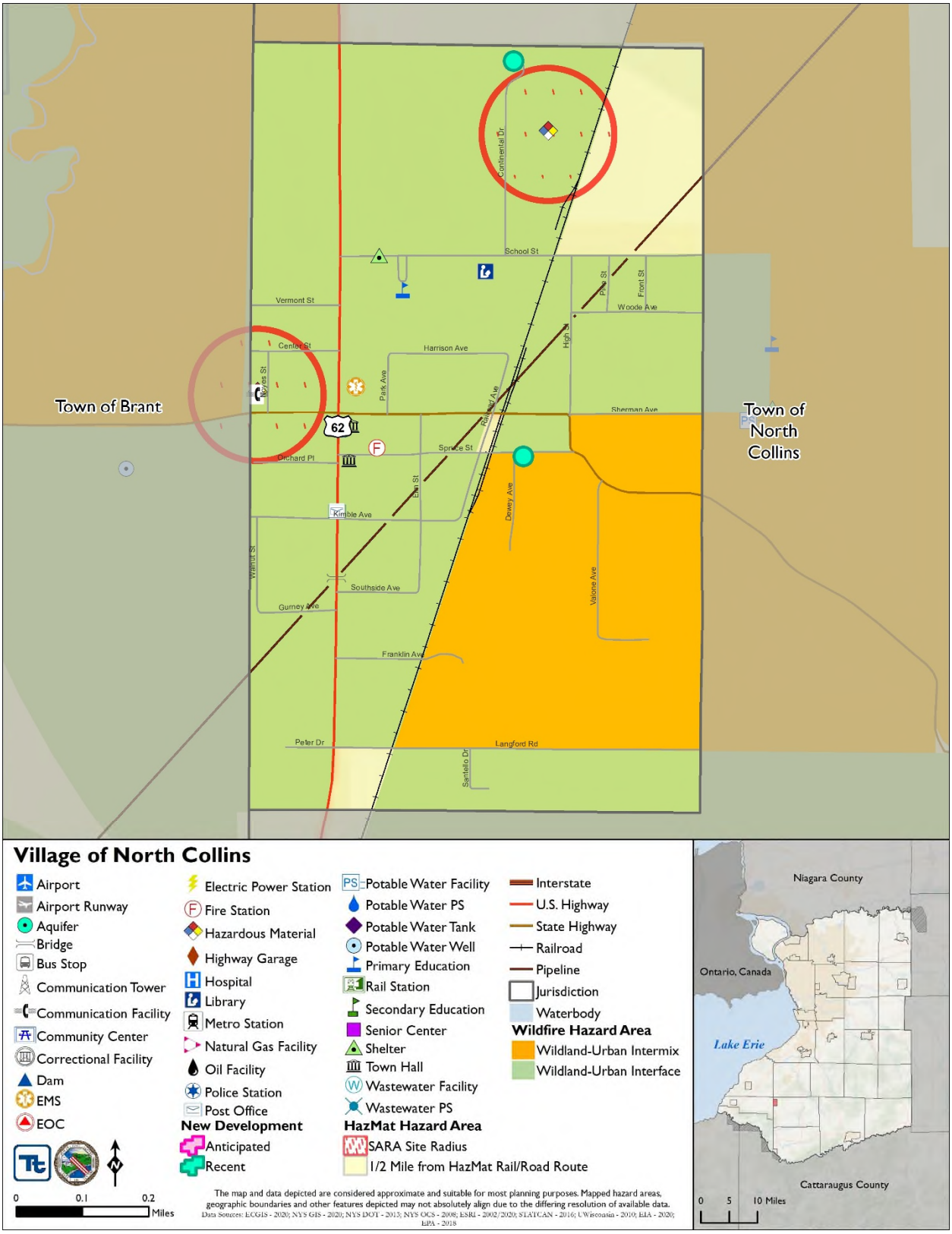
Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.36-2. Village of North Collins Hazard Area Extent and Location Map 2



Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.36-3. Village of North Collins Hazard Area Extent and Location Map 3



Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of North Collins's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.36-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.36-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	-
August 11-15, 2015	Flash Flood	No	-
October 28-29, 2015	High Wind	No	-
November 6, 2015	Thunderstorm Wind	No	-
November 12, 2015	High Wind	No	-
November 18, 2015	High Wind	No	-
January 11, 2017	High Wind	No	-
March 8, 2017	High Wind	No	Yes, flagpole broken from wind = $750
March 13, 2017	Winter Storm	No	-
July 20, 2017	Tornado	No	-
August 4, 2017	Thunderstorm Wind	No	-
December 10-15, 2017	Lake-effect Snow	No	-
December 24-29, 2017	Lake-effect Snow	No	-
January 2, 2018	Blizzard	No	-
October 6, 2018	Lightning	No	-
February 24, 2019	High Wind	No	-
February 24, 2019	Lakeshore Flooding	No	-
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	-
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	-
November 27, 2019	Lakeshore Flooding	No	-
January 12, 2020	Lakeshore Flooding	No	-
January 18, 2020	Lakeshore Flooding	No	-

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

DR *Major Disaster Declaration (FEMA)*

N/A *Not applicable*

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of North Collins's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of North Collins. The Village of North Collins has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated the following:

- The village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.36-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.36-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified						

Source: FEMA DFIRM

Identified Issues

After review of the Village of North Collins's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of North Collins has identified the following vulnerabilities within their community:

- Back yard flooding of residents inside the block of Sherman Ave (Route 249), Park Avenue, Harrison Avenue, and Railroad Avenue.
- Culvert replacement and redirection of creek on Gurney Avenue (eroding into the foundation of the house next door). See Mitigation Action 2022-V. North Collins-003.
- 3 Sisters Creek realignment or erosion prevention needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue. See Mitigation Action 2022-V. North Collins-004.
- Reported incidents of excessive flooding between Southside Avenue and Franklin Avenue.
- Dead trees resting in Right-of-way on wires along Main Street (across from Franklin Avenue)
- Storm drains needed along the portion of Railroad Avenue between Harrison Avenue and Sherman Avenue. See Mitigation Action 2022-V. North Collins-005.

9.36.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.36-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
-	Replacement and enlargement of existing storm sewer system	Runoff, Flooding	DPW	Flooding	No Progress	Cost	-	1. Include in 2022 HMP. 2. See Mitigation Action 2022-V. North Collins-005 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of North Collins has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of North Collins participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.36-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X						X			X
Cyber Attack	X						X			X
Earthquake	X						X			X
Expansive Soils	X						X			X
Extreme Temperature	X						X			X
Flood	X	X	X				X	X	X	X
Hazardous Materials	X						X			X
Landslide	X						X			X
Pandemic	X						X			X
Severe Storm	X	X	X				X	X	X	X
Severe Winter Storm	X	X	X				X	X	X	X
Utility Failure	X						X			X
Wildfire	X						X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.36-19 summarizes the comprehensive range of specific mitigation initiatives the Village of North Collins would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.36-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V. North Collins-001	Emergency Shelter	1, 2, 3	All Hazards	**Problem**: The village does not have any designated Emergency Shelter locations. **Solution**: The village will work with Erie County Emergency Services to identify and designate an Emergency Shelter.	Yes	No	Short	Village of North Collins	Low - Medium	High	Municipal Budget	High	LPR	PI, ES
2022-V. North Collins-002	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem**: The village does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The village will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose. The village will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	Yes	No	Short	Village of North Collins	Low - Medium	High	Municipal Budget	High	LPR	PI, ES
2022-V. North Collins-003	Gurney Ave Culvert Replacement	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Severe storms and flooding have exacerbated erosion along Gurney Avenue, destroying the foundation of homes along the creek. **Solution**: The village will seek funding to upsize and replace the culvert on Gurney Avenue to increase flow of water away from the homes	No	No	Short	Village of North Collins DPW, Engineering	Medium, estimated $50,000 to replace culvert	High, property protections	HMGP	High	SIP, NSP	SP, NR

Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				and reduce flooding. If deemed necessary by engineering, the village will employ green infrastructure improvements to the area to stabilize the creek bed to further eliminate erosion and property destructions.										
2022-V. North Collins-004	Three Sisters Creek Stabilization	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Three Sisters Creek realignment or erosion prevention is needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue. **Solution**: The village will seek funding to realign and stabilize the portion of Three Sisters Creek that runs adjacent to properties on Main St, Kimble Ave, Elm St, and Southside Ave. The village will work with Engineering, DPW, and the County SWCD to implement structural and non-structural methods to control erosion including adding vegetation, armoring the banks, or installing basins and diversion channels as deemed necessary.	No	No	Short	Village of North Collins DPW, Engineering, Erie County SWCD	High	High, property protections and reduces flooding and erosion	HMGP, BRIC	High	SIP, NSP	SP, NR
2022-V. North Collins-005	Storm Drainage System Improvements	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: The existing storm drainage system is inadequate for the needs of the Town and Village of North Collins. **Solution**: The Village and Town are currently seeking CDBG funding to increase the storm drainage system within the village. As part of this project, the village will install storm drains along Railroad Ave between Harrison and Sherman Avenues. These drains will improve runoff and stormwater drainage, and reduce	No	No	Short	Village of North Collins and Town of North Collins	High	High, property protections and reduces flooding and erosion	CDBG	High	SIP, NSP	SP, NR

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.36-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				impacts of storms on the properties along Railroad Avenue.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.36-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. North Collins-001	Emergency Shelter	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V. North Collins-002	Temporary and Permanent Housing	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-V. North Collins-003	Gurney Ave Culvert Replacement	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	9	High
2022-V. North Collins-004	Three Sisters Creek Stabilization	1	1	1	1	1	0	-1	0	1	1	1	1	1	0	9	High
2022-V. North Collins-005	Storm Drainage System Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.36.9 Action Worksheets

The following action worksheets have been developed by the Village of North Collins to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Gurney Ave Culvert Replacement		
Project Number:	2022-V. North Collins-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Severe storms and flooding have exacerbated erosion along Gurney Avenue, destroying the foundation of homes along the creek.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will seek funding to upsize and replace the culvert on Gurney Avenue to increase flow of water away from the homes and reduce flooding. If deemed necessary by engineering, the village will employ green infrastructure improvements to the area to stabilize the creek bed to further eliminate erosion and property destructions.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, property protections
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	Estimated $50,000/culvert	**Mitigation Action Type:**	Structure and Infrastructure Projects, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP dependent on funding
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	HMGP
Responsible Organization:	Village of North Collins DPW, Engineering	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadway	$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Gurney Ave Culvert Replacement	
Project Number:	2022-V. North Collins-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Protects homes
Property Protection	1	Protects properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	Project may require permitting
Fiscal	-1	Village will seek funding
Environmental	0	If need to do stabilizations/redirect creek
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Three Sisters Creek Stabilization		
Project Number:	2022-V. North Collins-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Three Sisters Creek realignment or erosion prevention needed in residential backyards inside the block of Main Street, Kimble Avenue, Elm Street, and Southside Avenue.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will seek funding to realign and stabilize the portion of Three Sisters Creek that runs adjacent to properties on Main St, Kimble Ave, Elm St, and Southside Ave. The Village will work with Engineering, DPW, and the County SWCD to implement structural and non-structural methods to control erosion including adding vegetation, armoring the banks, or installing basins and diversion channels as deemed necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, property protections and reduces flooding and erosion
Useful Life:	40 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	Structure and Infrastructure ProjectsIP, Natural Systems ProtectionSP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP, dependent on funding
Estimated Time Required for Project Implementation:	6 months – 1 year	**Potential Funding Sources:**	HMGP, BRIC
Responsible Organization:	Village of North Collins DPW, Engineering, Erie County SWCD	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate properties along creek	N/A	Not feasible
	Elevate roadways	1 Million	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Three Sisters Creek Stabilization	
Project Number:	2022-V. North Collins-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Protects homes on these streets
Property Protection	1	Ensures roadway and personal property protections
Cost-Effectiveness	1	
Technical	1	
Political	1	Village supports project
Legal	0	Project may require permitting
Fiscal	-1	Project requires funding support
Environmental	0	Possible environmental concerns, village will consult NYS DEC
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	

Attachment: 75-Section-9.36-North-Collins-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.37 Town of Orchard Park

This section presents the jurisdictional annex for the Town of Orchard Park. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Orchard Park's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.37.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Orchard Park's hazard mitigation plan primary and alternate points of contact. The Town of Orchard Park followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager, Building Inspector, Town Engineer, Code Enforcement, and Town Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.37-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Rich Mrugalski/ Emergency Manager Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-545-0557 Email: mrugalskir@orchardparkny.org	Name/Title: Wayne Bieler/ Town Engineer Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-662-6425 Email: bielerw@orchardparkny.org
NFIP Floodplain Administrator	
Name/Title: Steve Bremer/ Building Inspector Address: 4295 S. Buffalo Street, Orchard Park, New York 14127 Phone Number: 716-662-6430 Email: breners@orchardparkny.org	

9.37.2 Municipal Profile

In 1850, the Town of Orchard Park was formed from the original Town of Hamburg. It is 39 square miles and is one of the county's "South Towns". The separate Village of Orchard Park is entirely contained within the town. US Routes 20 and 219 pass through the town.

The first settlers in the area arrived in 1803, mainly Quaker families established farmsteads in the town's southwest corner. German families later settled south of the village area. As the community grew, links with neighboring communities improved. Some dirt roads became plank roads in the 1840s, and were gradually upgraded to stone, macadam, and brick as transportation technology changed. A railroad was extended to Orchard Park in 1883. In 1900, an electric trolley line began running between Buffalo and the town but was abandoned in 1932, with the advent of buses and automobiles. Orchard Park experienced significant residential

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

suburban development in the latter half of the 20th century. The South Buffalo residents of Irish heritage were the first to arrive and the town generally became a bedroom community of Buffalo. (Town of Orchard Park 2020) The building of Rich Stadium, now New Era Field, as the home of the Buffalo Bills football team, was a defining development within the town. (Town of Orchard Park 2007)

According to the U.S. Census, the 2010 population for the Town of Orchard Park was 25,808. The estimated 2019 population was 26,361, a 2.1 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.9 percent of the population is 5 years of age or younger and 22.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.37.3 Jurisdictional Capability Assessment and Integration

The Town of Orchard Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.37.3). The Town of Orchard Park's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Orchard Park. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.37-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 45 Building Construction, Adopted 1970	Local	Building Inspectors Department
Comment: *This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Orchard Park. This article is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this article.*					
Zoning Code	Yes	No	Chapter 144 Zoning, Adopted 1985	Local	Building Inspectors Department and Planning Department

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: *Adopted by the Town Board of the Town of Orchard Park 5-15-1985. Such regulations shall be made in accordance with the general plan and designed to lessen congestion in the streets; to secure safety from fires, flood, panic, and other dangers; to promote the health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to facilitate the provision of transportation, water, sewerage, schools, parks, and other public requirements. Such regulations shall be made with reasonable consideration, among other things, to the characteristics of the district and its peculiarities for particular uses and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the town.*					
Subdivision Ordinance	Yes	No	Chapter 121 Subdivision, Adopted 1958	Local	Building Inspectors Department, Engineering Department and Planning Department
Comment: *Site plan procedures include: 1) Sketch plan to include data showing how development may impact an adjoining property, the availability of utilities, the effect on drainage systems, natural watercourses, and other environmental concerns. 2) Where a subdivision or open development area is traversed by a watercourse, drainageway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width or construction, or both, as will be adequate for the purpose. 3) Land subject to flooding shall not be platted for residential occupancy nor for such other uses as may increase danger to life or property or aggravate the flood hazard. 4) Surface water retention facilities shall be developed where required in order that the rate of stormwater runoff after construction is no greater than the rate of runoff prior to construction.*					
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 119A & 119B Storm Sewer and Stormwater Management & Erosion Control, Adopted 2007	Local	Engineering Department and Building Inspectors Department
Comment: *The purpose of this chapter and Chapter 144, Article XII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 119B-1 hereof. This chapter and Chapter 144, Article XII, seek to meet those purposes by achieving the following objectives:* *A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* *B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* *D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* *E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* *F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.* *The ordinance includes but is not limited to the following guidelines: 1) At a minimum, a development's site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the land development activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and the location(s) of the stormwater discharge(s). 2) A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff.*					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Site Plan Review	Yes	Yes	Chapter 45; Building Construction Adopted 1970.	Local	Planning Department, Building Inspectors Department and Engineering Department
Comment: *The Town uses a subdivision plan review and a commercial plan review process:* *1) An applicant's site plan will include the following: legal data, impact on the environs, natural features, existing man-made features, proposed development, impact on stormwater pollution, and other information or materials. If a stormwater pollution prevention plan (SWPPP) is submitted pursuant to § 95-4B(6) of this chapter, such SWPPP shall be considered by the Town Board, Planning Board and others as part of an analysis of an applicant's site plan, and the site plan and SWPPP shall not be approved unless they comply with the performance and design criteria and standards in Chapter 96, Stormwater Management, of the Code. 2) Topographical features, including a map showing existing contour intervals of no more than five feet. Two-foot contour intervals will be required if the topography is relatively flat. Areas of steep slopes should be delineated as necessary. 3) Hydrologic features, which should include drainage and natural runoff patterns, flood zones, noted wetlands, vegetative cover and average depth to groundwater.*				
Environmental Protection Ordinance	No	Yes	Chapter 144 – Zoning. Adopted by the Town Board of the Town of Orchard Park 5-15-1985.		
Comment: *The Town does not have dedicated ordinance put parts of environmental protection are found in the zoning and stormwater prevention ordinances. The intent is to enforce environmental compliance through zoning.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 66 (Flood Damage Prevention); adopted 5/1/2019	Local	Building Inspector
Comment: *The Orchard Park Town Building Inspector is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.* *It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and* F. *Qualify for and maintain participation in the National Flood Insurance Program.*					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 119A, Stormwater Management Erosion & Sediment Control, Adopted 2007	Local	Stormwater Management Officer
Comment: *The purpose of this chapter and Chapter 144, Article XII, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 119B-1 hereof. This chapter and Chapter 144, Article XII, seek to meet those purposes by achieving the following objectives:* *A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* *B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* *D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* *E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* F. *Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.*					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: *Mitigation Action*					

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Completed 2006	Local	Planning Department
Comment: *The goals include the following 1) Protect and Preserve Open Space and Prime Farmlands; 2) Protect Significant Environmental Resources; 3) Provide a Safe and Efficient Transportation Network that Compliments the Existing Town Atmosphere 4) Recognize and Promote All Departments of Town Government as Having Public Service and Assistance to Citizens as the Primary Objectives*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No			
Comment: Open spacing planning can be found in the Towns Comprehensive Plan					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No			
Comment: The Conservation Board handles habitat issues within the Town					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No			
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Orchard Park Comprehensive Emergency Plan, March 2012	Local	Emergency Manager
Comment: *The CEMP provides a comprehensive evaluation of the municipality's vulnerabilities as well as an analysis of the overall preparedness of the community.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Orchard Park to oversee and track development.

Table 9.37-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Building Inspector, Engineering, Planning Departments, Town Board for Commercial Developments
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Building Inspector / Code Enforcement Department
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The process for controlling buildable land is handled through the Zoning Ordinance. No quantitative number are kept.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Orchard Park and their current responsibilities which contribute to hazard mitigation.

Table 9.37-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board, established in 1948 pursuant to New York State and Town Law, consists of seven members and one alternate appointed by the Town Board. The members serve for a seven-year term, with one members' term expiring annually, except for the alternate member who is appointed annually for a one-year term. The Planning Board reviews all development projects and subdivision developments which take place in the town, and makes recommendations on all commercial, industrial, and business development to the Town Board. The Planning Board has full approval authority, and binding jurisdictional authority regarding all residential subdivision developments, on which the Town Board may make recommendations. The Board is also charged with generating and reviewing proposed ordinances intended to become part of Orchard Park Town Law, review and recommendation on proposed zoning changes and review from time to time of existing zoning codes with recommendations for updating and appropriate changes. The Planning Board works closely with the Conservation Board, the Town Board, the Engineering Department, and the Planning Department.
Zoning Board of Appeals	Yes	The Zoning Board of Appeals was established in 1941 and is currently made up five members. The Zoning Board of Appeals hears and deliberates on cases from citizens seeking relief from the Town ordinances. Decisions by the Board are based on strict criteria defined by the State and may be appealed by court action. The Board can also advise the Town Board regarding zoning and development issues as they deem necessary. Lastly, the Zoning Board of Appeals has the authority to approve the location of cell towers as per Town of Orchard Park Code.
Planning Department	Yes	The role of the planning department includes but is not limited to developing planning documents, conducting analysis, and helping create a more sustainable and healthy community for all.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Mitigation Planning Committee	Yes	The Public Safety Committee is made up volunteers appointed each year by the Town Board. The Public Safety Committee works closely with law enforcement, fire departments, and other relevant agencies. The Orchard Park Police Captain acts in an advisory role and as liaison to the Town. Requests regarding the placement of stop signs, no parking restrictions, speed limits, traffic signals, intersections, traffic issues and other areas where public safety is a concern are referred to the Public Safety Committee for review and recommendations to the Town Board.
Conservation Board	Yes	The Conservation Board consists of seven members appointed by the Town Board. Each member serves for a two-year term, with three members' terms expiring in even years and four members' terms expiring in odd years. The function of the Conservation Board is to approve or deny submitted landscape plans and determine what is the required landscaping for Commercial projects. The board serves for the purpose of generating and reviewing proposed environmental ordinances intended to become part of Orchard Park Town Law, to review, amend, and approve required landscape plans submitted as part of required documents for business, commercial and industrial development projects, to review and recommend to the Town Board on requests for Conservation Easements. In the past this Board has completed an open space inventory, which was updated several years ago. It has researched and produced a Town Open Space Plan and has recently worked on the establishment of the Town Green Print.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	It is the mission of the Orchard Park Economic Development Committee to assist businesses to locate and expand in Orchard Park. In an effort to help promote Orchard Park to the commercial and industrial community, the OPEDC has compiled the following list of available commercial and industrial properties in Orchard Park for purchase, lease, or rent. For additional information on specific listings, please contact the respective company contact person.
Public Works/Highway Department	Yes	The Highway and Parks Department is responsible for services ranging from snowplowing and road repair to planting the flowers and trees in the town parks.
Construction/Building/Code Enforcement Department	Yes	Building Inspector/Code Enforcement Department – reviews building permits
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	CodeRED Community Notification System and App
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway Department – snowplowing, road repairs
Mutual aid agreements	Yes	Town has a MA agreement with Erie County and through the Superintendent of Highways Association
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering Department and the Planning Department

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department and Building Inspectors Department
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department
Staff with expertise or training in benefit/cost analysis	Yes	Engineering Department
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Town Building Inspector
Surveyor(s)	Yes	Engineering Department
Emergency Manager	Yes	Currently the Town does not have a designated department for this function; however, there is an emergency manager
Grant writer(s)	Yes	Town Board, On Call Basis
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Orchard Park.

Table 9.37-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Orchard Park.

Table 9.37-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Has various information regarding preparedness for the community as well as guidance on what to do during and after an event.
Social media for hazard mitigation education and outreach	Yes	Has various information regarding preparedness for the community as well as guidance on what to do during and after an event.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	The Town uses CodeRed messaging system
Natural disaster/safety programs in place for schools	No	-
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Orchard Park.

Table 9.37-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4 - Areas with Hydrants, Class 8 - Areas without Hydrants	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event,

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.37-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	N/A
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.37.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Steve Bremer, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Orchard Park.

Table 9.37-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Orchard Park	20	14	$8,609	0	2

Source: FEMA 2020a, FEMA 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The town does not have a list of properties that have been damaged by flooding or those that are interested in flood mitigation. The town does not have any RiskMAP projects underway in the jurisdiction. The town has not identified any way they make substantial damage determination, nor do they have properties that are mitigated. The existing flood hazard maps adequately address flood risk within the town.

NFIP Compliance

The building inspector is in charge of floodplain management and the town engineer is a certified floodplain manager. The town does not have access to resources to determine the impacts of climate change. The town

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

would like to have training as needed for any changes that occur national flood plan standards for staff in the Building Inspectors Department and the Engineering Department. Additional training for Engineering Staff on modeling of flood plains would be useful. As the NFIP provides permit review, the town would need additional funding and staff to increase service capacity. The town does not have any outstanding violations and the municipality had a CAV on May 18, 2020.

The local law number for the flood damage prevention ordinance is Chapter 66, Flood Damage Prevention, Last update 2019. The existing program meets all requirements, and the town does use the planning process, subdivision review, commercial review, and stormwater Phase II program to reduce flooding. The town is not interested in participating in the FEMA CRS. The Orchard Park Town Building Inspector is appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions. The municipality has a freeboard of two feet.

9.37.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Orchard Park has identified the following routes and procedures to evacuate residents prior to and during an event: Route 20, Route 20A, Abbott Road, Route 179 (Milestrip Road), Route 219, Route 240/277, Baker Road, Jewett Holmwood Road, New Armor Duells Road, and Transit Road. In the event of an evacuation, the Orchard Park Police Department is tasked with directing traffic to the main evacuation routes within the Town and Village.

Sheltering

The Town of Orchard Park has identified the following designated emergency shelters within the town.

Table 9.37-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No	None	Warming and cooling station only
Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Orchard Park has identified the following sites suitable for placing temporary housing units.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.37-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Compost/Soccer Complex	6909 Milestrip Road	300,000 Sq. Ft. Available	Parkland	Yes	Yes, satisfied
Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	400,000 Sq. Ft. Available	Vacant Parkland	Yes	Yes, satisfied
Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	52,000 Sq. Ft. Available	Parking Lot	Yes	Yes, satisfied
Brush Mountain Park	4520 California Road	200,000 Sq. Ft. Available	Parkland	Yes	Yes, satisfied

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Orchard Park has not identified any permanent housing locations.

Table 9.37-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – mitigation action number 009					

9.37.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.37-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.37-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	68	0	57	0	55	0	49	0	40	0	33	0
Multi-Family	2	0		0		0	3	0	10	0	8	0
Other (commercial, mixed-use, etc.)	5	0	3	0	2	0	5	0	7	0	1	0
Total Permits Issued	75	0	60	0	57	0	57	0	57	0	42	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Riley Meadows West	Residential	29 Homes	Murphy Road	None	One phase remaining to be constructed
Pleasant Acres West	Residential	18 Homes	New Taylor Road	0.2-percent Annual Chance Flood Event Hazard Area, Wildland-Urban Intermix Hazard Area, Steep Slopes (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Last two phase under construction
Knoche Farms	Residential	30 Homes	Milestrip Road	Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Two remaining phases yet to be constructed
Orchard Grove Apartments	Residential	16 Buildings/96 Units	California Road	None	Under construction
Sheffer Farms	Residential	14 Units	California Road	Flood Plain, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Under construction
Orchard Park Community Activity Center	Commercial	1 Building	California Road	SFHA, Hazardous Materials Facilities Hazard Area	Portion of parking in Flood Plain
Eagle Heights Phase 8	Residential	31 Homes	Knob Hill Road	Wildland-Urban Intermix Hazard Area, Expansive Soils Hazard Area	Completed
Buffalo Medical Group	Commercial	1 Building	3900 North Buffalo Street	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½	First Phase Completed

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

				Mile Buffer from HazMat Pipelines	
The Residents at the Ridge	Residential	3 Buildings/22 Units	5205 Chestnut Ridge Road	Wildland-Urban Interface Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Expansive Soils Hazard Area	Completed
Ellicott Development	Commercial	1 Building	3910 North Buffalo Road	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Completed
Dollar General	Commercial	1 Building	2737 Southwestern Blvd	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area	Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Birdsong Subdivision Phase 3B	Residential	62 Homes	Jewett Holmwwod Road	None	
Riley Meadows West	Residential	38 Homes	Murphy Road	Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Last phase remaining
Knoche Farms	Residential	31 Homes	Milestrip Road	None	Last Phase remaining
Smokes Creek Subdivision	Residential	26 Homes	Jewett Holmwood Road	Flood Plain	Review Submission
Old Transit Road Subdivision	Residential		Transit Road	None	Review Submission
Ellicott Development	Commercial	Mixed Use	North Buffalo Road	None	Review Submission
Freeman Farms (Taliesin Dev.)	Residential	11 Lots	Wellington Lane	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Review Submission
Broxton Heath	Residential	23 Lots	Powers Road	Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways	Review Submission
Benderson Development	Commercial	3 Buildings	Corner of Milestrip Road and Orchard Park Road	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils Hazard Area	Review Submission
Nexgen	Residential	26 Lots	Old Transit Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard	Review Submission

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

				Area, ½ Mile Buffer from HazMat Pipelines	
Speedway Convenience Store and Gas Station	Commercial	1 Building	Southwestern Blvd and Angle Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, Expansive Soils Hazard Area	Review Submission
5245 Murphy Road	Residential	195 Units	5245 Murphy Road	SFHA, Wildland-Urban Interface Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Review Submission
Orchard Meadows Subdivision	Residential	12 Lots	Old Salem Court	None	Review Submission
Heathwood Assisted Living	Residential	110 Units	North Buffalo Rd and Webster Road	None	Review Submission
Quaker Lake Terrace	Residential	17 Lots	Quaker Lake Terr.	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area,	Review Submission
New York Beer Project	Commercial	1 Building	Windward Road	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Review Submission
Williamsburg Subdivision	Residential	16 Lots	Diller Drive	None	Review Submission

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

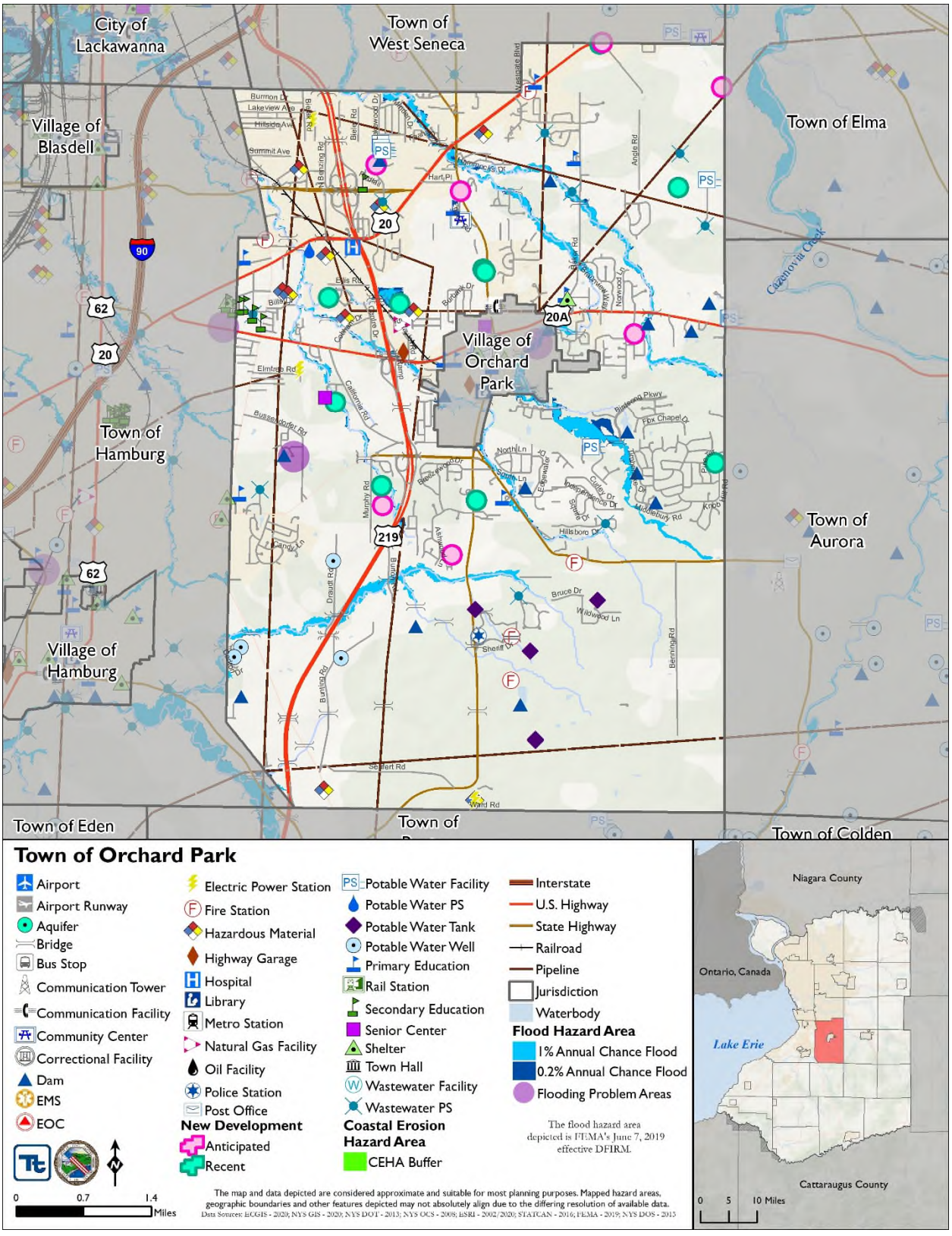
9.37.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.3 (Hazard Ranking) for a detailed summary for the Town of Orchard Park's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Orchard Park has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

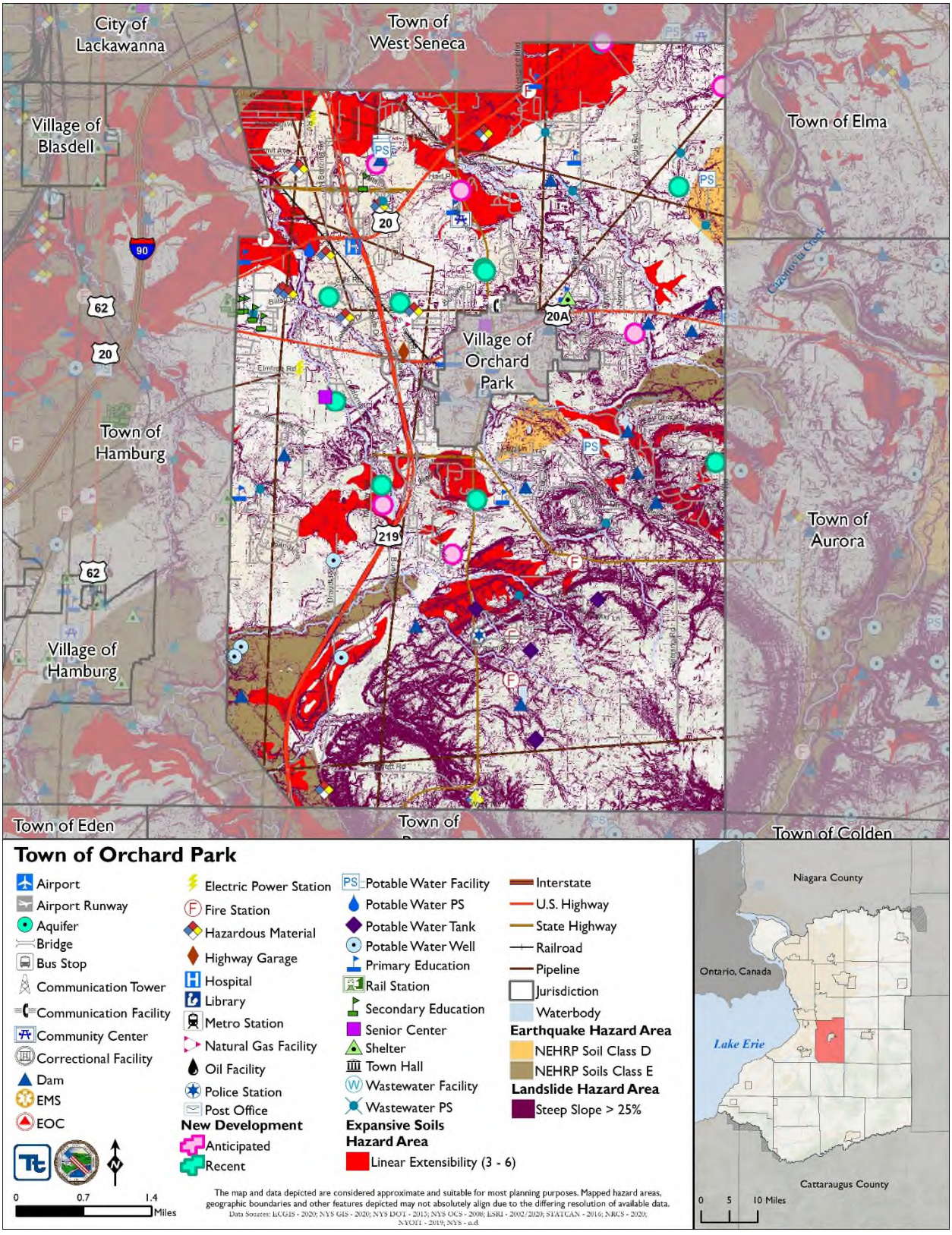
Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.37-1. Town of Orchard Park Hazard Area Extent and Location Map 1



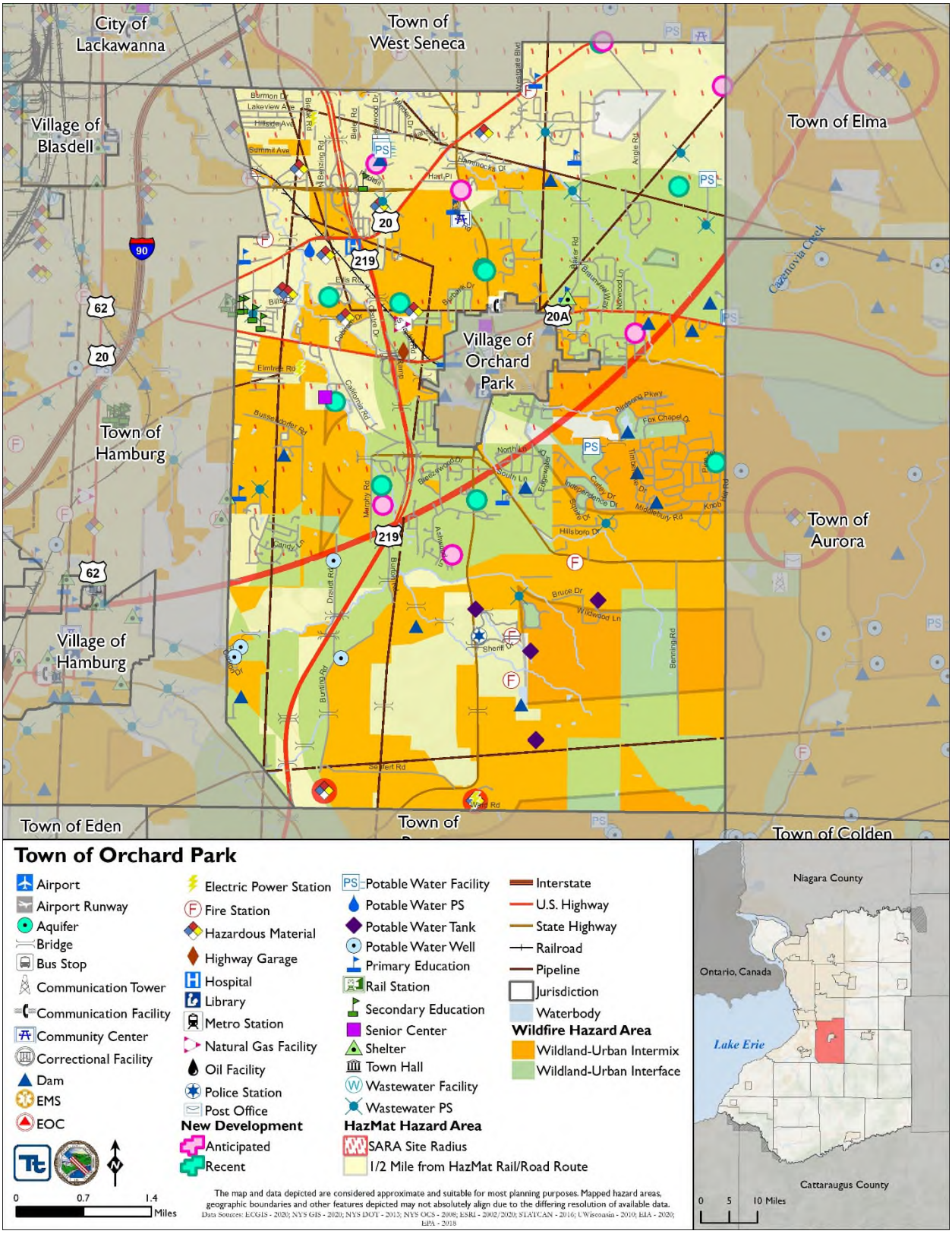
Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.37-2. Town of Orchard Park Hazard Area Extent and Location Map 2



Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.37-3. Town of Orchard Park Hazard Area Extent and Location Map 3



Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Orchard Park's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.37-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.37-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden, and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma, and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low-pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia, and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the town did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Yes, a few homes were damaged, and one garage had its roof torn off. No dollar damage was assessed to the Town.
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher-than-normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of	Although the County was impacted, the town did not report damages

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3–5-hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Orchard Park and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.4 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Orchard Park's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Orchard Park. The Town of Orchard Park has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

- Expansive soils have not been an issue for the town and thus will be re ranked as medium to low.
- Hazardous materials travel through the town which pose threat to community members and will be re ranked from low to medium.
- Wildfires have not been a significant threat so will be marked from high to medium.

Table 9.37-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Medium

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.37-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	**0.2% Event**	
Green Lake Dam	Dam	Yes	Yes	007

Source: GIS 2021

Identified Issues

After review of the Town of Orchard Park's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Orchard Park has identified the following vulnerabilities within their community:

- Only a portion of the main highway building can be run with the current generator and the sewer building does not have a generator. The facility is critical for municipal operation and the building needs power at all times to operate and serve the community at full capacity.
- The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner.
- Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area has caused an increase in the amount of water flowing downstream to the Elmtree Road crossing. This issue is continually becoming worse, and the town believes immediate intervention is necessary to mitigate future damage.
- The current Highway Department communication system restricts communication, by radio, with municipal police, fire, and EMS agencies. This slows down the communication and response of the various departments during hazard events because the Highway Department needs to use analog methods of communication.
- Two creeks that go under town-owned bridges are experiencing problems with sediment build up and creek bank erosion.
- Due to the rural nature of the town, the Fire Districts has dead radio zones in south and north parts of the Town.
- The Green Lake Dam is located in the 100-year floodplain.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- None

9.37.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.37-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Cleaning of existing storm sewer system; Will flush existing storm sewer systems of silt and debris to correct flooding problems – currently done every 5 years	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		1. Discontinue 2. - 3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection		
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
2	Rebuild existing storm catch basin; Will rebuild to alleviate restriction caused by broken concrete in catch basin – done on an add needed basis	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		1. Discontinue 2. - 3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection		
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
3	Stream Channel Mitigation: Will continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts	Flooding	Not Identified	Town Hwy Dept.	Ongoing Capability	Cost		1. Discontinue 2. - 3. This is an ongoing capability that is incorporated into the day-to-day operations of the town. Will be discontinued, and a new mitigation action will be included to address more immediate concerns in action 005.
						Level of Protection		
						Damages Avoided; Evidence of Success	Stabilization measures have decreased the amount of sediment in local creeks allow greater flow.	
4	Purchase Land in Flood Plain Areas; Will continue to evaluate land that may be purchased that falls within the flood plain areas of the Town for recreation and stormwater management purposes	Flooding	Not Identified	Engineering Dept.	Ongoing Capability	Cost	-	1. Discontinue 2. - 3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decreased downstream flooding	
5	Generator Maintenance: Will continue to run	Power Outage	Power outages	Maintenance Dept.	Ongoing Capability	Cost		1. Discontinue

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	generators on a monthly basis to determine the condition of each unit under load		caused by storms, or down power lines in the area			Level of Protection		2. -
						Damages Avoided; Evidence of Success	Provide power during outages. Fire and Police Dispatch to function	3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
6	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Building Inspector, Legal	Complete	Cost	Low	1. Discontinue
						Level of Protection	Moderate	2. -
						Damages Avoided; Evidence of Success	Regulatory Compliance	3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
7	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Building Inspector, Legal	Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2. -
						Damages Avoided; Evidence of Success	Ongoing as necessary	3. This is an ongoing capability that is incorporated into the day-to-day operations of the town.
8	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Flood	Not Identified	Building Inspector	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2. -
						Damages Avoided; Evidence of Success	-	3. The Town does not have the resources to complete this task
9	Join the Community Rating System (CRS)	Flood	Not Identified	Building Inspector, Legal	No Progress	Cost	-	1. Discontinue
						Level of Protection	-	2. -
						Damages Avoided; Evidence of Success	-	3. The Town does not have the resources to complete this task

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Orchard Park has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Green Lake Dredging and Dam Reconstruction - The project started in 2016 and completed early 2017. The project included dredging the entire lake, removing over 118,000 cubic yards of material, rebuilding the spillway from the dam, and reshaping the downstream face of the dam to meet NYSDEC requirements.
- Green Lake Weir Project - The project is scheduled to start in early 2021. The channel will be dredged to allow grader flow into Green Lake reducing downstream flooding
- Bussendorfer Regional Detention Pond Drainage Improvement Project – This project was completed in 2019. The pond will reduce flooding in the Bussendorfer and Elmtree area of the town and is in conjunction with the Bussendorfer Forsythia Phase 2 Drainage Improvements

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Orchard Park participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.37-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X		X					X	X
Cyber Attack		X		X					X	X
Earthquake		X		X					X	X
Expansive Soils		X		X					X	X
Extreme Temperature		X		X					X	X
Flood		X	X	X	X	X		X	X	X
Hazardous Materials		X		X					X	X
Landslide		X		X					X	X
Pandemic		X		X					X	X
Severe Storm		X		X	X	X			X	X
Severe Winter Storm		X		X	X	X			X	X
Utility Failure		X		X					X	X
Wildfire		X		X					X	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.37-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Orchard Park would like to pursue in the future to reduce the effects of hazards. Some upon of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.37-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Orchard Park - 001	Orchard Park Highway Department Buildings - Generators	1,2,	Severe Storm, Winter Storm, and Flood	**Problem**: Only a portion of the main highway building can be run with the current generator and the sewer building does not have a generator. The facility is critical for municipal operation and the building needs power at all times to operate and serve the community at full capacity. **Solution**: Install a new 3 phase generator to run the entire main highway building and install a generator for the entire sewer building. The DPW Superintendent shall conduct a preliminary assessment as to where the new generator shall be installed and to make sure it is not placed in an area where flood can occur.	Yes	No	2 years	Town Highway Dept.	$200,000	High	HMGP, Municipal Budget	High	SIP	PR, PP
2022-Town of Orchard Park - 002	Community Activity Center - Generator	1,2	Severe Storm, Winter Storm, and Flood	**Problem**: The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner. **Solution**: Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size	Yes	No	2 years	Town OEM, Community Center Operator	$800,000	High	HMGP, Municipal Budget	High	SIP	PR, PP

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				needed. Once the size is determined, the town shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.										
2022-Town of Orchard Park - 003	Bussendorfer Forsythia Phase 2 Drainage Improvements	1,2	Flood, Severe Storm	**Problem**: Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area has caused an increase in the amount of water flowing downstream to the Elmtree Road crossing. This issue is continually becoming worse, and the town believes immediate intervention is necessary to mitigate future damage. **Solution**: The Town Highway Department and the Town Engineer will re-design the current drainage system in the area. The re-design will include directing water to a detention basin in Brush Mountain Park. This will reduce the amount of water flowing downstream towards Elmtree Road. During this design process, additional professional assistance might be needed to determine. Once the design phase is complete, the town shall apply for funding.	No	No	2 years	Town Highway Department Town Engineer	High	High	HMGP, BRIC, Transportation Investment Generating Economic Recovery (TIGER), Emergency Watershed Protection (EWP) program	High	SIP	SP
2022-Town of	Upgrade communication	1,2	All	**Problem**: The current Highway Department	No	No	1 year	Town of Orchard Park	Moderate	High	Assistance to Firefighters	High	EAP	ES

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Orchard Park 004	channels for Highway, OEM, Sewer and Village of Orchard Park DPW			communication system restricts communication, by radio, with municipal police, fire, and EMS agencies. This slows down the communication and response of the various departments during hazard events because the Highway Department needs to use analog methods of communication. **Solution**: An assessment will be done to determine the proper system for the town. Once identified, the town will update their system to meet the needs of the town and village. The system will be similar to what other municipalities use in the region. The update will include obtaining new channels and installing new radios in all town and village vehicles.				Highway Dept., OEM, Fire and Police; Village of Orchard Park DPW			Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants			
2022-Town of Orchard Park - 005	Stream Channel Mitigation	1,2	Flood, Severe Storm	**Problem**: Two creeks that go under town-owned bridges are experiencing problems with sediment build up and creek bank erosion. **Solution**: Clean and lower the creek using excavation methods and reforming the shape of the stream. Stabilize banks and prevent erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile	No	No	3 years	Town Highway Dept., SWCD	Moderate	High	Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, BRIDGE NY	High	NSP	NS, SP

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				fabric. Additional consulting shall be provided by the County SWCD to address the immediate erosion concerns.										
2022-Town of Orchard Park - 006	Orchard Park Fire District Communication Enhancement Project	1,2,3	All	**Problem**: Due to the rural nature of the town, the Fire Districts has dead radio zones in south and north parts of the Town. **Solution**: Install a radio tower in the south part of the town or work other agencies to co-locate antennas on their towers. This would require the municipality to go through the SEQR process and determine whether the new tower would have any adverse impacts on the surrounding communities as well as visual impacts. Additional community comment would also be necessary. In addition to the tower, the town will install additional repeaters and boosters. This project will facilitate the communication between the Fire department, OEM, and other municipal and county agencies.	No	Yes	2 years	Town Fire Department	Moderate	High	Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants	High	EAP	ES
2022-Town of Orchard Park-007	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct	No	No	Within 3 years	Town Planning Board	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).										
2022-Town of Orchard Park - 008	Permanent Housing Location	1,2	All	**Problem**: The Town of Orchard Park currently does not have any official permanent housing location within the town. Given the town has limited land and does not have any specific place for the repetitive housing relocation, the town needs identify new land for this effort. **Solution**: The town will conduct an assessment of existing sites across the town that are best suited for permanent housing relocation. These sites should have access to all utilities. The town would then work with the landowner to acquire the property, if not yet owned by the town. The town would then need to apply for FEMA funding to acquire	No	Yes	5 years	Town of Orchard Park OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.37-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the town board and Town Highway Dept./ OEM.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.37-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Orchard Park -001	Orchard Park Highway Department Buildings - Generators	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Orchard Park -002	Community Activity Center - Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Town of Orchard Park -003	Bussendorfer Forsythia Phase 2 Drainage Improvements	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-Town of Orchard Park -004	Upgrade communication channels for Highway, Sewer and Village DPW	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Town of Orchard Park -005	Stream Channel Mitigation	1	1	1	0	0	1	-1	1	1	1	1	0	1	1	9	High
2022-Town of Orchard Park -006	Orchard Park Fire District Communication Enhancement Project	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Town of Orchard Park -007	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Town of Orchard Park -008	Permanent Housing Location	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.37.9 Action Worksheets

The following action worksheets have been developed by the Town of Orchard Park to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Community Activity Center - Generator		
Project Number:	2022-Town of Orchard Park -002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Problem: The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the town to allocate resources and respond in a timely manner.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the town shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$800,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	HMGP, Municipal Budget
Responsible Organization:	Town OEM, Community Center Operator	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	High	Unstable energy source
	Generator	High	Best option
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Community Activity Center - Generator	
Project Number:	2022-Town of Orchard Park -002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	0	This project has minimal environmental impact
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway Dept.
Other Community Objectives	1	Various objectives
Total	12	
Priority (High/Med/Low)	High	

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	2022-Town of Orchard Park -003		
Project Number:	Bussendorfer Forsythia Phase 2 Drainage Improvements		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Undersized drainage facilities in the Bussendorfer, Forsythia, & Willowbrook area and increased amount of water flowing downstream to the Elmtree Road crossing. This issue has continually becoming worse, and the town believe immediate intervention is necessary to mitigate future damage,		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Highway Dept. will be tasked to redesign drainage in the area, direct water to the newly constructed detention basin in Brush Mountain Park and reduce the amount of water flowing downstream to the Elmtree Road. During this design process, additional professional assistance might be needed to determine. Once the design phase is complete, the town shall apply for funding.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year storm	**Estimated Benefits (losses avoided):**	Flood reduction
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	Moderate	**Mitigation Action Type:**	Structural and infrastructure project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	HMGP, Building Resilient Infrastructure and Communities (BRIC), Transportation Investment Generating Economic Recovery (TIGER), Emergency Watershed Protection (EWP) program
Responsible Organization:	DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Close all flooded roads	High	Issue will not be resolved
	Flood mitigation	High	Flood waters will be redirected

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	2022-Town of Orchard Park -003	
Project Number:	Bussendorfer Forsythia Phase 2 Drainage Improvements	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This projects property
Cost-Effectiveness	1	This is the most cost effective
Technical	1	There are no identified technical issues
Political	1	There are no political issues with this project
Legal	1	There are no legal issues identified at this time
Fiscal	-1	The town needs additional resources
Environmental	1	This project has positive environmental impacts
Social	1	This project has positive social impact
Administrative	1	There are no administrative issues identified
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	There are no timeline related issues
Agency Champion	1	This town has assigned the Town Highway Dept.
Other Community Objectives	1	Various objectives
Total	12	
Priority (High/Med/Low)	High	

Attachment: 76-Section-9.37-Orchard-Park-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.38 Village of Orchard Park

This section presents the jurisdictional annex for the Village of Orchard Park. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Orchard Park's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.38.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Orchard Park's hazard mitigation plan primary and alternate points of contact. The Village of Orchard Park followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Code Enforcement, Emergency Management, and Clerk. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.38-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Richard J. Mrugalski/ Emergency Manager Address: 4295 S. Buffalo Street, Orchard Park NY Phone Number: 716-545-0557 Email: mrugalskir@orchardparkny.org	Name/Title: John Gullo/ Code Enforcement Address: 4295 S. Buffalo Street Municipal Building – 1st Floor Orchard Park, NY 14127 Phone Number: 716.662.9327 Email: BuildingInspector@OrchardParkVillage.org
NFIP Floodplain Administrator	
Name/Title: John Gullo/ Code Enforcement Address: 4295 S. Buffalo Street Municipal Building – 1st Floor Orchard Park, NY 14127 Phone Number: 716.662.9327 Email: BuildingInspector@OrchardParkVillage.org	

9.38.2 Municipal Profile

The Village of Orchard Park is 1.4 square miles and is situated entirely within the Town of Orchard Park. The first settlers to the village area were Quakers who arrived in 1803. The village was first called Potter's Corners" and incorporated with its current name in 1821. U.S. Route 20A and NYS Route 277 traverse the village.

According to the U.S. Census, the 2010 population for the Village of Orchard Park was 3,246. The estimated 2019 population was 3,148, a three percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 3.2 percent of the population is 5 years of age or younger and 20.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.38.3 Jurisdictional Capability Assessment and Integration

The Village of Orchard Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.38.3). The Village of Orchard Park's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Orchard Park. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.38-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 92 - Building Code Administration and Enforcement	Local	Code Enforcement Office
Comment: *This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Village. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter. The Code Enforcement Officer administers and enforces all provisions of this chapter.*					
Zoning Code	Yes	No	Chapter 225 – Zoning; adopted 12/3/1979 and amended as needed	Local	Code Enforcement Officer
Comment: *Such regulations are made in accordance with the Comprehensive Plan and designed to lessen congestion in the streets, to secure safety from fire, panic, floods, and other dangers; to promote the health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to facilitate the provision of transportation, water, sewerage, schools, parks and other public requirements. Such regulations are made with reasonable consideration, among other things as to the characteristics of the district and its peculiarities for particular uses and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the Village.* *The chapter identifies several zoning districts that promote the public health, safety, morals, and general welfare of the village. This includes: residential low-density, residential medium-density, residential medium-high density, commercial, professional-commercial, industrial, and land conservation.*					
Subdivision Ordinance	No	No	-	-	-
Comment:					

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Management Ordinance	Yes	Yes – for county	Chapter 185 – Stormwater Management and Erosion Control; adopted 12/29/2008	Local	Department of Public Works
Comment: *The purpose of this chapter, is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 185-1 hereof. This chapter seeks to meet those purposes by achieving the following objectives:* *A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;* *B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;* *D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;* *E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and* *F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.*				
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Village Code 225 -21 7/1998	Local	Code Enforcement Office
Comment: *Site plan review considers the compatibility of the proposed project with adjoining land uses and with other proposed development, having particular reference to its probable effect on the value of other land and to the adequacy of features intended to promote public health, safety and welfare and the general purposes of this chapter.*					
Environmental Protection Ordinance	Yes	Yes	Chapter 107 Adopted 1979 Local Law 1. Environmental Quality Review	Local	Planning Board
Comment: *The purpose of this chapter is to implement for the Village of Orchard Park SEQR and comply with the minimum environmental standard to protect the environment and overall health of the community.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 123 – Flood Damage Prevention; adopted 4/8/2019	Local	Code Enforcement Officer
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: *A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;* *D. Control filling, grading, dredging and other development which may increase erosion or flood damages;* *E. Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;* *F. Qualify and maintain for participation in the National Flood Insurance Program.*					

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
The Village Code Enforcement Officer is appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes – for municipalities within metropolitan areas.	Chapter 184 – Storm Sewers; adopted 12/29/2008	Local	Stormwater Management Officer
Comment: *The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of the Village of Orchard Park through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this article are:* *A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;* *B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;* *C. To prohibit illicit connections, activities and discharges to the MS4;* *D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and* E. *To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.*					
Emergency Management Ordinance	No	Yes	-	-	-
Comment:					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	Yes	No	-	-	-
Comment: • *Chapter 176 (Sewers) – adopted 7/12/2004; prohibits discharges to any sanitary sewer*					
Planning Documents					
Comprehensive Plan	No	No	-	-	-
Comment:					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-
Comment:					
Economic Development Plan	No	No	-	-	-
Comment:					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Orchard Park Comprehensive Emergency Plan, March 2012	Local	Emergency Manager
Comment: *The goal of the plan includes: 1) Prepare people for hazard events 2) Protect the community from hazard events 3) Reduce vulnerability to hazards. 4) Encourage smart and strategic planning to reduce long term risk.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Orchard Park to oversee and track development.

Table 9.38-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The Code Enforcement Department is responsible for issuing permits. Building permits are required for the following: • For all new construction, remodeling or additions • When a repair to an existing building is required • When a repair affects the structure of an existing building • When an electrical circuit is installed or extended • When a generator is installed • When remodeling involves the removal or relocation of walls; or affects the structure of a building • When a solid fuel device or natural gas insert, such as a wood burning stove or fireplace is installed or repaired • When the use of a building is changed (e.g., a retail store to a doctor's office…) • When the required fire safety features in an existing building are affected by repairs, remodeling or alterations • For a deck, shed, fence, pool, sign or newly paved surfaces • A Building Permit is required if the roof structure requires replacement or repairs
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is fully built out.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Orchard Park and their current responsibilities which contribute to hazard mitigation.

Table 9.38-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Village Planning Board reviews permit applications in residential and non-residential zones, all referrals from the Zoning Board of Appeals, and any other permits or matters referred by the Code Enforcement Officer or the Village Board.
Zoning Board of Adjustments	Yes	The Village Code Enforcement Officer reviews all permit applications to determine if variances to the Village's Municipal Code are needed. If a variance is required, the applicant completes a Zoning Board of Appeals application and a public hearing is scheduled.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works (DPW) monitors and maintains the village streets; this includes all pavement maintenance, management and snow plowing duties. The DPW also implements the stormwater management plan to stay current with EPA and DEC regulations.
Construction/Building/Code Enforcement Department	Yes	The Village Code Enforcement Officer reviews all permit applications to determine if variances to the Village's Municipal Code are needed. If a variance is required, the applicant completes a Zoning Board of Appeals application and a public hearing is scheduled.
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW – road maintenance, snow plowing, water quality monitoring, and storm sewer system cleaning
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Code Enforcement Officer
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer is the appointed local administrator to administer and implement Chapter 123 of the village code.
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	On Call Basis

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Orchard Park.

Table 9.38-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Orchard Park.

Table 9.38-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Mayor
Personnel skilled or trained in website development	Yes	Office Administrator
Hazard mitigation information available on your website	Yes	The village maintains a municipal website that includes public notices, upcoming events and meetings, announcements, and information pertaining to hazards
Social media for hazard mitigation education and outreach	Yes	The village has a social media page on Facebook where they post about upcoming events in the municipality.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	The village could use their website and Facebook page to post additional information about specific hazards of concern to the village.
Warning systems for hazard events	Yes	Code RED
Natural disaster/safety programs in place for schools	No	-

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Other	No	

Community Classifications

The table below summarizes classifications for community programs available to the Village of Orchard Park.

Table 9.38-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Class 4 - Areas with Hydrants	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.38-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	NA
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Weak
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong* *Capacity exists and is in use*

Moderate *Capacity may exist; but is not used or could use some improvement*

Weak *Capacity does not exist or could use substantial improvement*

9.38.4 National Flood Insurance Program (NFIP) Compliance

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

John Gullo, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Orchard Park.

Table 9.38-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Orchard Park	7	7	$59,650	2	2

Source: FEMA 2020a, FEMA 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The Village of Orchard Park maintains a list of flood-prone properties as well as a list of homeowners that are interested in flood mitigation. There are no RISK Map projects at this time. After significant flood events, the Code Enforcement Officer conducts substantial damage assessments; however, no assessments were made during recent flood events. At the time of this HMP update, no properties have been mitigated. The villages indicated that flood maps adequately address the areas that are prone to flooding.

NFIP Compliance

The village Code Enforcement Officer is in charge of floodplain manager and there are no certified floodplain managers in the village at this time. The village has access to resources to determine future flooding conduction from climate change through the village and county. The village would like to have the general training for staff regarding floodplain management. The FPA provides permit review, education, inspections, issues certificate of compliance, and engineering services for all residents and businesses

The village does not have any outstanding violations at this time and the last CAV was 08/04/2014. Chapter 123 of the village code pertains to flood damage prevention in the village. It was adopted on April 8, 2019. The current chapter meets the minimum state and federal standards, requiring all new construction or substantial improvements of structures in the SFHA to have their lowest floor elevated at least two feet above the base flood elevation.

The village does not have any other programs, plans, or ordinances in place that support the NFIP program. At the time of this plan update, the village is not interested in joining the CRS program.

9.38.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Village of Orchard Park has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 20, Route 20A, Abbott Road, Route 179 (Milestrip Road), Route 219, Route 240/277, Baker Road, Jewett Holmwood Road, New Armor Duells Road, and Transit Road.

The Town of Orchard Park Police Department will be tasked with directing traffic to the main evacuation routes within the town and village.

Sheltering

The Village of Orchard Park has identified the following designated emergency shelters within the village.

Table 9.38-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Orchard Park Community Activity Center	4520 California Road	100	Yes, not at site, can utilize Dog Control Facility	Yes	No (action 003)	None	Warming and cooling station only
Orchard Park Middle School	60 S. Lincoln Ave	100	Yes, not at site, can utilize Dog Control Facility	Yes	Yes	None	Warming and cooling station only

Temporary Housing

The Village of Orchard Park has identified the following sites suitable for placing temporary housing units.

Table 9.38-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Compost/Soccer Complex	6909 Milestrip Road	Yes	300,000 Sq. Ft. Available	Parkland	Yes
Webster Road Vacant Land	Webster Road, SBL162.00-1-28.121	Yes	400,000 Sq. Ft. Available	Vacant Parkland	Yes
Orchard Park Little League Baseball Parking Lot	Thorn Ave, SBL 172.11-1-3.11	Yes	52,000 Sq. Ft. Available	Parking Lot	Yes
Brush Mountain Park	4520 California Road	Yes	200,000 Sq. Ft. Available	Parkland	Yes

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Orchard Park has not identified any permanent housing locations and believes coordination for this would need to be determined with each landowner outside of the village due to the limited space within the municipality.

Table 9.38-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified – proposed in mitigation action 007					

9.38.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.38-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.38-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	1	0	0	0	0	0	1	0	0	0
Multi-Family	1	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	1	0	0	0	0	0	1	0
Total Permits Issued	1	0	1	0	1	0	0	0	1	0	1	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None identified					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.38.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section

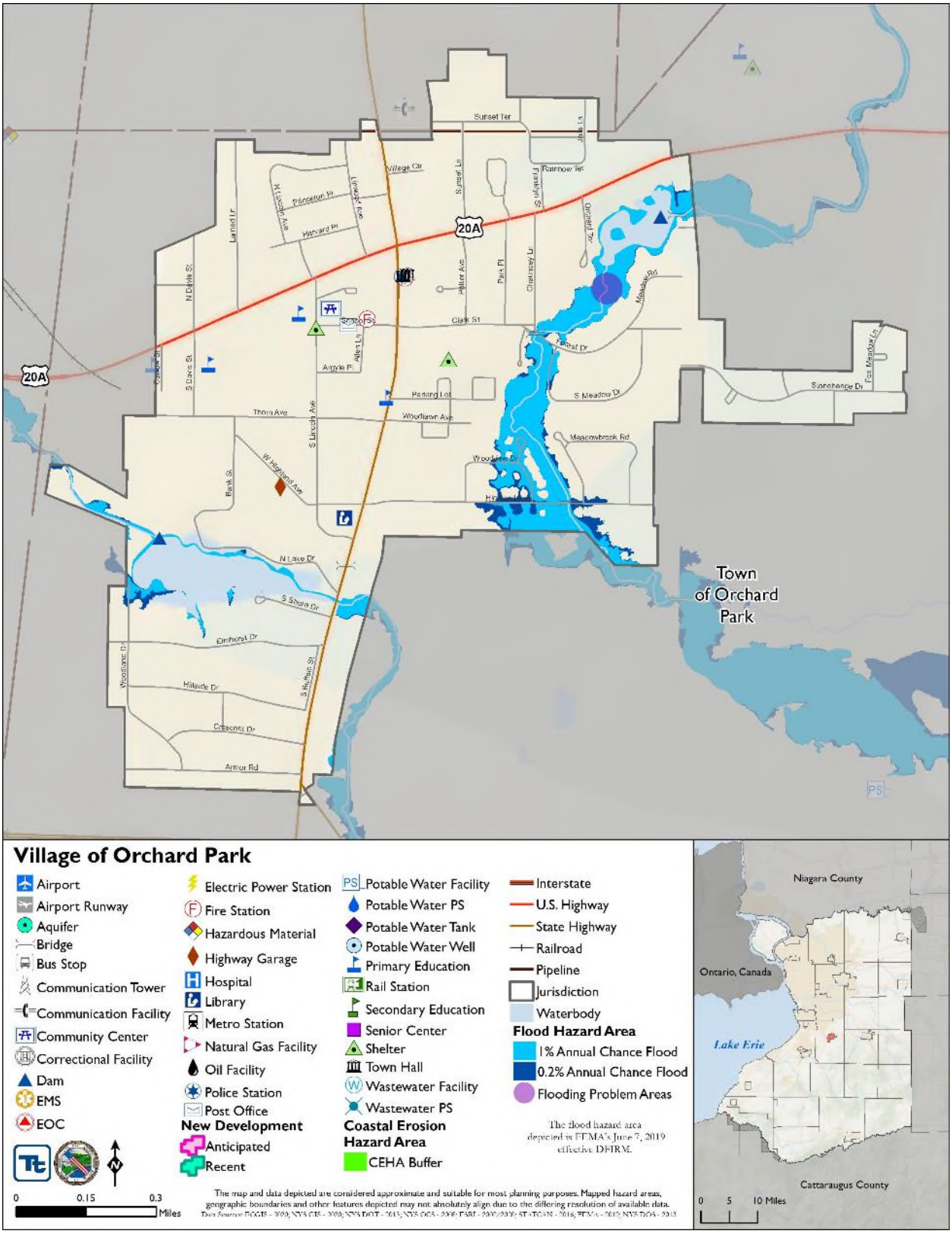
Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

5.4 (Hazard Ranking) for a detailed summary for the Village of Orchard Park's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Orchard Park has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

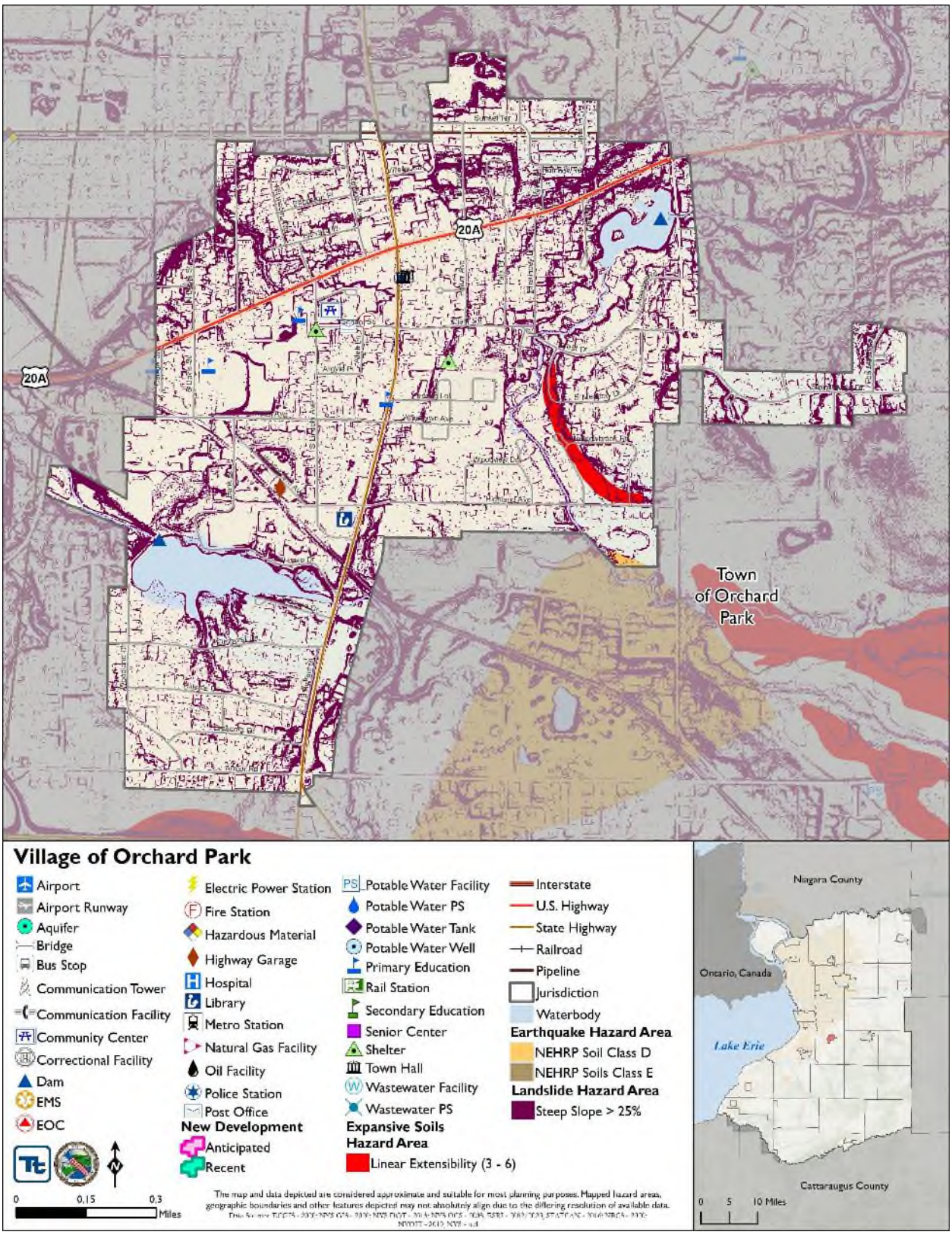
Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.38-1. Village of Orchard Park Hazard Area Extent and Location Map 1



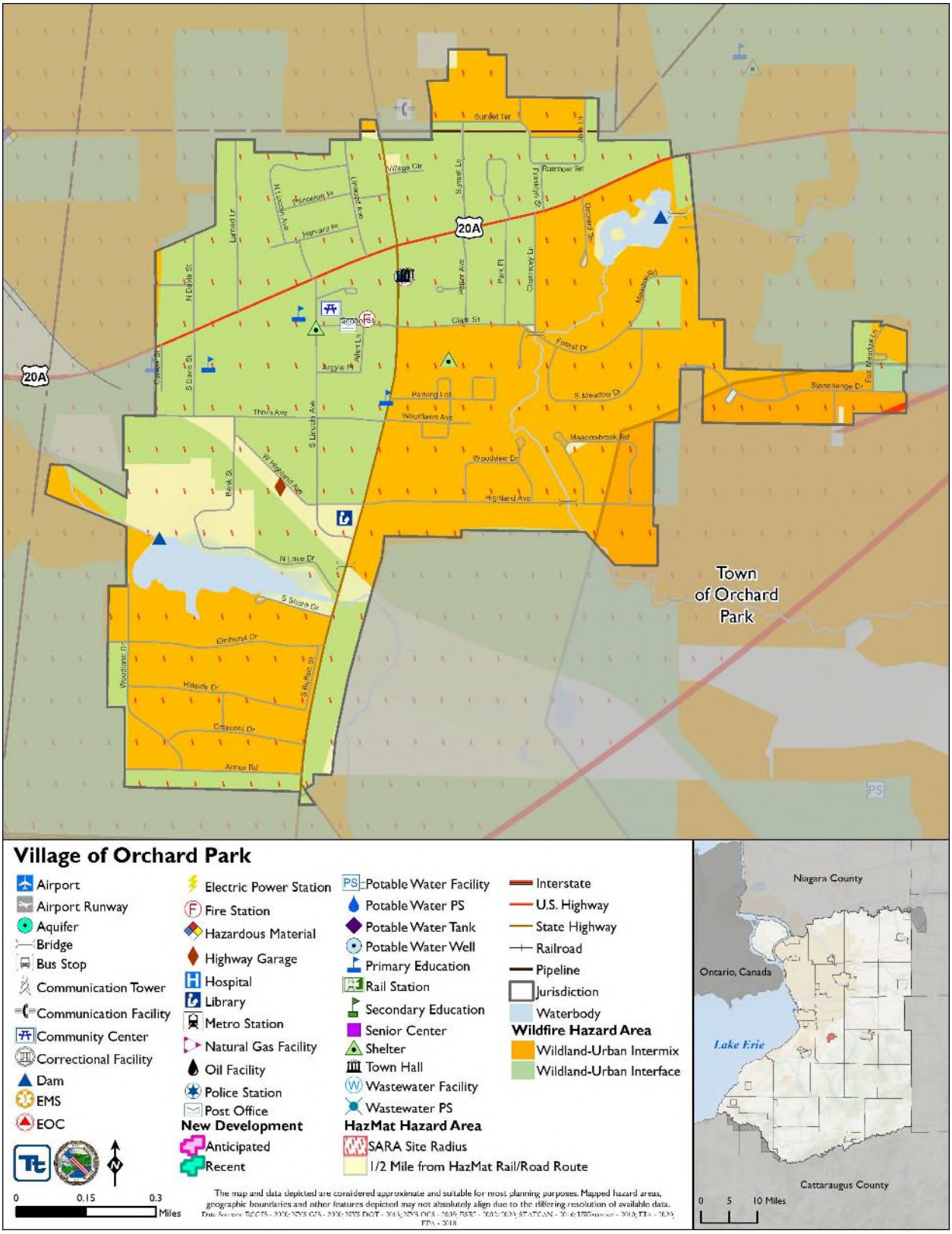
Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.38-2. Village of Orchard Park Hazard Area Extent and Location Map 2



Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.38-3. Village of Orchard Park Hazard Area Extent and Location Map 3



Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Orchard Park's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.38-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.38-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the village did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the village did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the village did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	Although the County was impacted, the village did not report damages

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the village did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the village did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the village did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	Although the County was impacted, the village did not report damages
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began	Although the County was impacted, the village did not report damages

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the village did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the village did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the village did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the village did not report damages
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the village did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher	Although the County was impacted, the village did not report damages

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the village did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the village did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the village did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario seiche, and river flooding in the North Country	Although the County was impacted, the village did not report damages
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the village did not report damages

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the village did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the village did not report damages
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Village of Orchard Park and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Orchard Park's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Orchard Park. The Village of Orchard Park has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

The village had no edits to the following hazard rankings.

Table 9.38-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.38-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Freemans Dam	Dam	Yes	Yes	004
Green Lake Dam	Dam	Yes	Yes	004

Source: GIS 2021

Identified Issues

After review of the Village of Orchard Park's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Orchard Park has identified the following vulnerabilities within their community:

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity.
- The current DPW system cannot communicate by radio with police, fire and EMS agencies in the village. This slows down the communication and response of the various departments during hazard events and thus time is wasted using analog methods of communication.
- The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner.
- The Freemans Dam and Green Lake Dam are both located in the 1% annual chance flood area.
- The village does not have an emergency management ordinance. This is out of compliance with the state and federal standard for municipalities and the Village of Orchard Park needs to adopt a model emergency management ordinance.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.38.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.38-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Cleaning of existing storm sewer system; Will flush existing storm sewer systems of silt and debris to correct flooding problems – currently done every 2 years	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
2	Rebuild existing storm catch basin; Will rebuild to alleviate restriction caused by broken concrete in catch basin – done on an add needed basis	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Decrease in roadway flooding and neighborhood flooding	
3	Stream Channel Mitigation; Will continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts	Flooding	Not Identified	DPW	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Village Board, Legal	Complete	Cost	Low	1. Discontinue 2. 3. Completed
						Level of Protection	Moderate	
						Damages Avoided; Evidence of Success	Regulatory Compliance	
5	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Village Board, Legal	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing project
						Level of Protection	-	
						Damages Avoided; Evidence of Success	Ongoing as necessary	

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Orchard Park has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Cleaning of existing storm sewer system.
- Rebuild existing storm catch basins.
- continue to clean stream corridors as needed to reduce flooding and erosion of banks near bridge and culverts.
- Updating/revising floodplain management ordinances to comply with latest FEMA regulations.
- Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Orchard Park participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013). The table below indicates the range of proposed mitigation action categories.

Table 9.38-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion				X						X
Cyber Attack				X						X
Earthquake				X						X
Expansive Soils				X						X
Extreme Temperature				X						X
Flood		X	X	X		X		X	X	X
Hazardous Materials				X						X
Landslide				X						X
Pandemic				X						X
Severe Storm		X		X	X	X				X
Severe Winter Storm				X						X
Utility Failure		X		X	X	X				X
Wildfire				X						X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.38-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Orchard Park would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.38-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Orchard Park - 001	Freemans Pond Dredging and Stream Rehabilitation Project	1,2	Flood	**Problem**: Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity. **Solution:** Clear Freeman Pond of debris and sediment and increase the pond size to increase overall capacity. Additional bank stabilization will also need to be conducted to reduce flooding and water overflow, as well as erosion.	Yes	Yes	2-3 Years	Village Engineer and DEC	High	High	Municipal Budget, Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, NYS DEC Climate Smart Communities Grant Program	High	NSP	NR
2022-Village of Orchard Park - 002	Upgrade communication channels for Highway, Sewer and Village DPW	All	All	**Problem**: The current DPW system cannot communicate by radio with police, fire and EMS agencies in the village. This slows down the communication and response of the various departments during hazard events and thus time is wasted using analog methods of communication. **Solution**: Obtain new channels, and install new radios in all Town and Village vehicles. The system shall be the most modern and up to date system that existing municipalities use in	No	No	1 year	Town Highway Department, OEM, Fire and Police; Village DPW	Moderate	High	Assistance to Firefighters Grant Program, Department of Homeland Security Grant Program (HSGP), The New York State Emergency Services Revolving Loan, Volunteer Fire Assistance Grants	High	EAP	ES

Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the region. The town and village OEM, Fire Services, and Board shall conduct some preliminary research to determine the exact cost to install this new system. Potentially a SEQR would need to be conducted to determine any adverse environmental impacts on any infrastructure that would be built as a result.										
2022-Village of Orchard Park - 003	Community Activity Center - Generator	1,2	Severe Storm, Utility Failure	**Problem:** The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner. **Solution:** Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the village shall work with the facility operator to apply for HMGP/ BRIC funding and hire a contractor to install the generator. The location for the new generator shall be in	Yes	No	2 years	Town OEM and Village, Community Center Operator, Municipal Engineers	$800,000	High	HMGP, Municipal Budget	High	SIP	PR, PP

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				a place that is safe from any hazard event.										
2022-Village of Orchard Park - 004	Dam Retrofitting	1,2	Flood	**Problem**: The Freemans Dam and Green Lake Dam are both located in the 1% annual chance flood area. **Solution**: While it is not unusual for the dam to be located in a floodplain, it is necessary to conduct additional assessment and mitigation measures to make sure the dam is not vulnerable to operation failure. The Village engineer shall conduct an assessment of the dam and determine if the facility is retrofitted based on FEMA guidelines to withstand severe storms. If not, the village will apply for mitigation funding, accordingly.	Yes	No	2 years	Village DPW	Moderate	High	HMGP	High	SIP	SP
2022-Village of Orchard Park - 005	Emergency Management Ordinance Adoption	All	All	**Problem**: The village does not have an emergency management ordinance. This is out of compliance with the state and federal standard for municipalities and the Village of Orchard Park needs to adopt a model emergency management ordinance. **Solution**: The village shall develop and adopt an emergency management ordinance based on the New York Homeland Security and	No	No	1 year	Village Board of Trustees	Low	Moderate	Municipal Budget.	High	LPR	ES

Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Emergency Services template/ model. Once the policy has been agreed upon, the village board shall adopt the policy for the municipality.										
2022-Village of Orchard Park - 006	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).	No	No	Within 3 years	Village Code Enforcement	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP
2022-Village of Orchard	Permanent Housing Location	1,2	All	**Problem**: The Village of Orchard Park currently does not have any official permanent housing location within the village. Given the	No	Yes	5 years	Village of Orchard Park OEM	High	Permanent Housing	HMGP, BRIC	High	SIP	SP

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.38-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Park - 007				village has limited land and does not have any specific place for the repetitive housing relocation, the village needs identify new land for this effort. **Solution**: The village will conduct an assessment of existing sites across the village that are best suited for permanent housing relocation. These sites should have access to all utilities. The village would then work with the land owner to acquire the property, if not yet owned by the village. The village would then need to apply for FEMA funding to acquire the property and purchase. Additional improvements to the site are TBD and will be determined once the site is identified by the village board and DPW, and OEM										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.38-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village of Orchard Park -001	Freemans Pond Dredging and Stream Rehabilitation Project	1	1	1	1	1	1	-1	1	1	1	0	1	1	1	11	High
2022-Village of Orchard Park -002	Upgrade communication channels for Highway, Sewer and Village DPW	1	1	1	0	1	1	-1	1	1	0	1	1	1	1	10	High
2022-Village of Orchard Park -003	Community Activity Center - Generator	1	1	1	1	1	1	-1	0	1	1	1	1	1	1	11	High
2022-Village of Orchard Park -004	Dam Retrofiring	1	1	1	1	1	1	0	1	1	0	0	0	1	1	10	High
2022-Village of Orchard Park -005	Emergency Management Ordinance Adoption	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-Village of Orchard Park -006	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Village of Orchard Park -007	Permanent Housing Location	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.38.9 Action Worksheets

The following action worksheets have been developed by the Village of Orchard Park to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Freemans Pond Dredging and Stream Rehabilitation Project		
Project Number:	2022-Village of Orchard Park -001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Reduced retention capacity of Freemans Pond is causing upstream problem, backyard flooding and increased creek bank erosion. With increasing intense precipitation due to climate change, the village needs to increase its stormwater control and retention capacity.		
Action or Project Intended for Implementation			
Description of the Solution:	Clear freeman pond and increase the pond size to increase overall capacity. Additional bank stabilization will also need to be conducted to reduce flooding and water overflow, as well as erosion,		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year flood	**Estimated Benefits (losses avoided):**	Flood Loss
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	High	**Mitigation Action Type:**	Natural System Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year once funding secured
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	Municipal Budget, Clean Water Act Section 604(b) Water Quality Planning Grants, Water Quality Improvement Project (WQIP) Program, NYS DEC Climate Smart Communities Grant Program
Responsible Organization:	Village Engineer and DEC	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Build new retention pond	Moderate	No space
	Rehabilitation project	High	Best alternative

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Freemans Pond Dredging and Stream Rehabilitation Project	
Project Number:	2022-Village of Orchard Park -001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is the most cost effective based on village's evaluation
Technical	1	There are no technical issues
Political	1	There are no political opposing parties
Legal	1	There are no legal issues
Fiscal	-1	The village does not have the fiscal resources for this
Environmental	1	This has positive impact on the environment
Social	1	This has a positive social impact
Administrative	1	There are no administrative issues
Multi-Hazard	0	This addresses a single hazard
Timeline	1	The designated timeline is feasible
Agency Champion	1	This project is under the responsibility of the DPW
Other Community Objectives	1	Various objectives
Total	11	
Priority (High/Med/Low)	High	

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Community Activity Center - Generator		
Project Number:	2022-Village of Orchard Park -003		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Utility Failure		
Description of the Problem:	The community activity center does not have a generator. This facility is often used during hazard evets as an emergency operations center and needs to be in full operation for the village to allocate resources and respond in a timely manner.		
Action or Project Intended for Implementation			
Description of the Solution:	Install a generator for the entire building. The first step for this would be to have the facility operator determine the existing capacity needs for the facility in order to determine the generator size needed. Once the size is determined, the village shall work with the facility operator to apply for HMGP funding and hire a contractor to install the generator. The location for the new generator shall be in a place that is safe from any hazard event.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	**Estimated Benefits (losses avoided):**	Continued Operation
Useful Life:	20 years	**Goals Met:**	1,2
Estimated Cost:	$800,000	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months once funding secured
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, Municipal Budget
Responsible Organization:	OEM and Village, Community Center Operator, Municipal Engineers	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install Solar	High	Variant based on weather
	Generator	High	Best option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Community Activity Center - Generator	
Project Number:	2022-Village of Orchard Park -003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property
Cost-Effectiveness	1	This is most cost effective
Technical	1	There are no technical issues
Political	1	There are no political issues
Legal	1	There are no legal complications
Fiscal	-1	The village does not have adequate resources
Environmental	0	This has minimal impact on environment
Social	1	This has positive social impact
Administrative	1	This has no administrative barriers
Multi-Hazard	1	This addresses multiple hazards
Timeline	1	This timeline is feasible
Agency Champion	1	The village OEM
Other Community Objectives	1	Various
Total	11	
Priority (High/Med/Low)	High	

Attachment: 77-Section-9.38-Orchard-Park-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.39 Town of Sardinia

This section presents the jurisdictional annex for the Town of Sardinia. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Sardinia's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.39.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Sardinia's hazard mitigation plan primary and alternate points of contact. The Town of Sardinia followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Emergency Manager and Supervisor. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from person with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.39-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gerard Whittington, Emergency Manager Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-432-2435 Email: Gerard.whittington@erie.gov	Name/Title: Beverly Gambino, Supervisor Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-496-8900 Email: beverlygambino@outlook.com
NFIP Floodplain Administrator	
Name/Title: Gene Degman, Code Enforcement Office Address: 12320 Savage Road, Sardinia, NY 14134 Phone Number: 716-807-7818 Email: accugene2@att.net	

9.39.2 Municipal Profile

Sardinia is a rural community located in the southeast corner of Erie County. The town is approximately 50 square miles, and contains three hamlets: Sardinia, Protection and Chaffee. The town is bordered by Wyoming County to the east and Cattaraugus County to the south. The Towns of Holland and Colden are to the north and the Town of Concord is on the west. The town is approximately 35 miles from downtown Buffalo. The Town contains two state highways, NYS Route 39 and NYS Route 16. Town of Sardinia is situated within three watersheds: Cazenovia Creek-Buffalo River watershed in the north; Buffalo Creek watershed in the northeast; and Cattaraugus Creek watershed in the south. The area's first white settlement around 1809. George Richmond and Ezra Nott were the first settlers. By 1810, there were fifteen other families in the area. The town contains 38 registered historic buildings. (Town of Sardinia 2003)

According to the U.S. Census, the 2010 population for the Town of Sardinia was 2,775. The estimated 2019 population was 2,780, a 0.1 percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.9 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.39.3 Jurisdictional Capability Assessment and Integration

The Town of Sardinia performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.39.3). The Town of Sardinia's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Sardinia. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.39-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL2-2006, Chapter 52, Construction Code, Uniform	Local, State	Code Enforcement/Building Department
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.					
Zoning Code	Yes	No	LL1-2005, Chapter 115, Zoning	Local	Planning Board, Code Enforcement Officer
Comment: The purpose of this chapter is to provide for the orderly growth of the Town of Sardinia by setting minimum requirements in accordance with a comprehensive plan designed to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. Specifically, this chapter is adopted to: A. Implement the Town of Sardinia Comprehensive Plan. B. Regulate the use of land. C. Regulate the location, height and bulk of buildings and their accessory structures.					

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
D. Preserve and protect significant natural resources. E. Preserve and protect the rural character of the community.					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	No	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	LL1-2005, Chapter 115, Zoning Article IX Site Plan Approval	Local	Planning Board
Comment: Prior to the development of individual parcels for commercial activities, including but not limited to multifamily residential and manufactured housing parks, a site plan for the land activity or development must be reviewed and approved. The purpose of these regulations is to enable the town to control the placement of buildings and accessory structures and ancillary improvements so that they do not impact neighboring land uses or negatively impact the surrounding community. The implementation of these requirements furthers the public health, safety and general welfare of the community by allowing the reviewing body to restrict the number, size and location of vehicular access points along all roads; require buffering of incompatible land uses; require adequate aesthetic enhancements in the form of soft and hard landscaping features; require buildings to have architectural features which are consistent with human scale and/or require architectural styles that are consistent or reflective of the surrounding community; and require the provision of open space in multifamily residential or manufactured housing parks for recreational opportunities or permit the town to accept monies in lieu of providing such open space for the creation of recreational opportunities elsewhere in the community. Site plan review includes assessment of hazard risk					
Environmental Protection Ordinance	Yes	Yes	LL1-2005, Chapter 115, Zoning	Local	Planning and Zoning Board
Comment: Zoning administration includes assessment of hazard risk.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 63, Flood Damage Prevention	Local	FPA
Comment: BFE+2 feet is required for all construction in the SFHA (residential and non-residential). It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.					

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	No	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: No					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	Chapter 105, Trees and Chapter 49, Buildings, Unsafe	Local	Town Board, Planning Board,
Comment: The purpose of this article is to allow entry onto private property to cut trees that endanger the public life and property within the Town of Sardinia.					
Planning Documents					
Comprehensive Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003	Local	Planning Board, Town Board
Comment: The Comprehensive Plan helps ensure that local land use decisions are sensitive to regional context and are consistent with countywide goals and objectives. Goals of the Plan include • Preserve and protect the rural and small-town character of the Town of Sardinia • Balance residential and business development with the protection of natural resources, agricultural land, and rural character • Manage growth to ensure high quality development • Protect natural resources • Maintain the water quality of streams					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Natural Resources and Environmental Protection.	Local	Town Board
Comment: Natural features within the Town of Sardinia include streams, wetlands, floodplains, steep slopes, and forests. These features are significant to the natural ecology of the area, and influence the types and density of development that is feasible and appropriate in various areas within the town.					
Economic Development Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Economic and Business Development	Local	Town Board
Comment: Issues and opportunities relating to business and economic development include: • Providing appropriate infrastructure and other services to local businesses • Market potential for businesses in the town • Identifying appropriate locations for future business expansion • Ensuring "business-friendly" policies in the town					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003, Economic and Business Development	Local	Town Board
Comment: Infrastructure within the Town of Sardinia consists of roads and highways, electrical and other utilities, and water service. Trails provide alternative means of transportation and are addressed in the Parks and Recreation section of the Plan.					
Climate Change /Resilience/ Sustainability Plan	No	Yes	Town of Sardinia Comprehensive Plan, 2003, Transportation and Infrastructure	Local	-
Comment: Goals of this Chapter include: • Maintain a supportive business environment to retain existing businesses and to attract new business development. o Encourage commercial and industrial expansion and new commercial and industrial development in appropriate areas of the town. In particular: Encourage the clustering of businesses in specific areas along Routes 16 and 39 and East Schutt Road. Encourage limited business development in and around the Hamlets of Chaffee and Sardinia of the type and scale that is harmonious with the residential neighborhoods of the Hamlets. o Encourage tourism and related business development.					
Agriculture Plan	Yes	No	Town of Sardinia Comprehensive Plan, 2003	Local	Town Board
Comment: This chapter of the Comprehensive Plan sets the goal to promote the continued viability of agriculture and the retention of farmland.					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	-	-	-

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Sardinia to oversee and track development.

Table 9.39-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Town Building Department/Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	The town provided data for this Plan that detailed the lack of development within the floodplain in the past five years.
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	There is adequate land in the town to accommodate permanent and temporary locations

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Sardinia and their current responsibilities which contribute to hazard mitigation.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.39-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board conducts site plan and development reviews that incorporate natural hazard exposure
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals conducts variance hearings to determine if proposals may proceed in contravention of zoning and in consideration of natural hazard risks.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Highway Department is one of the core functions of the town government
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/Building Inspector provides effective administration of building code.
Emergency Management/Public Safety Department	Yes	Department of Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Ready Erie Preparedness
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Roadway maintenance is performed, as appropriate, by the State Department of Transportation, Erie County Highway Department and Town Highway Department.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Floodplain Administrator enforces building restrictions in floodplains.
Surveyor(s)	No	-

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Sardinia.

Table 9.39-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Sardinia.

Table 9.39-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Supervisor
Personnel skilled or trained in website development	Yes	Town Clerk
Hazard mitigation information available on your website	Yes	Hazard mitigation information is posted as necessary
Social media for hazard mitigation education and outreach	Yes	Town Clerk
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to	No	Links to established websites

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
communicate hazard-related information		
Warning systems for hazard events	Yes	Ready Erie Preparedness, NY Alert, website, Facebook
Natural disaster/safety programs in place for schools	No	School System/Board of Cooperative Educational Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Sardinia.

Table 9.39-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.39-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.39.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Gene Degman, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Sardinia.

Table 9.39-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Sardinia	4	6	$114,205	0	3

Source: FEMA 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas prone to flooding in the town are mainly along Cattaraugus Creek and some of its tributaries. There are no RiskMAP projects currently underway in the town. The town indicated that no properties have been mitigated and that a list of property owners interested in mitigation is not maintained. The town's flood hazard maps adequately address the flood risk within the jurisdiction. The town does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Town of Sardinia does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in May 2016. The Code Enforcement Officer is responsible for floodplain administration and this individual is not a certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town stated that its floodplain management staff are not in need of assistance or training to support its floodplain management program. The town does not make Substantial Damage determination. The town's floodplain management meets minimum requirements and incudes inspections and permit review utilizing GIS technology. The town does not participate in the Community Rating System.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.39.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Sardinia has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 39
- Route 16
- Genesee Road, Savage Road, Allen Road, and Middle Road are also evacuation routes and are county owned.

The town will coordinate with the County Highway Department and fire departments to keep evacuation routes clear and coordinate public notifications. The fire department and the Highway Department will coordinate with the Sheriff and NYS Police for purposes of notification, planned routes and shelter locations. First responders will assist evacuees as needed.

Sheltering

The Town of Sardinia has identified the following designated emergency shelters within the town.

Table 9.39-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	12320 Savage Road	TBD	No	Yes	Yes	First Responders/Red Cross	-
St. Jude's Roman Catholic Church	12800 Genesee Road	TBD	No	Yes	TBD	First Responders/Red Cross	-

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Sardinia has identified the following sites suitable for placing temporary housing units and has stated its intention to coordinate with the American Red Cross during emergencies.

Table 9.39-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to address this # 2022-Sardinia Town-006					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Sardinia has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.39-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to address this # 2022-Sardinia Town-006					

9.39.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.39-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.39-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	2	0	3	0	7	0	7	0	3	0	5	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	52	0	79	0	55	0	53	0	76	0	61	0
Total Permits	**54**	**0**	**82**	**0**	**62**	**0**	**60**	**0**	**79**	**0**	**66**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None Anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.39.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Sardinia's risk assessment results and data used to determine the hazard ranking discussed later in this section.

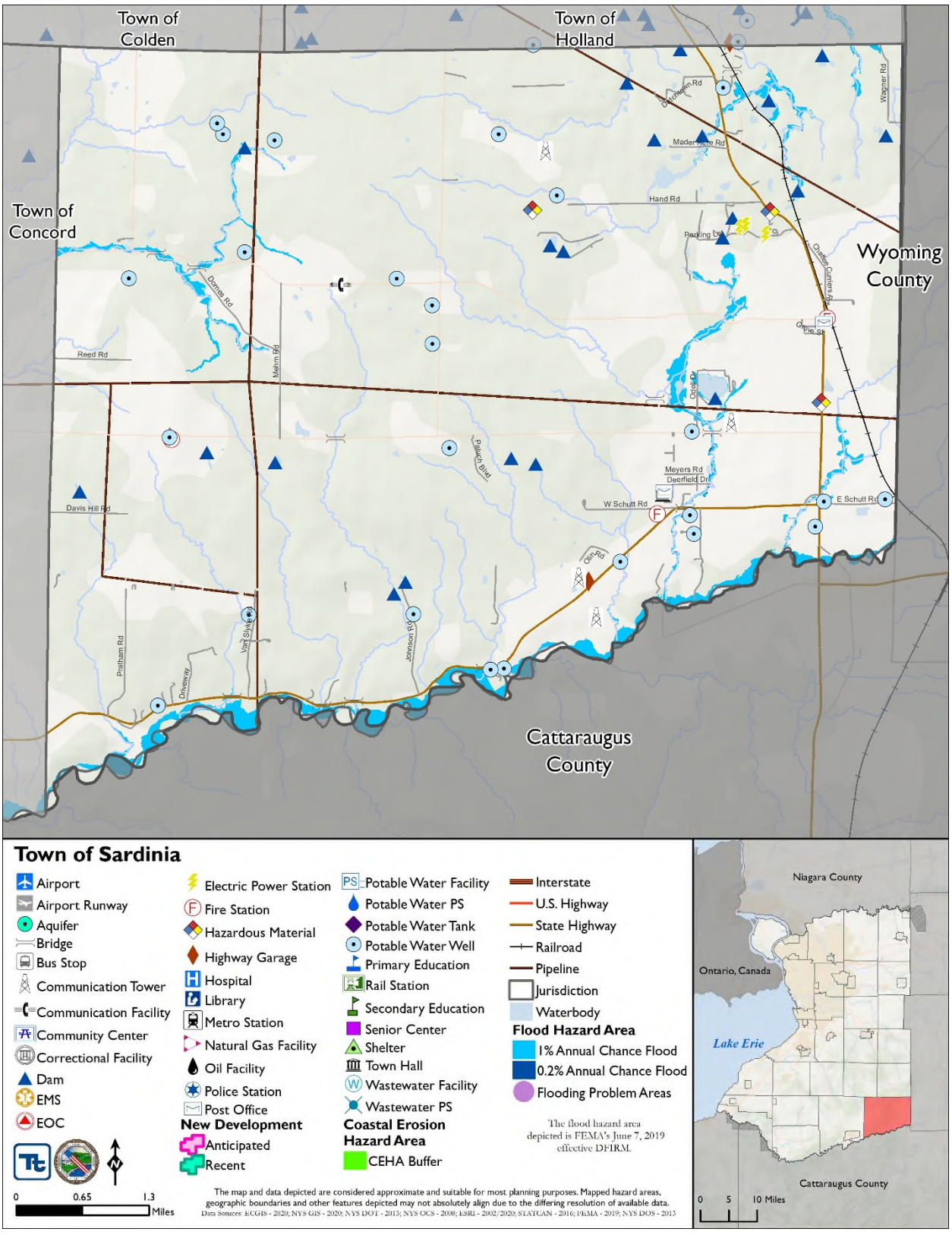
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

using mapping techniques and technologies and for which the Town of Sardinia has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

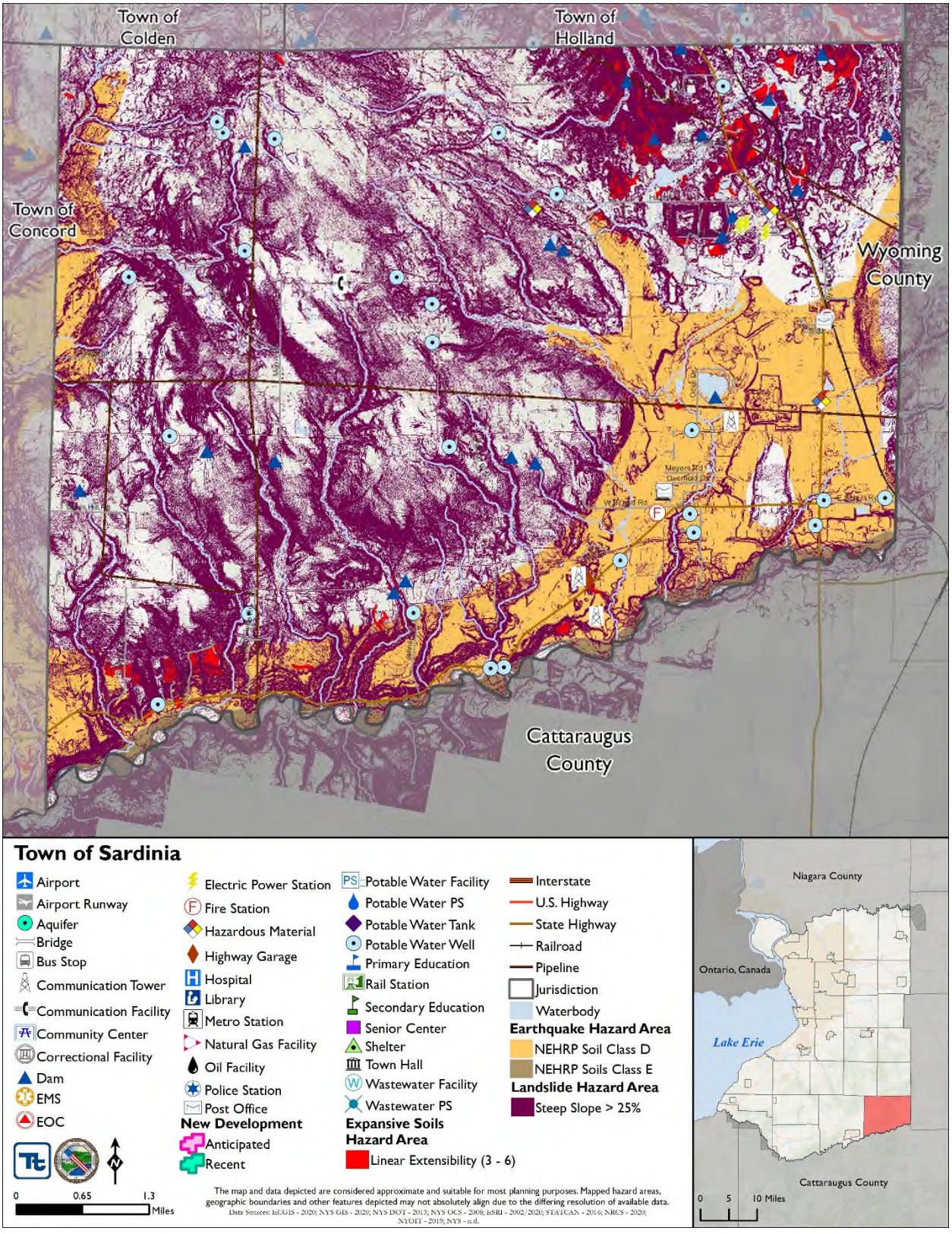
Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.39-1. Town of Sardinia Hazard Area Extent and Location Map 1



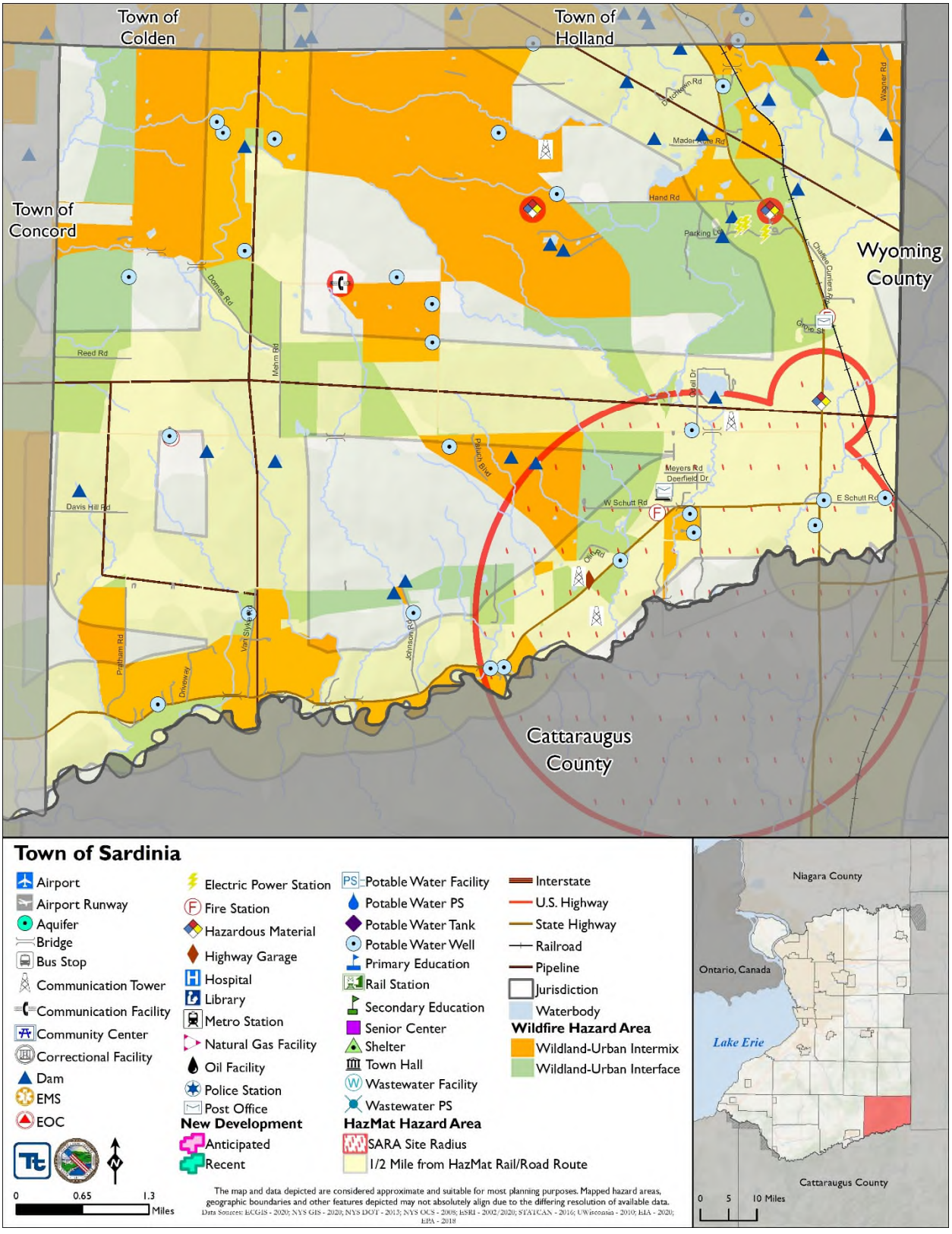
Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.39-2. Town of Sardinia Hazard Area Extent and Location Map 2



Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.39-3. Town of Sardinia Hazard Area Extent and Location Map 3



Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Sardinia's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.39-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.39-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, town did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, town did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, town did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, town did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, town did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, town did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, town did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, town did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, town did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, town did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, town did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, town did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Sardinia's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Sardinia. The Town of Sardinia has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated to make the following changes based upon relative rate of occurrence.

- Change the Flood risk from Low to Medium
- Change the Hazardous Materials risk from Medium to High
- Change the Landslide risk from Medium to Low.

Table 9.39-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Medium	High

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	High

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.39-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Donald Kelleck Pond Dam	Dam	X	X	2022-T Sardinia-002
Erie County Conservation Society Dam	Dam	X	X	2022-T Sardinia-003
Pfarners Pond Dam	Dam	X	X	2022-T Sardinia-004

Source: FEMA 2021

Identified Issues

After review of the Town of Sardinia's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Sardinia has identified the following vulnerabilities within their community:

- Trucks become a problem on roadways during heavy snow and storm events. Trucks should follow designated detour routes during these hazard events.
- The town has been impacted by COVID-19.
- There are three dams located within the Special Flood Hazard Area.
- There may be Repetitive Loss Properties located within the town.
- The town was not able to identify temporary and permanent housing locations.

9.39.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.39-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Work with landowner, farmer, and Town to implement a Water Retention solution at corner of Genesee Rd and Savage Rd	Flood	Flood conditions during thaw	Town of Sardinia	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	1. Discontinue 2. 3. Complete
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Not Identified	Planning Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	1. Discontinue 2. 3. Complete
	Designate/install a specific person to be your municipality's Floodplain Administrator	Flood	Not Identified	Code Enforcement	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	1. Discontinue 2. 3. Complete
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances	Flood	Not Identified	Code Enforcement	Ongoing	Cost Level of Protection Damages Avoided; Evidence of Success	1. Discontinue 2. 3. Ongoing capability
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Not Identified	Planning Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	1. Discontinue 2. 3. Complete
	Require staff involved in floodplain management and ordinance enforcement to	Flood	Not Identified	Code Enforcement	Ongoing	Cost Level of Protection	1. Discontinue 2.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	become Certified Floodplain Managers (CFMs).					Damages Avoided; Evidence of Success	3. Ongoing capability

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Sardinia participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.39-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X			X			X			X
Cyber Attack	X			X			X			X
Earthquake	X			X			X			X
Expansive Soils	X			X			X			X
Extreme Temperature	X			X			X			X
Flood	X	X		X		X	X			X
Hazardous Materials	X			X			X			X
Landslide	X			X			X			X
Pandemic	X			X			X			X
Severe Storm	X			X			X			X
Severe Winter Storm	X			X			X			X
Utility Failure	X			X			X			X
Wildfire	X			X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.39-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Sardinia would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.39-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-T Sardinia-001	Truck Traffic Detours during Weather Events	1	All Hazards	**Problem**: Trucks passing through the town, sometimes loaded with hazardous materials, should be aware of best routes to use during storm events. **Solution**: The town will coordinate with the County Public Works Department and the NYS Department of Transportation to ensure that needed information gets to truck haulers.	No	No	Within 3 years	Town Highway Department, County Public Works, NYS Department of Transportation	$500 staff time	Reduce risk of road accidents and HazMat releases during hazard events	Municipal budget	High	LPR, EAP	PI
2022-T Sardinia-002	Protect the Donald Kelleck dam to the 0.2% annual flood chance event	1, 2	Flood	**Problem**: The Donald Kelleck Dam is in the Special Flood Hazard Area. **Solution**: The town will contact the facility managers of the privately owned dam and discuss options for protecting the dams to the 0.2% annual chance flood.	Yes	No	Within 5 years	Town Highway Department, Emergency Manager	$500	Ensure continued operation of this flood protection facility	Municipal budget	High	EAP	PI
2022-T Sardinia-003	Protect Erie County Conservation Society dam to the 0.2% chance annual flood	1, 2	Flood	**Problem:** The Erie County Conservation Society Dam is in the Special Flood Hazard Area and is subject to flooding hazard.	Yes	No	Within 3 years	Town Highway Department, Emergency Manager, County DPW	<$500 for outreach, TBD by engineering analysis for county owned dams	Facility managers aware of options to protect dams to the 0.2% annual	County and municipal budget	High	EAP	PI

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will contact the facility managers of this privately owned dam and discuss options for protecting the dam to the 500-year flood level. The County DPW will survey the dam to determine what protections are necessary and carry out the necessary upgrades.						chance flood event			
2022-T Sardinia-004	Protect Pfarner's Farm dam to the 0.2% annual chance flood event	1, 2	Flood	**Problem:** The Pfarmer's Farm dam is in the Special Flood Hazard Area. **Solution**: The town will contact the facility managers of the privately owned dam and discuss options for protecting the dams to the 500-year flood level.	Yes	No	Within 5 years	Town Engineer	$500 staff time	Ensure continuity of flood preventions services from this dam	Municipal budget	High	EAP	PI
2022-T Sardinia-005	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including	No	No	Within 3 years	Town Board, FPA, homeowners	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share by property owners	High	SIP	PP

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.39-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.										
2022-T Sardinia-006	Identify temporary and permanent housing locations	2	All Hazards	**Problem:** The town was not able to identify locations for temporary or permanent housing . **Solution:** The town will work with the county to identify temporary and permanent housing locations and will acquire access to these housing locations.	No	No	Within 5 years	CEO, FPA	Staff Time	Ensure safe locations for people to live after a natural disaster	Municipal funds	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.39-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-T Sardinia-001	Truck traffic Detours during Weather Events	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2022-T Sardinia-002	Protect the Donald Kelleck dams to the 0.2% annual flood chance event	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-T Sardinia-003	Protect Erie County Conservation Society dam to the 500-year Flood Level	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-T Sardinia-004	Protect Pfarner's Farm dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-T Sardinia-005	Residential Property Flood Mitigation.	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-T Sardinia-006	Identify temporary and permanent housing locations	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.39.9 Action Worksheets

The following action worksheets have been developed by the Town of Sardinia to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Sardinia Action Worksheet			
Project Name:	Truck Traffic Detours during Weather Events		
Project Number:	2022-T Sardinia-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Trucks passing through the town, sometimes loaded with hazardous materials, should be aware of best routes to use during storm events.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will coordinate with the County Public Works Department and the NYS Department of Transportation to ensure that needed information gets to truck haulers.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	All Hazards	**Estimated Benefits (losses avoided):**	Reduce risk of road accidents and HazMat releases during hazard events
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	<$500 for outreach analysis , TBD by engineering for county owned dams	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 year	**Potential Funding Sources:**	Municipal budget
Responsible Organization:	Town Highway Department, County Public Works, NYS Department of Transportation	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Shut down roadways during emergencies	Very High	Not feasible, endangers safety
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Truck Traffic Detours during Weather Events	
Project Number:	2022-T Sardinia-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the dam.
Property Protection	1	Project will protect the dam from the flood hazard.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	Within 3 years
Agency Champion	1	Town Highway Department, Emergency Manager, County DPW
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Sardinia Action Worksheet			
Project Name:	Residential Property Flood Mitigation		
Project Number:	2022-T Sardinia-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	BFE +2	**Estimated Benefits (losses avoided):**	Provide flood protection for residential property owners
Useful Life:	Ongoing	**Goals Met:**	1
Estimated Cost:	TBD by engineer's analysis and cost of each property	**Mitigation Action Type:**	Structure and Infrastructure Improvement
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 year	**Potential Funding Sources:**	BRIC, HMGP, FMA, cost share by property owners
Responsible Organization:	Town Board, FPA, homeowners	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Encourage property owners to abandon their homes	Very High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Residential Property Flood Mitigation	
Project Number:	2022-T Sardinia-005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will provide a mitigation option for residential property owners.
Property Protection	1	Project will protect residential property owners from flood exposure
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 3 years
Agency Champion	1	Town Board, FPA, homeowners
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 78-Section-9.39-Sardinia-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.40 Village of Sloan

This section presents the jurisdictional annex for the Village of Sloan. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Sloan's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.40.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Sloan's hazard mitigation plan primary and alternate points of contact. The Village of Sloan followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Department of Public Works, Code Enforcement, and the clerk treasurer. The DPW chief, CEO, and clerk treasurer represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.40-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Debra Smith, Clerk Treasurer Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1560 Email: sloanny@roadrunner.com	Name/Title: Karen M. Gold, Deputy Clerk Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1560 Email: kgold@villageofsloan.org
NFIP Floodplain Administrator	
Name/Title: Robert Smith, Crew Chief/Department of Public Works Address: 425 Reiman Street, Sloan, New York 14212 Phone Number: (716) 897-1561 Email: ssloanhwydpt@roadrummer.com	
Additional Contributors	
Name/Title: Vincent Ferraraccio, CEO Method of Participation: Submitted data and worksheets.	

9.40.2 Municipal Profile

The village was incorporated in 1896 from portions of the original Town of Cheektowaga. Its name honors Samuel Sloan, President of the Lackawanna Railroad. The village is surrounded on three sides by the Town of Cheektowaga and on the west by the City of Buffalo. The Indian trail from Buffalo to Batavia ran through the village and continued to be well travelled and then improved by white settlers from a mud path to a wooden plank road, and toll booths in 1850. The village was a historically important railroad center. Five railroads were built into the village between 1850 to 1880 (Village of Sloan website, accessed 2020).

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

According to the U.S. Census, the 2010 population for the Village of Sloan was 3,661. The estimated 2019 population was 3,562, a 2.7 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 15.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.40.3 Jurisdictional Capability Assessment and Integration

The Village of Sloan performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 0). The Village of Sloan's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Sloan. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.40-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	19 NYCRR Part 1203; Village Code Ch 205	State	Code Enforcement
Comments: NYS Uniform and Energy Code 2020; This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Sloan. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.					
Zoning Code	Yes	No	VC 455, Zoning	Local	Code Enforcement
Comment: The zoning regulations and districts hereinafter set forth are made in accordance with a comprehensive plan for classifying, regulating and restricting the height, number of stories and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, the density of population and the location and use of buildings, structures and land for trade, industry, residence or other purposes; establishing the boundaries of districts for said purposes; and providing fines and penalties for violations, so as to promote the health, safety, morals and general welfare of the Village of Sloan.					

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Subdivision Ordinance	No	-	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	Yes	VC 390, Stormwater Management	Local	DPW/CEO
Comment: Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	VC 205, 455	Local	CEO
Comment: The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc. • The general standards and considerations when reviewing a site plan include; the adequacy of stormwater and drainage facilities; the adequacy, type and arrangement of trees, shrubs, and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways, and landscaping in areas with susceptibility to ponding, flooding and/or erosion. • Where applicable, the Applicant must indicate measures and features to comply with flood hazard and flood insurance regulations.					
Environmental Protection Ordinance	No	-	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	VC 390	Local	Zoning Board
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	No	VC 360-34	Local	Board of Trustees
Comment: The purpose of this article is to provide for the health, safety and general welfare of the citizens of the Village of Sloan through the regulation of nonstormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02. The objectives of this article are:					

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
• To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02; • To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; • To prohibit illicit connections, activities and discharges to the MS4; • To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and • To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	-	-	-	-
Comment: None					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	VC 390	Local	FPA
Comment: There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	No	-	-	-	-
Comment: None					
Urban Water Management Plan	No	-	-	-	-

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Cheektowaga	Local	TOC Emergency Management Services
Comment:					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Post-Disaster Recovery Plan	No	-	-	-	-
Comment: None					
Continuity of Operations Plan	No	-	-	-	-
Comment: None					
Public Health Plan	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Sloan to oversee and track development.

Table 9.40-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is fully developed

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Sloan and their current responsibilities which contribute to hazard mitigation.

Table 9.40-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	No	-
Zoning Board of Adjustments	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	Department of Public Works
Construction/Building/Code Enforcement Department	Yes	One part-time Code Enforcement Officer
Emergency Management/Public Safety Department	No	-
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Annual tasks undertaken by DPW: tree maintenance on right of way, snow/ice removal from streets.
Mutual aid agreements	Yes	With Erie County
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village subcontracts for engineering services
Engineers or professionals trained in building or infrastructure construction practices	Yes	The village subcontracts for engineering services
Planners or engineers with an understanding of natural hazards	Yes	The village subcontracts for engineering services
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	The village has a shared service with the Town of Cheektowaga.
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Sloan.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.40-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Sloan.

Table 9.40-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village of Clerks' Office
Personnel skilled or trained in website development	Yes	Subcontract with Webmaster
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Official Facebook page for village
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	The village is a member of the Western New York Stormwater Coalition.
Warning systems for hazard events	No	None other than social media
Natural disaster/safety programs in place for schools	Yes	School and volunteer fire department
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Sloan.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.40-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	N/A	No results for 2020 yet
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.40-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.40.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Robert Smith, DPW Crew Chief

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Sloan.

Table 9.40-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Sloan	0	0	$0	0	0

Source: *FEMA 2019*

Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*

RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

The municipality does not have a list of properties that have been damaged by flooding, but the village is aware of areas with street flooding in heavy rains. Some areas are being addressed through curbing installation. The village does not maintain a list of property owners interested in flood mitigation and there are no RiskMAP projects underway. The village does not make Substantial Damage determinations and no properties have been mitigated.

NFIP Compliance

The DPW department is responsible for floodplain management. There are not any certified floodplain managers on staff. The village does not have access to resources to determine possible flooding condition from climate change other than FEMA publications. The village's floodplain management staff does not need assistance or training because they are not located in a floodplain or have shorelines. The flooding that occurs in the village is minor, and from heavy rains and snow melt. They are partially mitigated by curbing, storm sewer maintenance and repair, assessment and rehabilitation of underground flume.

The village has not had a Community Assistance Contact (CAC) or Community Assistance Visit (CAV). The Village of Sloan's administration services include outreach through the WNYSC Code official completed time of sale inspections of stormwater facilities for both commercial and residential determines any illegal connection. There are not any outstanding NFIP compliance violations that need to be addressed. The local law number of the village's flood damage prevention ordinance is VC 390 December 11, 2007. The Code Official supports floodplain management when completing site plan reviews and determining requirements pertaining to landscape and parking lot drainage.

9.40.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Sloan has identified the following routes and procedures to evacuate residents prior to and during an event.

- The Village of Sloan is located within the Town of Cheektowaga and would follow their emergency plan of evacuation and housing.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Sheltering

The Village of Sloan has identified the following designated emergency shelters within the village.

Table 9.40-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Piekarski Community Center	140 Halstead Avenue	75	Yes	Partial	Yes	First aid and EMS with local fire department	Short term shelter use (1-2 days)

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Sloan has identified the following sites suitable for placing temporary housing units.

Table 9.40-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate locations for Temporary Housing. See Mitigation Action 2022-V. Sloan-#005					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Sloan has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.40-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with the county to identify and designate locations for Permanent Housing. See Mitigation Action 2022-V. Sloan-#005					

9.40.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.40-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.40-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	1	0
Total Permits Issued	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

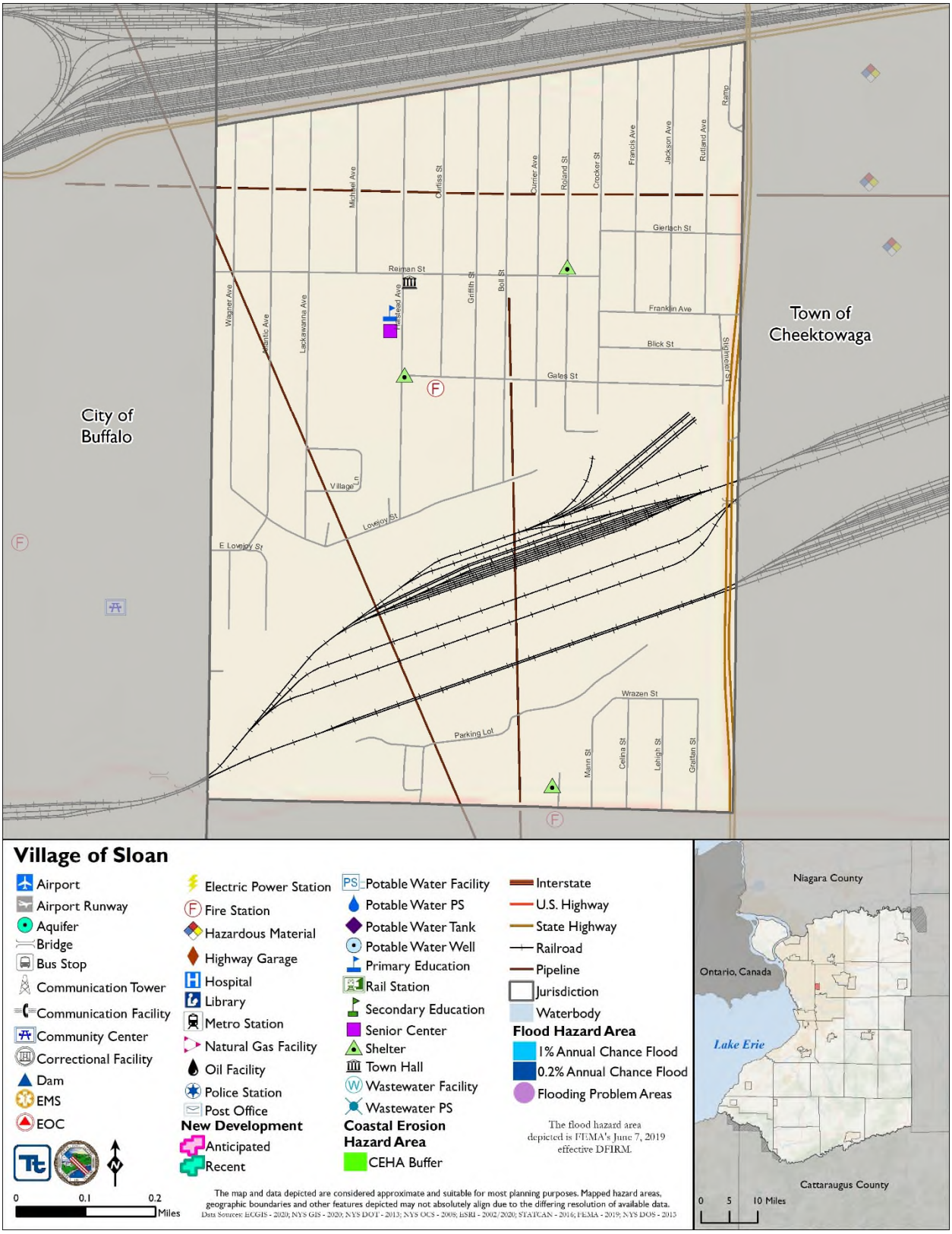
9.40.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Sloan's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Sloan has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

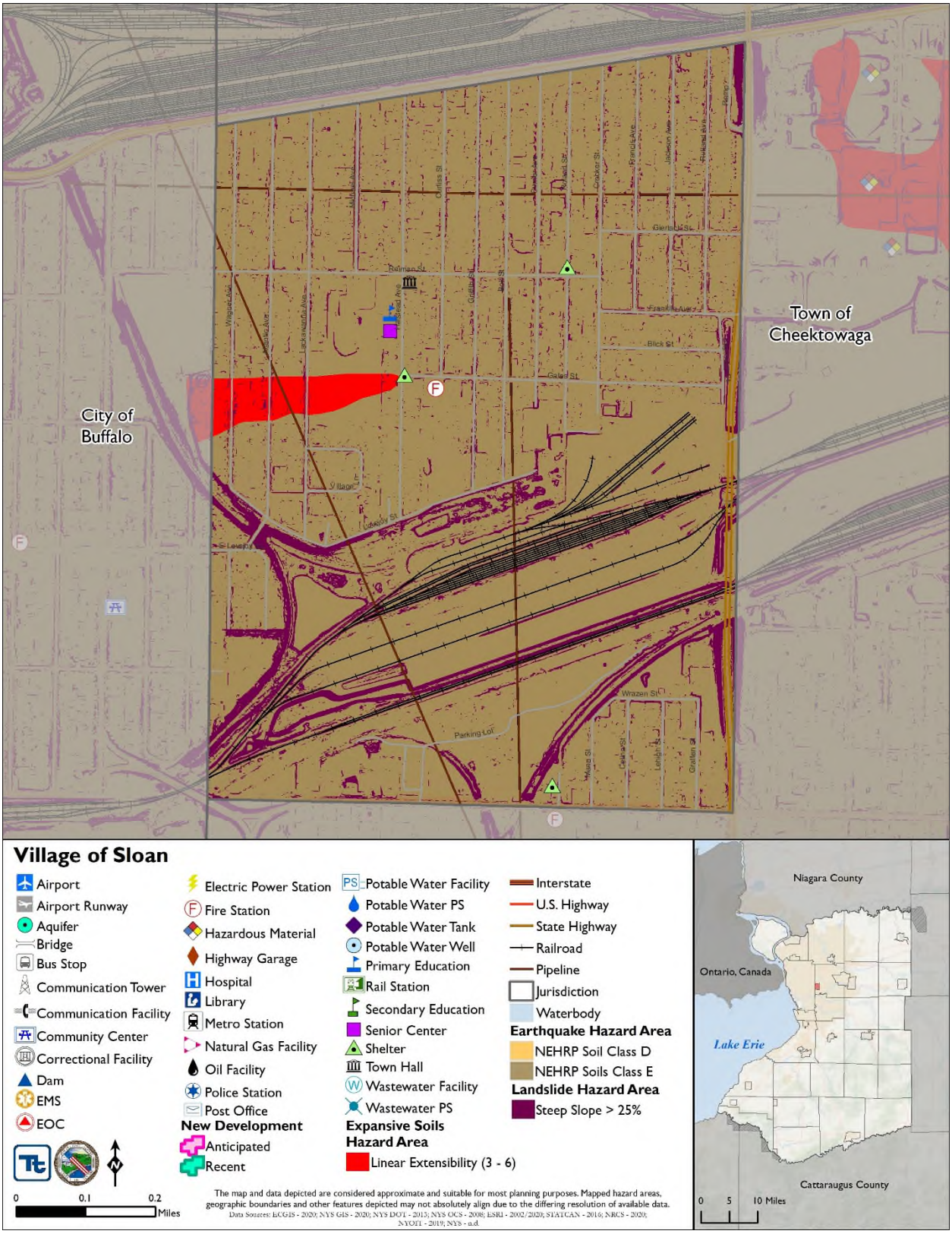
Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.40-1. Village of Sloan Hazard Area Extent and Location Map 1



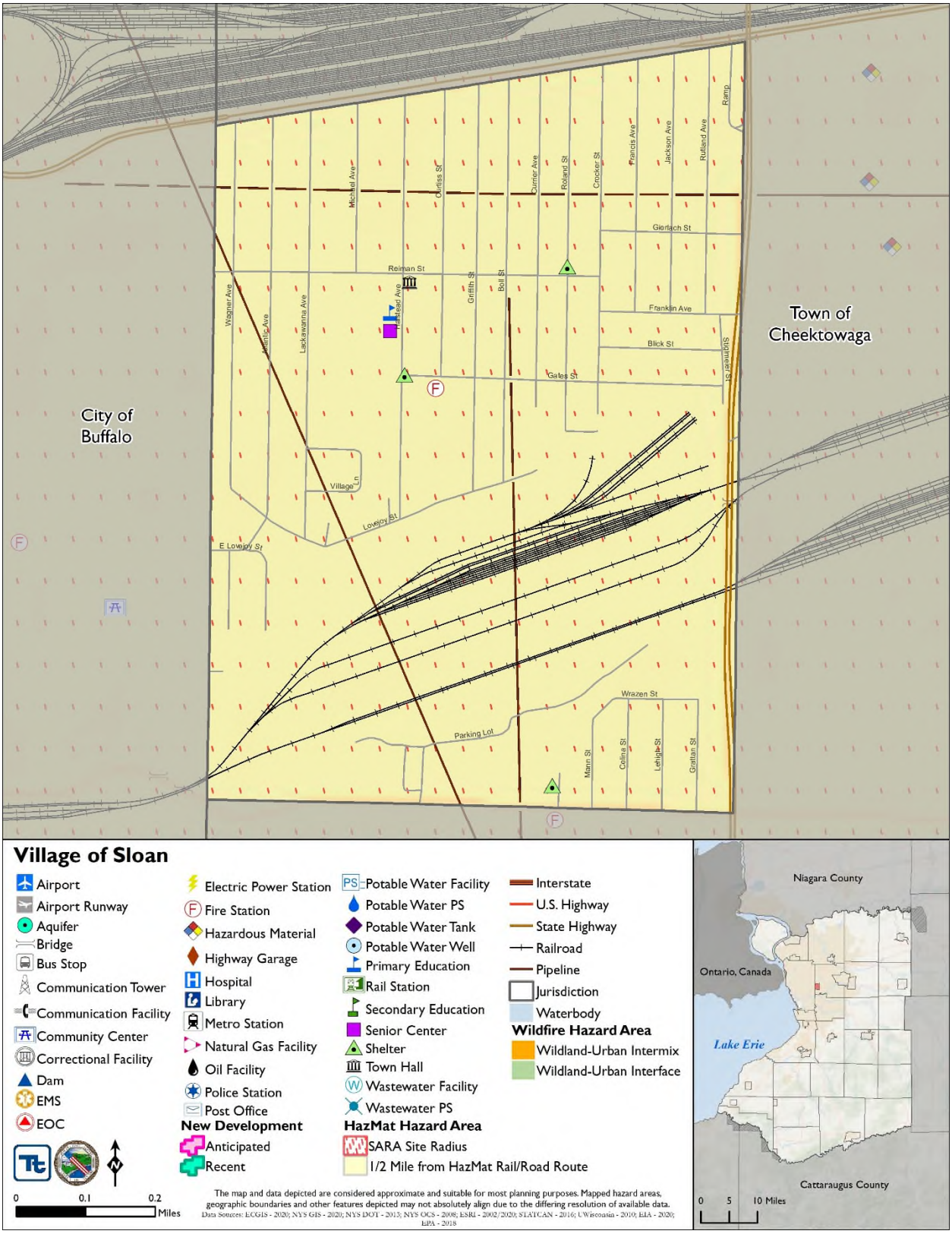
Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.40-2. Village of Sloan Hazard Area Extent and Location Map 2



Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.40-3. Village of Sloan Hazard Area Extent and Location Map 3



Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Sloan's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.40-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.40-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Sloan's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Sloan. The Village of Sloan has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village did not provide feedback on the following hazard rankings.

Table 9.40-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.40-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None Identified						

Source: HAZUS-MH 4.2

Identified Issues

After review of the Village of Sloan's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Sloan has identified the following vulnerabilities within their community:

- Sloan Municipal Building 425 Reiman Street- lacks backup generator power. See Mitigation Action 2022-V. Sloan-001.
- Street and residential basement flooding during heavy rains and/or snowmelt. Under NYS DEC Order on Consent, the villages' sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years. In 2021, the village is undertaking a multi-year project of curbing and DI inspection/repair/replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do not flow into the flume. See Mitigation Action 2022-V. Sloan-002
- Currier Street and portions of Atlantic Avenue do not have curbing, which reduces storm water flow to existing drain inlets, leading to water ponding on street. See Mitigation Action 2022-V. Sloan-003

9.40.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.40-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Undertake smoke tests to determine inappropriate hookups to our storm water system from downspouts, roof leaders, sump pumps, etc.	Flooding	Engineering	Village submitted for an EPA Urban Waters Grant. Reduction of inappropriate hookups would lessen storm water flooding and backups.	Complete	Cost	EPG Monies Used	1 Discontinue 2. 3. Project was completed in 2018.
						Level of Protection	High	
						Damages Avoided; Evidence of Success	352 deficiencies were noted and letters sent to property owners	
	Inspection of stream flume with sewer camera	Flooding	Engineering	Approx. 75 years ago, village diverted a small stream underground through a flume. The flume has not been assessed for damage/ blockage/ infiltration in excess of 30 years	No Progress	Cost		1. Include in 2022 HMP as action 2022-Village of Sloan-002
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	DPW, Engineering	Outdated floodplain management ordinance	No Progress	Cost		1. Include in the 2022 HMP as action 2022-Village of Sloan-004
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	DPW, Engineering	Floodplain management ordinance is not updated to be consistent with new FIRMS	No Progress	Cost		1. Include in the 2022 HMP as action 2022-Village of Sloan-004
						Level of Protection		
						Damages Avoided; Evidence of Success		

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Sloan has not identified any mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Sloan participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.40-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X			X					X
Cyber Attack	X	X			X					X
Earthquake	X	X			X					X
Expansive Soils	X	X			X					X
Extreme Temperature	X	X			X					X
Flood	X	X			X				X	X
Hazardous Materials	X	X			X					X
Landslide	X	X			X					X
Pandemic	X	X			X					X
Severe Storm	X	X			X				X	X
Severe Winter Storm	X	X			X				X	X
Utility Failure	X	X			X					X
Wildfire	X	X			X					X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.40-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Sloan would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.40-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village of Sloan-001	Generator for Sloan Municipal Building	1, 2	Utility Failure, All Hazards	**Problem**: Sloan Municipal Building 425 Reiman Street lacks backup power source Lack of power results in a breakdown of continuity of operations and prevents the Sloan Municipal Building from providing critical services during a hazard event. **Solution**: The village will work with the county to research and purchase the approximately sized backup generator for the building. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.	Yes	None	1 year	Village of Sloan, DPW, Erie County	$50,000	Continuity of operations of the Sloan Municipal Building	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES
2022-Village of Sloan-002	Drain inlet replacement and repair and inspection of flume	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Street and residential basement flooding during heavy rains and/or snowmelt. Under NYS DEC Order on Consent, the villages' sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years. **Solution**: In 2021, the village is undertaking a multi-year project of curbing and DI inspection/ repair/ replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do NOT flow into the flume.	No	None	Within 5 years	DPW, DEC, Engineering, Construction	High	High, reduces flooding	FEMA BRIC and HMGP	High	SIP	SP

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				The Village DPW, supported by DEC and engineering and construction as necessary, will seek funding to replace and repair drain inlets to improve water flow and reduce flooding at these locations.										
2022-Village of Sloan-003	Curbing of Currier Street and portions of Atlantic Avenue	1, 2	Flood, Severe Storm, Severe Winter Storm	**Problem**: Currier Street and portions of Atlantic Avenue do not have curbing, which reduces storm water flow to existing drain inlets, leading to water ponding on street. **Solution**: The Village DPW will seek engineering support to develop a plan to reduce the stormwater overflow on the streets. Recommendations from engineering will be implemented, depending on funding. Potential solutions include a sump pump to redirect runoff, replacing drain inlets, or upsizing culverts.	No	No	Within 5 years	Engineering, DPW	Medium-High	High, reduce flooding and street closures	FMA, Municipal Budget	High	SIP	SP
2022-Village of Sloan-004	Updated floodplain management ordinance	1, 2, 3	Flood	**Problem**: Floodplain Management Ordinances need to be updated to comply with newest versions of FIRMs. **Solution**: The village will update/revise floodplain management ordinances to comply with latest FEMA regulations and new FIRMS.	No	No	1 year	Village of Sloan	Low	High	Municipal Budget	High	LPR	PR
2022-Village of Sloan-005	Temporary and Permanent Housing	1, 2, 3	All Hazards	**Problem**: The village does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution**: The village will work with Erie County Emergency Services to identify, purchase and designate sites	No	No	1-2 years	Village of Sloan, Erie County Emergency Services	Low-Medium	High	Municipal Budget, Erie County Budget, FEMA, HUD	High	LPR	PR

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.40-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the village will work with the county to identify land in neighboring jurisdictions for the same purpose. The village will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.40-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V. Sloan-001	Generator for Sloan Municipal Building	1	1	1	1	1	1	-1	1	1	1	1	1	1	1	12	High
2022-V. Sloan-002	Drain inlet replacement and repair and inspection of flume	1	1	1	0	1	1	-1	1	1	1	1	0	1	1	10	High
2022-V. Sloan-003	Curbing of Currier Street and portions of Atlantic Avenue	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2022-V. Sloan-004	Updated floodplain management ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2022-V. Sloan-005	Temporary and Permanent Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.40.9 Action Worksheets

The following action worksheets have been developed by the Village of Sloan to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Generator for Sloan Municipal Building		
Project Number:	2022-Village of Sloan-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure, All Hazards		
Description of the Problem:	Sloan Municipal Building 425 Reiman Street lacks backup power source Lack of power results in a breakdown of continuity of operations and prevents the Sloan Municipal Building from providing critical services during a hazard event.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to research and purchase the approximately sized backup generator for the building. The DPW will install the backup generator and necessary electrical components and will be responsible for testing and upkeep of the generator after installation.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is the critical facility located in the 1% annual chance flood area?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Continuity of operations of the Sloan Municipal Building
Useful Life:	20 years	**Goals Met:**	1, 2
Estimated Cost:	$50,000	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village of Sloan, DPW, Erie County	**Local Planning Mechanisms to be Used in Implementation if any:**	Economic Development, Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Generator for Sloan Municipal Building	
Project Number:	2022-Village of Sloan-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures function of government
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Village can install and implement project
Political	1	Village supports project
Legal	1	
Fiscal	-1	Village will need to seek funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	1 year
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Drain inlet replacement and repair and inspection of flume		
Project Number:	2022-Village of Sloan-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	Street and residential basement flooding during heavy rains and/or snowmelt. Under NYSDEC Order on Consent, the villages' sanitary sewer infrastructure is under a multi-year rehabilitation. The project does not include the stormwater system. Drain inlets require replacement/repair and the village has an underground concrete flume that all storm sewers located north of the railroad yard flows into. The flume has not been inspected for debris buildup or condition in excess of thirty years.		
Action or Project Intended for Implementation			
Description of the Solution:	In 2021, the village is undertaking a multi-year project of curbing and DI inspection/ repair/ replacement on the following streets: Grattan, Lehigh, Celina, Mann Streets. All streets are located off of William Street, south of the railroad yard, which do NOT flow into the flume. The Village DPW, supported by NYSDEC and engineering and construction as necessary, will seek funding to replace and repair drain inlets to improve water flow and reduce flooding at these locations.		
Is this project related to a Critical Facility?		Yes ☐	No ☒
Is the critical facility located in the 1% annual chance flood area?		Yes ☐	No ☒
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	High, reduces flooding
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	High	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	ASAP
Estimated Time Required for Project Implementation:	3-5 years	**Potential Funding Sources:**	FEMA BRIC and HMGP
Responsible Organization:	Village of Sloan DPW, NYSDEC, Engineering, Construction	**Local Planning Mechanisms to be Used in Implementation if any:**	Economic Development, Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate roadways	$1 million	Costly and may not solve problem
	Relocate roadway	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Drain inlet replacement and repair and inspection of flume	
Project Number:	2022-Village of Sloan-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Reduces flooding of roadway
Property Protection	1	Reduces runoff onto properties
Cost-Effectiveness	1	
Technical	0	Village will be supported by NYSDEC
Political	1	
Legal	1	
Fiscal	-1	Village will seek funding
Environmental	1	No environmental concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	0	
Agency Champion	1	DPW
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 79-Section-9.40-Sloan-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.41 Village of Springville

This section presents the jurisdictional annex for the Village of Springville. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Springville's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.41.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Springville's hazard mitigation plan primary and alternate points of contact. The Village of Springville followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including the Village Administrator and the Mayor. The Village Administrator and the Mayor represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.41-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Liz Melock, Village Administrator Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 Email: lmelock@villageofspringvilleny.com	Name/Title: Bill Krebs, Mayor Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 X1573 Email: wkrebs@villageofspringvilleny.com
NFIP Floodplain Administrator	
Name/Title: Mike Kaleta, Code Enforcement Officer Address: 5 West Main Street Springville, NY 14141 Phone Number: 716-592-4346 x1525 Email: mkaleta@villageofspringvilleny.com	
Additional Contributors	
Name/Title: Duane Boberg, Superintendent of Public Works Method of Participation: Assisted with completion of municipal capabilities worksheet	

9.41.2 Municipal Profile

The Village of Springville is located 45 minutes from downtown Buffalo, almost to Erie County's southern border and among the Allegheny Mountain foothills. The village incorporated in 1834 and was named for its many freshwater springs. It is entirely contained within the Town of Concord. US Route 219 and NYS Route 39 traverse the village.

The first white settler to the area was Christopher Stone in 1807. Historically, Springville was the center of a prosperous agricultural district, providing services and goods to farmers in the countryside and serving as a market for agricultural products. In 1878, the Buffalo, Rochester and Pittsburgh railroad was extended to the village and in 1906 additional railroad connections were established. The railroads improved access and encouraged development of the village by providing a reliable means of obtaining raw materials and distributing manufactured goods. Despite the declining industrial economy regionally, several manufacturing businesses remain important to the local economy. The importance of farming has lessened in recent decades. Extension of US Route 219 as a limited access highway spawned large scale retail development along Cascade Drive (Village of Springville 2020).

"Pop" Warner, the father of Pee Wee football, is a nationally known figure who lived in Springville. His personal collections are housed in the Warner Museum. (village website). The Village of Springville remains the economic and social heart of the community, the only village in the Town of Concord, and an urban center serving southern Erie and Cattaraugus Counties (Village of Springville 2014).

According to the U.S. Census, the 2010 population for the Village of Springville was 4,296. The estimated 2019 population was 4,298, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 15.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.41.3 Jurisdictional Capability Assessment and Integration

The Village of Springville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.41.3). The Village of Springville's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Springville. The comment field provides information as to where hazard mitigation has been integrated.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.41-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	LL6-2006, Village of Springville. 2006. Building Construction and Fire Prevention. Chapter 73 Village Code	Local	Code Enforcement
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Village of Springville. This Chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.					
Zoning Code	Yes	No	Village of Springville. 1979. Zoning, Chapter 200 Village Code	Local	Planning Board, Code Enforcement
Comment: The Zoning Code sets the objectives to lessen the potential for excessive erosion. In the Wellhead Overlay District, no discharging or allowing any sewage or polluted liquid of any kind to flow on or beneath the surface of the ground is permitted. All excavation slopes more than 1:1 shall be adequately fenced and Stripping of topsoil for sale or for use on other premises is prohibited. This chapter is adopted for the purpose of promoting the health, safety, morals, and the general welfare of the community and in furtherance of the following related and more specific objectives relating to hazard mitigation: • To guide and regulate the orderly growth, development, and redevelopment of the municipality in accordance with a Comprehensive Plan and with long-term objectives, principles and standards deemed beneficial to the interests and welfare of the people. • To promote, in the public interest, the utilization of land for the purposes for which it is most appropriate. • To secure safety from fire, panic, and other dangers and to provide adequate light, air, and convenience of access. • To eliminate nonconforming uses gradually. • To lessen the potential for excessive erosion and to conserve and reasonably to protect the natural scenic beauty of the municipality and its environs				
Subdivision Ordinance	Yes	No	Village of Springville. 2007. Subdivision of Land, Chapter 155	Local	Planning Board, Code Enforcement, Village Board
Comment: The Planning Board of the Village of Springville is directed to study each plat of land subdivision within the village and to give approval or disapproval in accordance with the procedure and standards adopted by the Planning Board and approved by the Village Board.					
Stormwater Management Ordinance	Yes	Yes	Chapter 193, Water, Sanitary Sewer, Electric and Storm Sewer Systems, Article IX Storm Sewers	Local	DPW, Planning Board
Comment: The purpose of this chapter is to insure the proper and satisfactory construction of connections and installations of water, sanitary sewer, storm drainage and electric systems of the Village of Springville. The Storm Sewers Article prohibits discharge of anything other than stormwater into the stormwater system; prohibits illicit connections; prohibits activities that could contaminate stormwater; and establishes prevention, control, and reduction of stormwater pollutants by best management practices.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 200, Zoning	Local, County	Local and County Planning Board referral
Comment: The site plan review process is intended to secure compliance with the requirements and standards set forth in this chapter and with accepted professional design practice for such site improvements as grading, drainage, means of access, signs, architectural features, screens, sidewalks, curbs, parking, landscaping, fences, driveways, location, and dimension of buildings. Site Plan review is part of the planning process in the village and deliberations encompass exposure to natural hazard risk.					

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Environmental Protection Ordinance	Yes	Yes	Chapter 200, Zoning	Local	Planning Board
Comment: SEQR is part of the development review process and mandates a thorough environmental review for proposed projects.					
Flood Damage Prevention Ordinance	Yes	Yes	LL3-2019, Chapter 97, Flood Damage Prevention.	Local	FPA
Comment: The Ordinance establishes the following purposes • Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; • Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; • Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; • Control filling, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands, and; • Qualify for and maintain participation in the National Flood Insurance Program. The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	No	Yes	-	-	-
Comment: None					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	Yes	No	Chapter 170, Trees	Local	Tree Committee
Comment: The purpose of this chapter is to manage the trees within the public right-of-way, in parks, and on public property in the village; assure the proper planting of new trees in these public spaces, maintain the health of existing trees in these public spaces; aid in maintaining property values in the village; implement the design and environmental goals of the Village Comprehensive Plan, and promote the general health and welfare of the village residents. The chapter aims to: • Create a Tree Committee to establish regulations governing the planting, maintenance, and removal of trees and shrubs in the public streets, rights-of-way, parks and other municipally owned or controlled property in the village; • Preserve green foliage on village streets and public property; • Replace trees that must be removed from public property because of disease, lack of treatment or interference with village utilities; • Prevent interference with village utility pipes, wires, sidewalks, or streets.					
Planning Documents					
Comprehensive Plan	Yes	No	Village of Springville Comprehensive Plan. 2014.	Local	Village Board
Comment: The Comprehensive Plan aims to preserve natural environment by protecting sensitive environmental areas from development and encouraging environmentally sensitive site design. Development of a stormwater management program to control stormwater runoff. Restrict development in areas with steep slopes, wetlands, and floodplains to mitigate flooding and erosion issues by requiring floodplain development permits, environmental protection overlay districts, zoning, and strict adherence to regulatory requirements. The Plan includes Floodplain Overlay District Maps.					

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	Yes	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No			
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business	No	-	-	-	-

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
development plan, etc.)					
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	Yes	Town of Concord and Village of Springville Comprehensive Plan, 1999	Local	Town Board
Comment: The Comprehensive Plan categorizes the development vision and goals into the following functional areas: • The Environment • Economic Development: Commerce and Industry • Residential Development • Parks and Recreation • Community Services • Transportation • Infrastructure • Urban Design and Historic Preservation					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Springville to oversee and track development.

Table 9.41-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Michael Kaleta manages the Code Enforcement Office and issues development permits.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe	Yes	There is vacant property in various parts of the village and some of these properties have water and sewer access.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If no, please quantitatively describe the level of buildout in the jurisdiction.		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Springville and their current responsibilities which contribute to hazard mitigation.

Table 9.41-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Five Planning Board members administer the Zoning Code in consideration of natural hazard exposure
Zoning Board of Adjustments	Yes	Five-member Zoning Board of Appeals considers requests from applicants to vary from the Zoning Code.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works keeps roadways in good condition, manages electric and water facilities and mitigates against natural hazards.
Construction/Building/Code Enforcement Department	Yes	Mike Kaleta, Code Enforcement Officer. The Department issues building permits and examines the location of proposed construction in the flood zone.
Emergency Management/Public Safety Department	Yes	The Police Department provides emergency management services.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	The village Police Department ensures that warnings are issued during a hazard event, via social media and other systems.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works keeps roadways in good condition, manage electric and water facilities and mitigate against natural hazards.
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The village retains a consulting engineer to assist with planning administration.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The consultant engineer assists with building or infrastructure related projects as needed.
Planners or engineers with an understanding of natural hazards	Yes	The consultant engineer provided guidance about hazard exposure.
Staff with expertise or training in benefit/cost analysis	Yes	The consultant engineer provided guidance about hazard exposure and preparation of benefit cost analysis.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Professionals trained in conducting damage assessments	Yes	Damage assessments at the village can be prepared by the Code Enforcement Officer or the consulting engineer.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	The village Code Enforcement Officer is the designated Floodplain Administrator.
Surveyor(s)	Yes	Consulting Engineer provides surveying services.
Emergency Manager	Yes	Emergency Management services for the village are provided by the Police Department.
Grant writer(s)	Yes	Consultant grant writer completes funding applications.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	The village's consulting engineer advises the village on environmental project elements.

Fiscal Capability

The table below summarizes financial resources available to the Village of Springville.

Table 9.41-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Springville.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.41-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Administrator
Personnel skilled or trained in website development	Yes	Office Clerk
Hazard mitigation information available on your website	Yes	The village website contains a large amount of information about zoning and related land use matters, many of which are impacted by hazard exposure.
Social media for hazard mitigation education and outreach	Yes	The village maintains a Facebook page.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Historic Preservation Committee
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	Code Red website, Facebook
Natural disaster/safety programs in place for schools	No	School System/Board of Cooperative Educational Services
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Village of Springville.

Table 9.41-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	5 and 9	June 2014
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	04	January 2015
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.41-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.41.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Michael Kaleta, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Springville.

Table 9.41-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Springville	5	18	$320,646	6	3

Source: FEMA 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas prone to flooding in the village are mainly along Spring Brook. It is not known if there are any RiskMAP projects currently underway in the village. The village indicated that no properties have been mitigated. The village's flood hazard maps adequately address the flood risk within the jurisdiction. The village does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The Village of Springville does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in December 2009. The Code Enforcement Office is responsible for floodplain administration and this individual is not a certified Floodplain Manager. The village does not have access to resources to determine possible future flooding conditions from climate change. The village stated that its floodplain management staff are not in need of assistance or training to support its

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

floodplain management program. The village makes Substantial Damage determinations after the damage has been assessed. The village's floodplain management meets minimum requirements and includes permit review utilizing GIS technology.

Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Springville has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 39 east and west bound
- Route 219
- Route 240/North Cascade Road.
- Old Route 219.

Sheltering

The Village of Springville has identified the following designated emergency shelters within the village. In case of emergency, the village will coordinate with the Red Cross.

Table 9.41-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville-010							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Springville did not identify any sites suitable for placing temporary housing units.

Table 9.41-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville -010					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.41-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The village will work with county to identify emergency shelter locations, per Proposed Action #2022-Village of Springville-010					

9.41.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.41-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.41-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	0	0	2	0	2	0	2	0	**3**	0	6	0
Multi-Family	0	0	0	0	1	0	1	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	1	0	1	0	0	0	1	0	2	0
Total Permits Issued	**0**	**0**	**3**	**0**	**4**	**0**	**3**	**0**	**4**	**0**	**8**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None identified					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

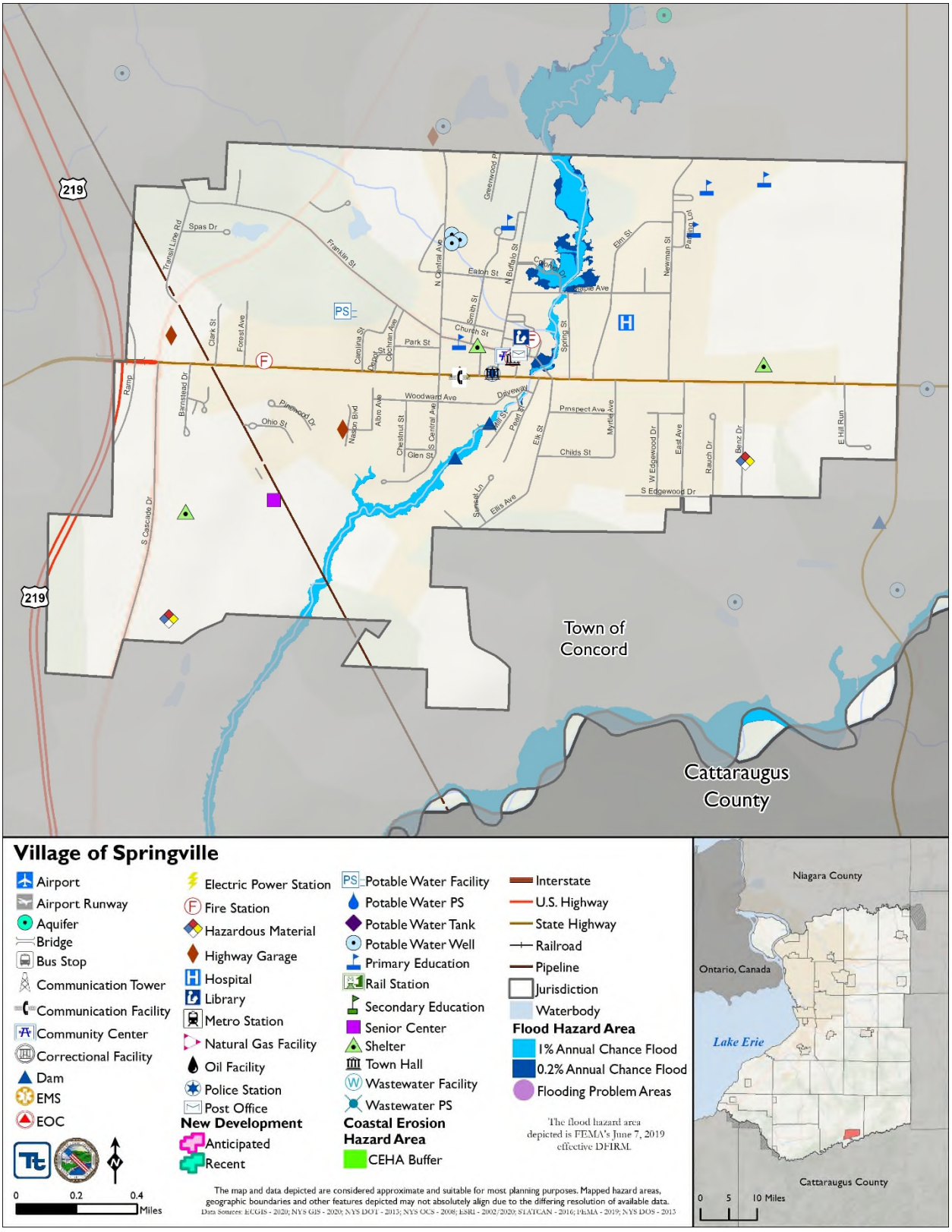
9.41.6 Jurisdictional Risk Assessment

The hazard profiles in Section 6 (Mitigation Strategies) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Springville's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Springville has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

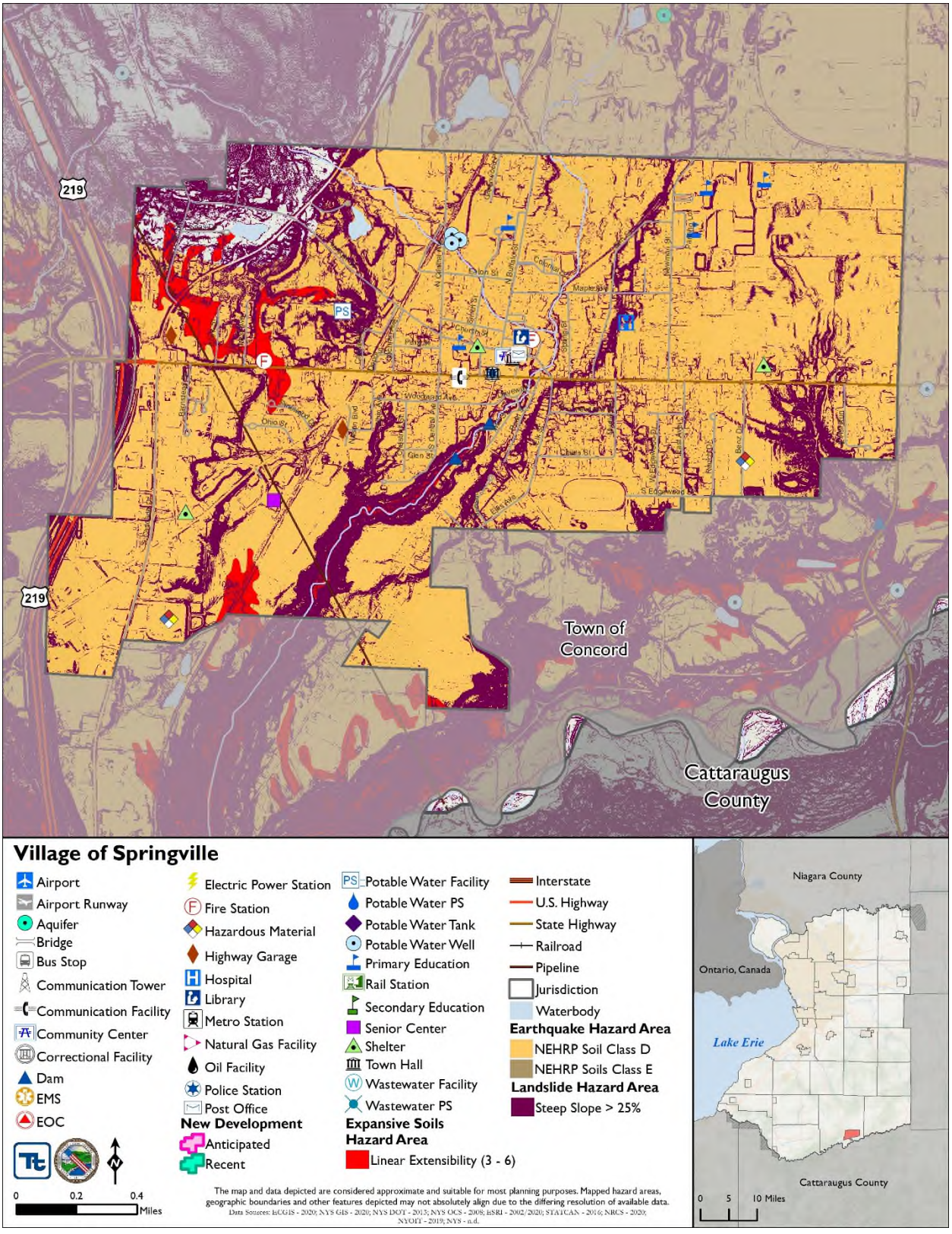
Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.41-1. Village of Springville Hazard Area Extent and Location Map 1



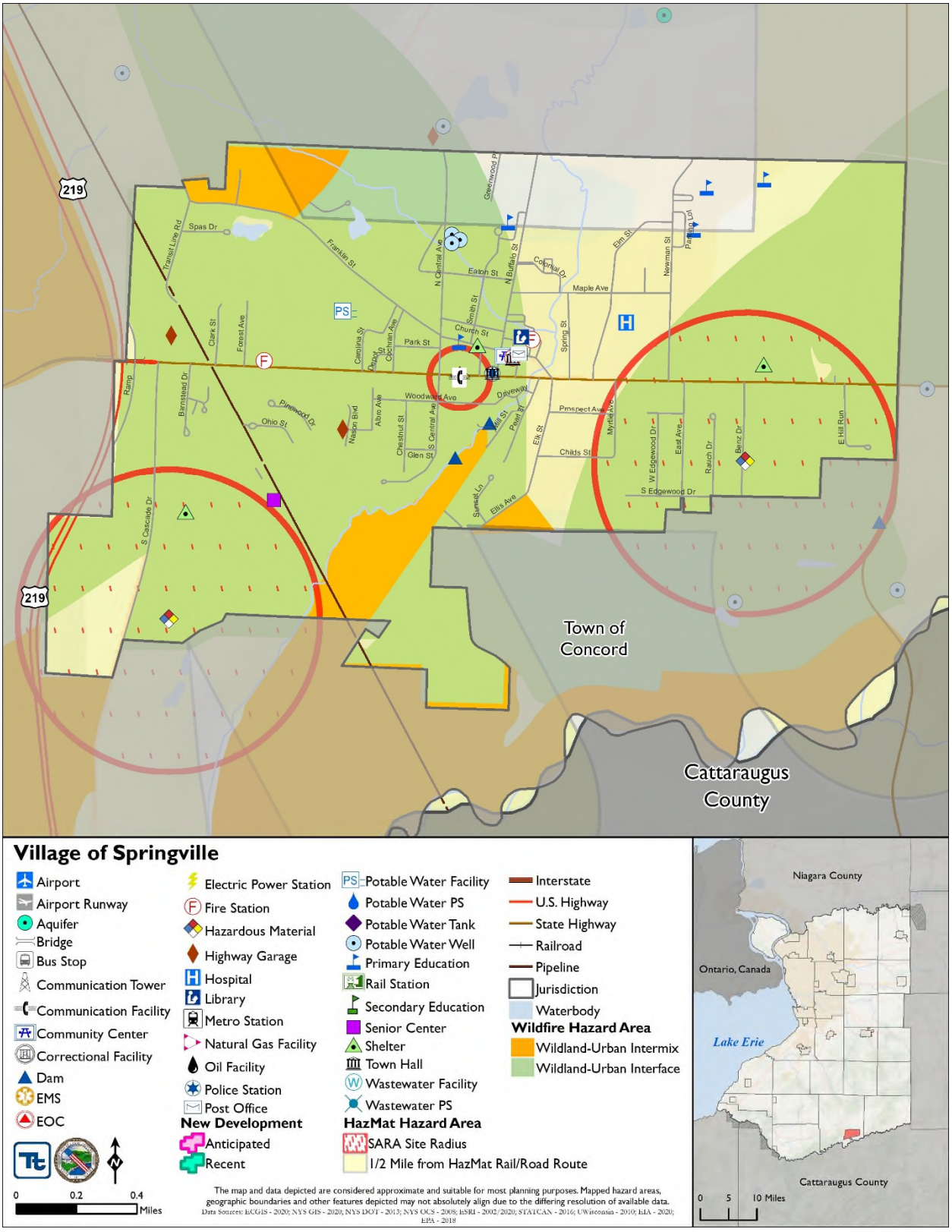
Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.41-2. Village of Springville Hazard Area Extent and Location Map 2



Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.41-3. Village of Springville Hazard Area Extent and Location Map 3



Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Springville's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.41-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.41-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, village did not report any damages.
November 18, 2015	High Wind	No	Yes, debris clean up
January 11, 2017	High Wind	No	Yes, debris clean up
March 8, 2017	High Wind	No	Yes, debris clean up
March 13, 2017	Winter Storm	No	Although the county was impacted, village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, village did not report any damages.
January 2, 2018	Blizzard	No	Yes, snow removal extra effort
October 6, 2018	Lightning	No	Although the county was impacted, village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, village did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, village did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	No	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents. The village was awarded $5,000 to fund PPE and EMS/Fire cleaning equipment

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Springville's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Springville. The Village of Springville has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village indicated that it agreed with the hazard ranking below.

Table 9.41-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	High

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.41-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: FEMA 2020

Identified Issues

After review of the Village of Springville's hazard event history, hazard rankings, jurisdiction specific vulnerable

- Flood waters lack open space for open flow.
- The wastewater treatment plant generator only runs the digester building. The facility lacks backup power.
- NYS Route 39 is subject to closure due to hazard events
- Some properties flood repetitively. The village should seek to purchase land that falls within flood plains and assist homeowners with Repetitive Loss Properties.
- The village needs to work with electric service providers to ensure that power is not interrupted during hazard events.
- There are problems with water drainage along NYS Route 39 (Main Street). If the culvert under this state road collapses, it would create a serious problem for the village.
- The culvert over Spring Brook needs replacing.
- Cybersecurity is a serious concern for village operations
- The village is unable to identify locations for emergency shelters, temporary or permanent housing.
- Village offices lack backup power

9.41.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.41-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Continue maintenance of drainage ditches, culverts and related structures	Flooding	Not Identified	DPW	Ongoing	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing capability
	The Village will continue evaluate land that may be purchased that falls within the flood plain areas of the Village for recreation and stormwater management purposes	Flooding	Not Identified	Village Board	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. 3.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flooding	Not Identified	Legal, Code Enforcement	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flooding	Not Identified	Legal, Code Enforcement, Village Board	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2690

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Springville has not identified mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Springville participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.41-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	-	-	X	-	-	X
Cyber Attack	X	X	-	X	-	X	X	-	-	X
Earthquake	X	X	-	X	-	-	X	-	-	X
Expansive Soils	X	X	-	X	-	-	X	-	-	X
Extreme Temperature	X	X	-	X	-	-	X	-	-	X
Flood	X	X	X	X	X	X	X	-	-	X
Hazardous Materials	X	X	-	X	-	-	X	-	-	X
Landslide	X	X	-	X	-	-	X	-	-	X
Pandemic	X	X	-	X	-	-	X	-	-	X
Severe Storm	X	X	-	X	-	X	X	-	-	X
Severe Winter Storm	X	X	-	X	-	-	X	-	-	X
Utility Failure	X	X	-	X	-	X	X	-	-	X
Wildfire	X	X	-	X	-	-	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.41-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Springville would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.41-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-V Springville-001	Create open space along riverways to allow for storm water flows.	2	Flood	**Problem**: Several properties within the Village are in the SFHA and are subject to flooding. **Solution:** The village will evaluate land that may be purchased that falls within the flood plain areas of the village for recreation and stormwater management purposes.	No	No	Within 5 years	Village Board	TBD by purchase options	Retain natural and unobstructed floodways	Village budget HMGP, BRIC, FMA, land trust organizations	High	SIP	PP
2022-V Springville-002	Protect wastewater treatment plant from the risk of power failure	1	All Hazards, Utility Failure	**Problem**: The village's Wastewater Treatment Facility lacks backup power. The facility provides critical water services. **Solution**: The village will purchase, install, and maintain a backup generator for the	No	No	Within 3 years	Village DPW	$320,000	Ensure continued operation at this critical facility.	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program,	High	SIP	ES

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Wastewater Treatment Facility.							Municipal Budget			
2022-V Springville-003	Repetitive Loss Properties	1	Flood	**Problem:** There are 9 Repetitive Loss Properties within the village. **Solution:** The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and	No	No	Within 2 years	FPA, homeowners	Low cost to conduct Outreach	Give residents the option to move from the floodplain.	HMGP, BRIC FMA, cost-share for residents	High	SIP	PP

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				elevation as necessary.										
2022-V Springville-004	Work with NYSDOT to ensure that NYS Route 39 remains passable during hazard incidents	1	All Hazards, Flood	**Problem**: There is concern that a culvert passing under NYS Route 39 could fail and cause a roadway collapse on the Village's Main Street. **Solution**: Coordinate with NYSDOT to ensure that necessary upgrades and mitigation are carried out in a timely manner.	Yes	No	Within 3 years	NYSDOT, Village DPW	TBD by NYSDOT engineering analysis	Preserve service along this critical transportation corridor	Village budget for outreach; NYSDOT	High	EAP	PI
2022-V Springville-005	National Grid tree trimming will mitigate loss of power during hazard events	2	Utility Failure	**Problem:** National Grid power lines feeding North St and the North Street substation are vulnerable to outage. **Solution:** The village will monitor tree trimming activities by	No	No	Within 1 year	Village DPW	Operations budget	Preserve service along this critical transportation corridor	Village budget for outreach; Electric utility companies	High	EAP	PI

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				National Grid personnel to see if tree trimming and maintenance is taking place in the Grid territory from West Seneca to Springville, which is the route the transmission line takes.										
2022-V Springville-006	Backup power for Village offices	1	Utility Failure	**Problem:** The Village Office at 5 W. Main St needs a generator installed on the roof to run the Village Office server and computers to process utility payments, taxes, permits, payroll, and receivables. The office is surrounded by sidewalks with no spot for a generator install except the roof.	Yes	No	Within 3 years	Village Administrator, DPW, outside engineering firm	>$75,000	Ensure continuity of village services	BRIC, HMGP, Village	High	SIP	ES

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The village Administrator and DPW Superintendent will contact an engineering firm to look at the feasibility of installing a generator on the roof to power the village office to keep the office running during prolonged power outages. The structural integrity of the flat membrane roof would have to be reviewed also by an engineer. The Village DPW will procure and install the generator.										
2022-V Springville-007	Replace NYSDOT	1	Flood, Severe Storm	**Problem:** NYSDOT owns the culvert over	No	No	Within 3 years	Village DPW, NYS DOT	>$150,000	Continuity of services over this	Village budget for monitoring	High	EAP	PI

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	culvert over Spring Brook			Main Street and Spring Brook that runs under buildings and Route 39 in the Village, which is the main road for truck and car traffic through the village. Failure of the roadway due to culvert collapse would be detrimental to the village downtown area. **Solution:** Monitor NYS DOT maintenance of the culvert and alert NYS if there are any visual deficiencies noticed.						important roadway	and outreach; BRIC, HMGP to address any needs			
2022-V Springville-008	Address Cybersecurity threats	1	Cyber Attack	**Problem:** The village operations are vulnerable to cyber-attack. **Solution:** The Village	No	No	Within 3 years	Village Emergency Manager	TBD	Protect critical village operations from cyber attack	Municipal Budget, EMPG	High	LPR	ES

Table 9.41-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Emergency Manager will work with subject matter experts to implement cyber security countermeasures.										
2022-V Springville-009	Identify locations for emergency shelter, temporary and permanent housing locations	1	All Hazards	**Problem:** The village is not able to identify locations for emergency, temporary or permanent housing. **Solution:** The village will work with the county and the Town of Concord emergency managers to identify locations for emergency, temporary and permanent shelter. The village will act to secure access to these sites when a natural hazard strikes.	No	No	Within 2 years	Village DPW, FPA, County emergency managers	Staff time	Village can quickly provide emergency shelter, temporary and permanent housing options	Municipal budget	High	LPR	ES

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.41-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-V Springville-001	Create open space along riverways to allow for storm water flows	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-V Springville-002	Protect wastewater treatment plan from the risk of power failure	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2022-V Springville-003	Repetitive Loss Properties	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-V Springville-004	Work with NYSDOT to ensure that NYS Route 39 remains functional during hazard incidents	1	1	1	1	1	0	1	1	1	1	1	0	1	0	11	High
2022-V Springville-005	Work with Electric Utilities to ensure that power is not interrupted during hazard events	1	1	1	1	1	0	1	1	1	1	0	1	1	0	11	High
2022-V Springville-006	Backup power for Village offices	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
2022-V Springville-007	Replace culvert over Spring Brook	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High
2022-V Springville-008	Address Cybersecurity threats	1	1	1	1	1	1	0	1	1	1	0	1	1	0	12	High
2022-V Springville-009	Identify locations for emergency shelter, temporary and permanent housing locations	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.41.8 Action Worksheets

The following action worksheets have been developed by the Village of Springville to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect wastewater treatment plant from the risk of power failure		
Project Number:	2022-V Springville-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The village's Wastewater Treatment Facility lacks backup power. The facility provides critical water treatment services.		
Description of the Solution:	The village will purchase, install, and maintain a backup generator for the Wastewater Treatment Facility.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect against power failure	**Estimated Benefits (losses avoided):**	Ensures continuity of wastewater services
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	~$320,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues
	Build a dedicated solar field	Very high	Prohibitively expensive

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Backup power for wastewater treatment plant	
Project Number:	2022-V Springville-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the wastewater treatment plant
Property Protection	1	Project will protect the plant from power failure
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	0	Within 3 years
Agency Champion	1	Village DPW
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-V Springville-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	There are 9 Repetitive Loss Properties within the village.		
Description of the Solution:	The village will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the village will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect safety of residents whose homes are in the floodplain	**Estimated Benefits (losses avoided):**	Protect homeowners from flooding
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	Outreach cost is low. Cost to acquire or mitigate properties will vary by property	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, BRIC FMA, cost-share for residents
Responsible Organization:	FPA, homeowners	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management , Education and Awareness
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues
	Require all homes to be raised six feet	Very high	Prohibitively expensive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-V Springville-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect the safety of residents who live in the floodplain
Property Protection	1	Project will protect village residences from flood damage
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Within 3 years
Agency Champion	1	FPA, homeowners
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 80-Section-9.41-Springville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.42 City of Tonawanda

This section presents the jurisdictional annex for the City of Tonawanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the city participated in the planning process; an assessment of the City of Tonawanda's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.42.1 Hazard Mitigation Planning Team

The following individuals have been identified as the City of Tonawanda's hazard mitigation plan primary and alternate points of contact. The City of Tonawanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many city departments, including Emergency Management and the Building Department. The Deputy Director of Emergency Management and the Fire Chief represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.42-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark Banks, Director, Emergency Management Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-692-8400 x408 Email: mbanks@tonawandacityfd.com	Name/Title: Chuck Stuart, Fire Chief and Co-Director of Emergency Management Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-695-9291 Email: firechief@tonawandacityfd.com
NFIP Floodplain Administrator	
Name/Title: Erik Lindhurst, Building Inspector Address: 200 Niagara Street Tonawanda, NY 14150 Phone Number: 716-695-1806 Email: bldginsp@tonawandacity.com	

9.42.2 Municipal Profile

The City of Tonawanda is four square miles in size and is located within the northwestern corner of Erie County. The Niagara River, Tonawanda Creek/Erie Canal, and the Town of Tonawanda form the city's northern border. The city is entirely contained within the Town of Tonawanda. NYS Routes 265, 266, 384, 425 traverse the city.

The Iroquois Indians named this area after the Tonawanda Creek. The first white settler to the area was Henry Anguish, who built a log home in 1808 (Wikipedia 2014). The completion of the Erie Canal in 1825 spurred development in the new community. A large lumber mill that operated in Tonawanda lent the town the title of the "Lumber Capital of the World" (City Tonawanda 2018). Tonawanda incorporated as a village in 1854. In 1857 the northern portion of the village separated to become the City of North Tonawanda in Niagara County. In 1903, Tonawanda changed its status from village to city and then lobbied New York to re-construct a segment

of the Erie Barge canal. The mouth of Tonawanda Creek, located in the City of Tonawanda, became the western terminus of the Canal. As transportation modes shifted, the Barge Canal's importance quickly declined. A decline in regional manufacturing resulted in the decline of business in the City's downtown area. (City of Tonawanda 2018). The City of Tonawanda is centered on the Gateway Harbor, a public park that runs along the Erie Canal just before it joins the Niagara River. During the summer, local boaters can dock for free in the Harbor (Wikipedia 2020).

According to the U.S. Census, the 2010 population for the City of Tonawanda was 15,130. The estimated 2019 population was 14,830, a two percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.0 percent of the population is 5 years of age or younger and 19.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.42.3 Jurisdictional Capability Assessment and Integration

The City of Tonawanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Mitigation Strategies) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.42.3). The City of Tonawanda's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Tonawanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.42-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	City of Tonawanda Building Code, Chapter 14, 2008	State and Local	New York State Department of State, New York State Code Council. Enforced by the Building Department.
Comment: This ordinance provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this city. This ordinance is adopted					

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
pursuant to section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this ordinance, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this ordinance.					
Zoning Code	Yes	No	Zoning, Chapter 14, 1997, amended 2020	Local	Town Board, Planning Board
Comment: The comprehensive zoning plan is adopted to secure safety from flooding, to promote and protect public health, safety, convenience, and other aspects of the general welfare. These general goals include, among others, the following specific purposes relating to hazard mitigation: • Secure safety from fire, flood, panic, and other dangers. • Lessen congestion in the streets and facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. • Encourage the most appropriate use of land to protect and conserve property values throughout the city. • Bring about the gradual conformity of land and buildings to the comprehensive zoning plan.					
Subdivision Ordinance	Yes	No	Chapter 58, Subdivision of Land, 1989	Local	Code Enforcement/Building
Comment: This chapter is adopted for the purpose of providing for the orderly growth and development of the city and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health, and welfare of its population.					
Stormwater Management Ordinance	Yes	Yes	Chapter 52, Stormwater Management	Local	City of Tonawanda Common Council, Enforced by the Building Department, and the Engineering Department.
Comment: Proactive stormwater management reduces flood risk. The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the health, safety, and welfare of the public residing within this jurisdiction. This chapter seeks to meet those purposes by achieving the following objectives: • Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02 or as amended or revised; • Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01 or as amended or revised; • Minimize increases in stormwater runoff from land development activities to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; • Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Ordinances of the City of Tonawanda, Chapter 82, Site Plan, Zoning	Local	City of Tonawanda Common Council, the City of Tonawanda Planning Board, and Enforced by the Building Department.
Comment: Site plan review incorporates consideration of natural hazard exposure					
Environmental Protection Ordinance	Yes	Yes	Chapter 26; Environment	Local	City Council

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The City's Environment Ordinance aims to protect its ecological resources which, in part, provide protection from natural hazard impacts.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 34 Flood Damage Prevention, 2019	Local	FPA
Comment: It is the purpose of this article to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: • Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; • Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; • Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; • Control filling, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands; and • Qualify and maintain for participation in the National Flood Insurance Program. BFE+2 feet is required for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Division 6, Section 66-351 thru 366	County	FPA, City Engineer
Comment: Coordination of stormwater management to prevent flooding.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	No	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	No	City of Tonawanda, Comprehensive Plan, 2002	Local	City of Tonawanda Common Council, Enforced by the Building Department, and the Engineering Department.
Comment: The Comprehensive Plan's objectives are to retain open space through preservation of sensitive environmental areas such as steep slopes and waterways. Development in flood-prone areas should be controlled using zoning laws. Development should not increase run-off in waterway areas. City is awaiting NYS approval of the latest version of our Comprehensive Plan.					
Capital Improvement Plan	No	No	-	-	-
Comment: None					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Floodplain or Watershed Plan	No	-	-	-	-
Comment:					
Stormwater Plan	Yes	-	-	-	-
Comment:					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	Yes	Yes	Local Waterfront Revitalization Plan	Local	LWRP Steering Committee
Comment: The Local Waterfront Revitalization Plan (LWRP), or waterfront plan, is a community-driven document that provides guidance on future policies, projects, and actions specifically related to the waterfront. The original plan was developed in 1986 and updated in 1991; many changes have taken place since that time and the City desires to take a proactive approach by developing a solid plan for the future of the waterfront. Although the Niagara River is the most prominent feature, this plan also includes Two Mile Creek, Tonawanda Creek/Erie Canal, and Ellicott Creek. Funding for the update to the plan was provided by a grant from the New York State Department of State under the Environmental Protection Fund.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Comprehensive Emergency Management Plan, February 2018	Local	Emergency Management
Comment: The Comprehensive Emergency Management Plan coordinates emergency service provision during hazard events.					
Strategic Recovery Planning Report	No	No			-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	Yes	No	Railroad Emergency Plan	Local	City DPW, Emergency Manager
Comment: The Railroad Emergency Plan equips the city to respond effectively to railroad related emergencies.					

Development and Permitting Capability

The table below summarizes the capabilities of the City of Tonawanda to oversee and track development.

Table 9.42-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	The City of Tonawanda Building Department issues the required building, plumbing and electrical permits for the project.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	If a building is constructed in a floodplain then a floodplain permit is required.
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The Building Department estimates that the City of Tonawanda is roughly 95% fully built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Tonawanda and their current responsibilities which contribute to hazard mitigation.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.42-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The City of Tonawanda Planning Board is a separate board of appointed people that reviews project for compliance with New York State planning guidelines.
Zoning Board of Adjustments	Yes	The City of Tonawanda Zoning Board of Appeals is a separate board of appointed people that reviews specific project variance requests for compliance with local ordinance. This board will then decide if the requested variance is approved or denied based on various factors relating to the neighborhood.
Planning Department	No	-
Mitigation Planning Committee	Yes	OEM, Fire, Police, Engineering
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The City Public Works Department mitigates against natural hazards by protecting assets such as roads, sewer, and water infrastructure.
Construction/Building/Code Enforcement Department	Yes	The Building Inspection Department is responsible for enforcement of the New York State Uniform Fire Prevention and Building Code, the City of Tonawanda Zoning Ordinance and other local laws and ordinances.
Emergency Management/Public Safety Department	Yes	City of Tonawanda Emergency Management involves the Volunteer Director, Disaster Planning Advisory Committee. Over sees emergency planning with the city such as the CEMP, Railroad Emergency Plan. Coordinates with all City Departments Hazard Mitigation Planning. Responsible for the operation of the EOC during an emergency or potential emergency. Works daily with the Fire and Police Departments.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Through city applications, NY Alert, School District though phone calling app
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Public Works Department and Parks Department staff maintain programs to reduce hazard risk, including street repair, culvert maintenance and facility management.
Mutual aid agreements	Yes	Police, Fire, Emergency Management. DPW
Other	Yes	Traffic and Safety Board and Local Waterfront Revitalization Committee
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	The Building Inspector and the City Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Building Inspector and the City Engineer

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Planners or engineers with an understanding of natural hazards	Yes	The Building Inspector and the City Engineer
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Trained to perform evaluations and determine the professional assistance required to perform a complete evaluation. Staff performing this level evaluations are the Building Inspector, City Engineer, Fire Inspector and Fire Personnel and Emergency Management Director
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	The Building Inspector and the City Engineer have limited training in the use of GIS software.
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Erik Lindhurst, Building Inspector
Surveyor(s)	No	-
Emergency Manager	Yes	Coordinates all activities for city in concert with the Police Chief and Fire Chief.
Grant writer(s)	Yes	Consultant grant writer
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Tonawanda.

Table 9.42-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes, Treasurer
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes, Treasurer
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Treasurer
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Tonawanda.

Table 9.42-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	City Clerk's office
Personnel skilled or trained in website development	Yes	City Clerk's office
Hazard mitigation information available on your website	Yes	https://www.tonawandacity.com/residents/emergency_management.php
Social media for hazard mitigation education and outreach	Yes	Facebook pages for Tonawanda Emergency Management, Fire, Police, Fire Department Union IAFF Local 859. Booths at public events sharing information.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Disaster Planning Advisory Committee
Other programs already in place that could be used to communicate hazard-related information	Yes	The city provides hazard mitigation information during public and educational events.
Warning systems for hazard events	Yes	Broadcast Media, Social Media, School District Radio Station, NY Alert, ReadyErie App
Natural disaster/safety programs in place for schools	Yes	Project Save, Communicable Disease Disaster Plan, District Wide Safety Plan, Building Level Safety Plan.
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Tonawanda.

Table 9.42-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	March 1, 2019
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (Intergovernmental Panel on Climate Change, 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.42-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.42.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Erik Lindhurst, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the City of Tonawanda.

Table 9.42-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
City of Tonawanda	4	9	$26,665	0	0

Source: FEMA 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the City of Tonawanda that are prone to flooding include a small section of parkland along Tonawanda Creek. There are five structures located in the floodplain which have LOMC's; these structures have been

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

removed from the floodplain. The city does not maintain a list of properties that have been damaged by flooding nor a list of property owners interested in flood mitigation. There are not any RiskMAP projects currently underway in the town. The city did not identify how many (if any) properties have been mitigated. The city flood hazard maps adequately address the flood risk within the jurisdiction.

NFIP Compliance

The City of Tonawanda does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Contact (CAC) was in February 2017. The Building Department is responsible for floodplain administration, however; the Building Inspector is not a certified Floodplain Manager. The city does not have access to resources to determine possible future flooding conditions from climate change. The city did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. When determining if proposed development on an existing structure qualifies as a substantial improvement, the FPA will estimate the value of new work completed versus the assessed value of the entire property. The Building Inspector issues floodplain permits for any construction or substantial improvement to properties within the floodplain. The Building Inspector reviews construction documents that are provided with the permit documents for compliance with all applicable codes and ordinances. Once the permit is issued the Building Inspector will conduct the required inspections to verify that construction conforms with submitted plans.

9.42.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The City of Tonawanda has identified the following routes and procedures to evacuate residents prior to and during an event.

- Routes 265/384/425 for north to south evacuation
- Route 266 for westbound evacuation
- Fletcher Street for east and westbound evacuation

The City Police Department coordinates evacuation effort per the Comprehensive Emergency Management Plan. Auxiliary Police and Fire Police may also be utilized during evacuations. Emergency notifications are made via broadcast media, social media, and mobile announcements from emergency vehicles. In some situations, notification will be made door to door by first responders.

Sheltering

The City of Tonawanda has identified the following designated emergency shelters within the city.

Table 9.42-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Tonawanda High School	600 Fletcher Street	500	No, Assistance Provided by SPCA	Yes	Yes	Local EMS and Hospitals in region.	2 Kitchens, Refrigerators, Freezers, Griddles, Ovens, Convection

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
(ARC Approved)							Ovens, Microwave Ovens, 2-way radios, 30 phone lines, PA System, At times Govt. surplus food on site
Tonawanda Senior Center (ARC Approved)	35 Main Street	60	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Small Kitchen
Tonawanda Youth Center (ARC Approved)	291 Kohler Street	45	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Small Kitchen
Boys and Girls Club (ARC Approved)	325 Franklin Street	150 sleeping, 250 sitting	No, Assistance Provided by SPCA	Yes	No	Local EMS and Hospitals in region	Kitchen, Steamer, Refrigerators, Freezers, 8 Burners, Maximum seating 250 PA System

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The City of Tonawanda has identified the following sites suitable for placing temporary housing units.

Table 9.42-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Veterans Park	Niagara Street	24	Trailers on Pavement	Water. Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations
Big Lots Plaza Parking Lot	750 Young Street	30 to 40 (More if Businesses are Closed)	Trailers on Pavement	Water. Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations
Kohler Pool Parking Lot	291 Kohler Street	20	Trailers on Pavement	Water. Power, Sewer in area	Power, Water, Sewer connections required to be run from nearby locations

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The City of Tonawanda did not identify any permanent housing locations.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.42-12. Permanent Housing Locations

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The city will coordinate with county and neighboring municipalities (Action 2022-City Tonawanda-006)					

9.42.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.42-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.42-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	12	0	18	0	14	0	9	0	11	0	7	0
Multi-Family	0	0	1	0	1	0	1	0	3	0	1	0
Other (commercial, mixed-use, etc.)	4	0	3	0	3	0	3	0	8	0	2	0
Total Permits Issued	**16**	**0**	**22**	**0**	**18**	**0**	**13**	**0**	**22**	**0**	**10**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
233 Wales Ave	Commercial	2,376 panel ground mounted solar array.	Wales Avenue	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed and occupied
332 Wheeler	Commercial	41,000sf heavy equipment sales & service building – Milton CAT	332 Wheeler Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines	Under construction
378 Franklin	Commercial	12,528 sf Addition	378 Franklin Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½	Under construction

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

				Mile Buffer from HazMat Pipelines	
80 Clinton	Commercial	97.92Kw roof top solar	80 Clinton St.	½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Completed
560 Fillmore	Commercial	60x100 warehouse	560 Fillmore Ave.	0.2-percent Annual Chance Flood Event Hazard Area, NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed and occupied
150 Fillmore	Commercial	Roof top solar	150 Fillmore Ave.	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed
72 East Niagara	Commercial mixed use	Mixed use building w/ 14 apartments & one commercial space.	72 East Niagara Street	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Under construction
377 Delaware	Residential	(2) New 12-unit apartment buildings.	377 Delaware Street	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Under construction
330 East Niagara	Residential	Converted existing vacant industrial to 18-unit apartment building.	39.40-1-2.12	NEHRP Soils Class D and E Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Gateway Harbor	Park	Development and redevelopment of existing and new parkland	Young Street, Tonawanda, NY 14150	Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Some aspects of the total project have been completed, some are being bid, and some are in design.
Former Water Plant	Residential	Unknown	38.52-3-1	Wildland-Urban Interface Hazard Area, Steep Slope (Greater Than 25% Grade) Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	Property just sold to new owner

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

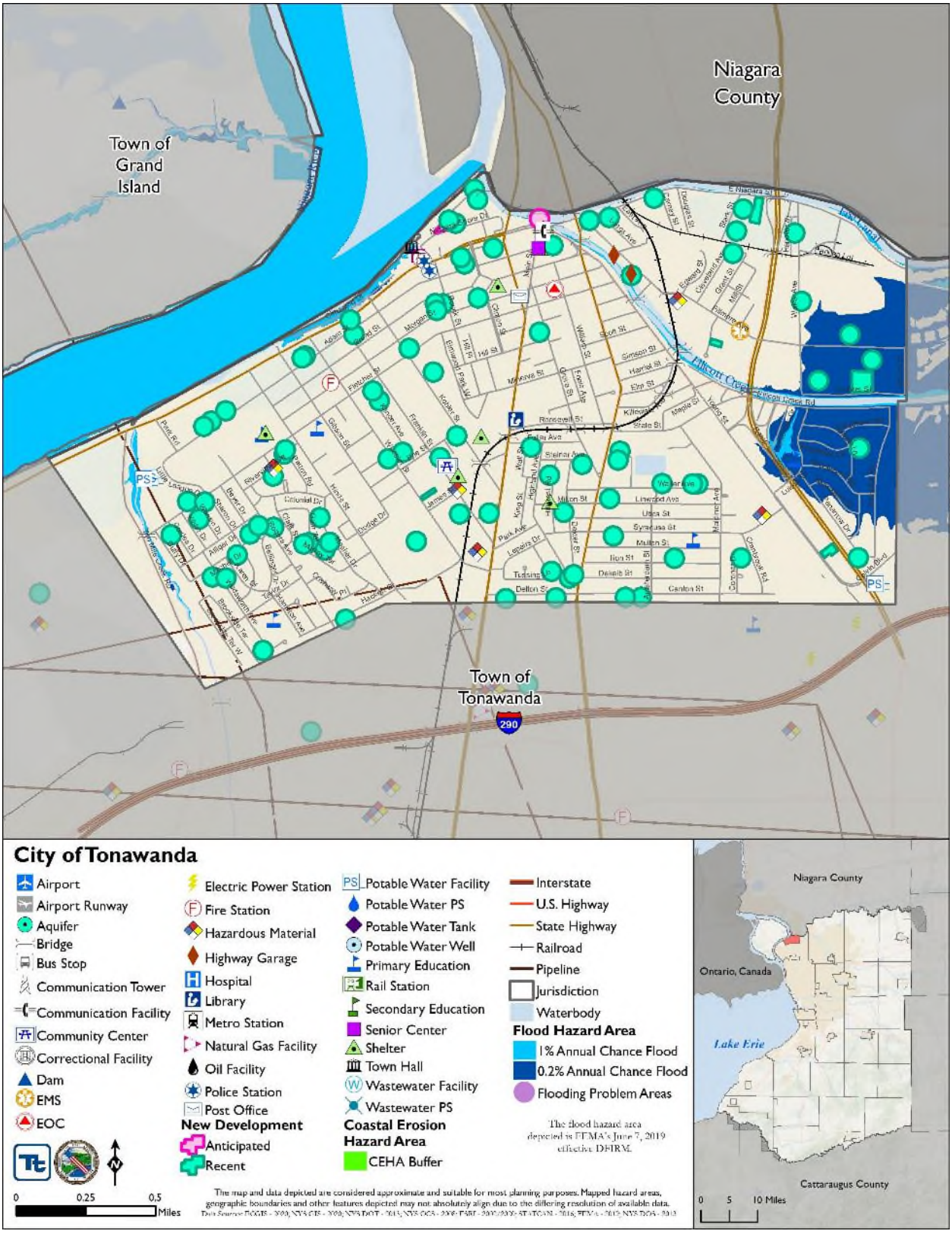
9.42.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the City of Tonawanda's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the City of Tonawanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

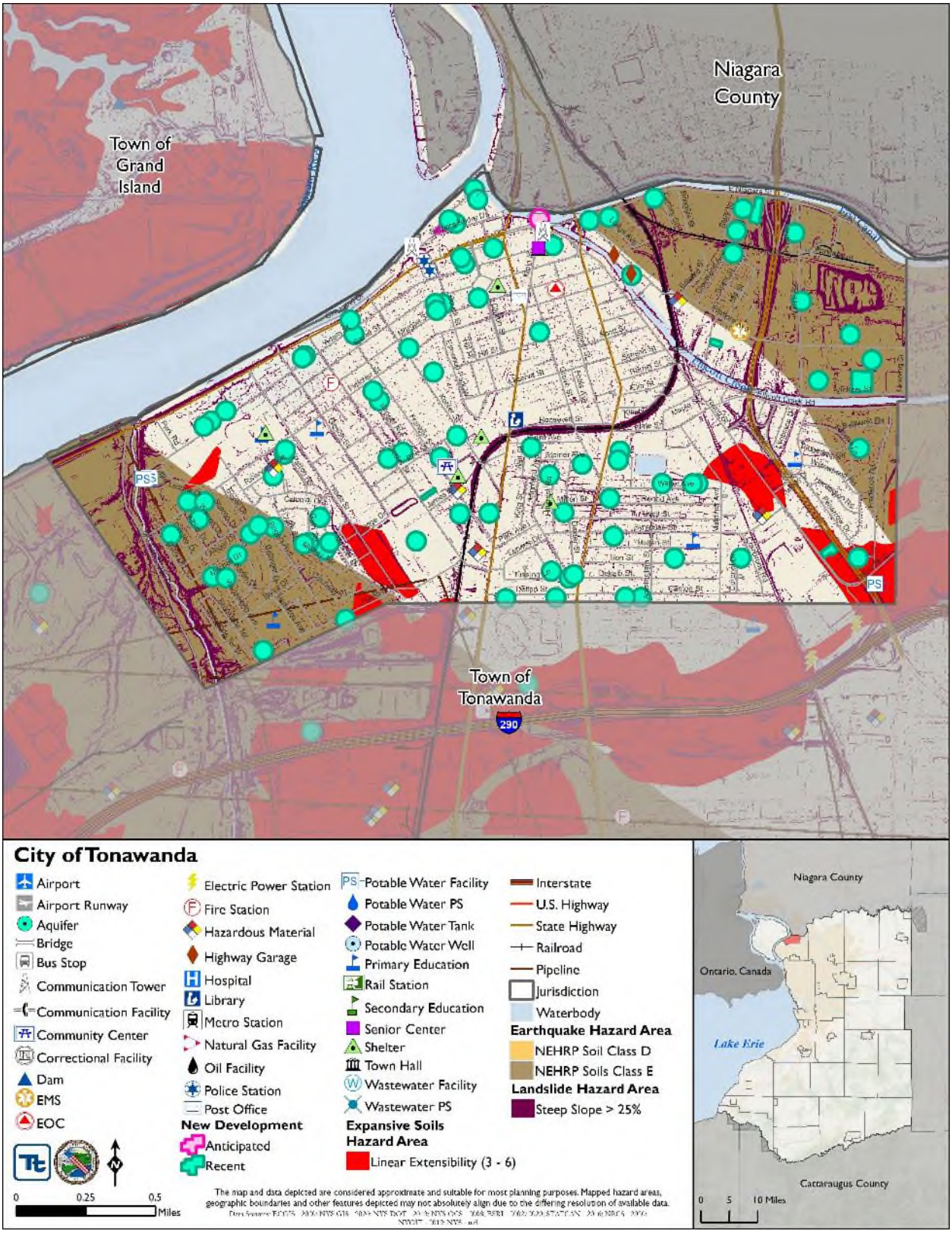
Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.42-1. City of Tonawanda Hazard Area Extent and Location Map 1



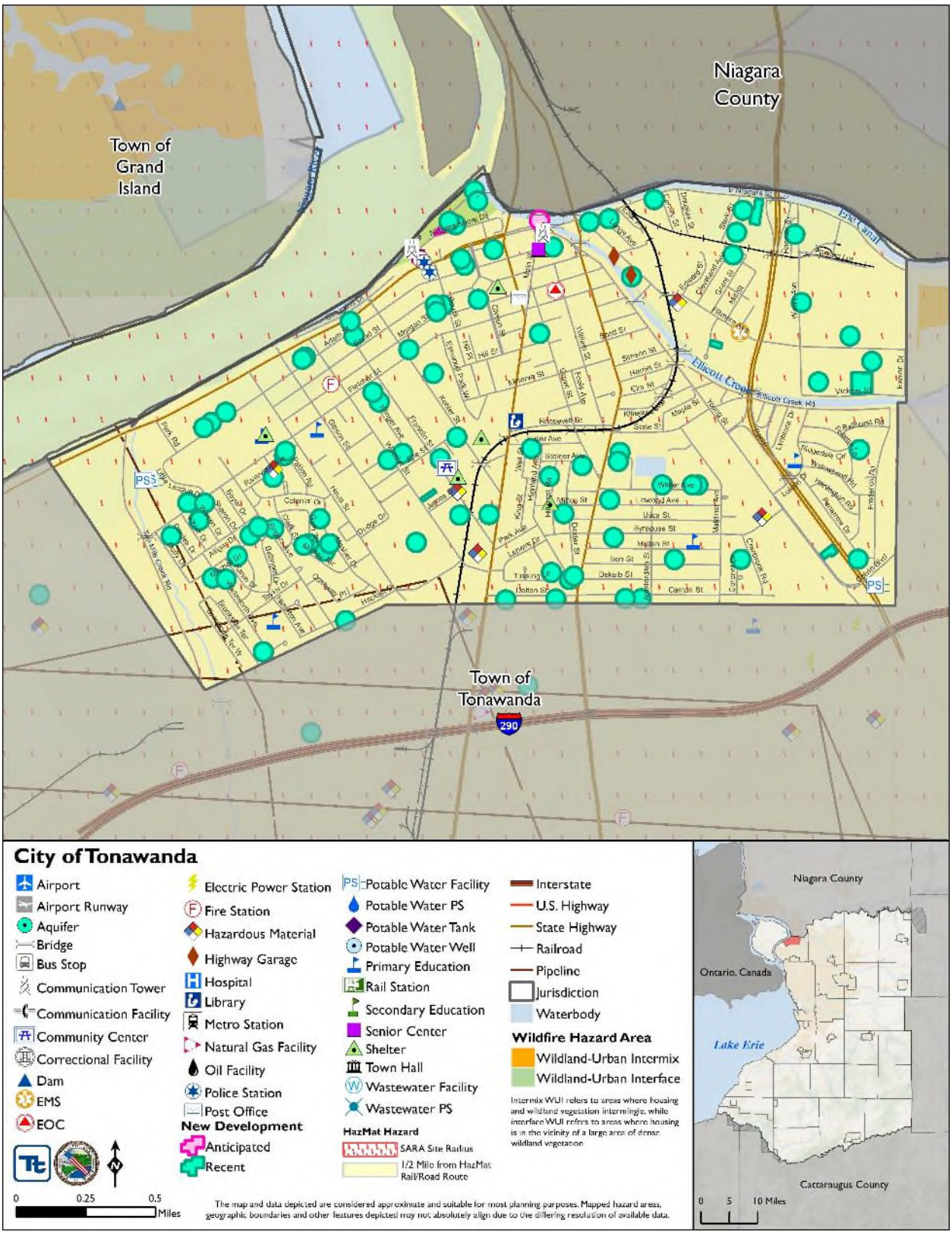
Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.42-2. City of Tonawanda Hazard Area Extent and Location Map 2



Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.42-3. City of Tonawanda Hazard Area Extent and Location Map 3



Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The City of Tonawanda's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.42-14 provides details regarding municipal-specific loss and damages the city experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.42-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	Though the county was impacted by this event, the city did not report any damages.
August 11-15, 2015	Flash Flood	No	Though the county was impacted by this event, the city did not report any damages.
October 28-29, 2015	High Wind	No	Though the county was impacted by this event, the city did not report any damages.
November 6, 2015	Thunderstorm Wind	No	- Though the county was impacted by this event, the city did not report any damages.
November 12, 2015	High Wind	No	Overtime for tree damage.
November 18, 2015	High Wind	No	Overtime for tree damage.
January 11, 2017	High Wind	No	Overtime for tree damage.
March 8, 2017	High Wind	No	Overtime for tree damage.
March 13, 2017	Winter Storm	No	Overtime for plowing and snow removal.
July 20, 2017	Tornado	No	Though the county was impacted by this event, the city did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Though the county was impacted by this event, the city did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Overtime for plowing.
December 24-29, 2017	Lake-effect Snow	No	Overtime for plowing.
January 2, 2018	Blizzard	No	Overtime for plowing and snow removal.
October 6, 2018	Lightning	No	Though the county was impacted by this event, the city did not report any damages.
February 24, 2019	High Wind	No	Overtime for tree damage.
February 24, 2019	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Overtime for tree damage.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Though the county was impacted by this event, the city did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
January 12, 2020	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Though the county was impacted by this event, the city did not report any damages.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the City of Tonawanda's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Tonawanda. The City of Tonawanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the city indicated concurrence with the derived Hazard Rankings shown below.

Table 9.42-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Medium	Low	Medium	Low	High

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.42-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
City Hall	Public Facility	X	X	2022-City Tonawanda-004

Source: FEMA 2020a and 2020b

Identified Issues

After review of the City of Tonawanda's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Tonawanda has identified the following vulnerabilities within their community:

- Tonawanda Towers apartments at 5 Main Street and apartments at 284 Main Street are residential high-rise buildings that lack adequate backup power. Firefighters have carried residents down 11 flights of stairs in emergency events.
- The city lacks the full range of firefighting equipment to respond to all hazard events as they occur. This includes the ability to effectively respond to hazardous material releases.
- Rail lines within the city present hazardous materials risks
- The City DPW facility provides a range of critical operations and lacks backup power.
- City Hall is in the 0.2% annual chance flood zone. Note, that protection of the town hall is the ultimate responsibility of the town, not the city's administration.
- Certain properties in the city may flood repetitively.
- Trees along public rights of way can damage power lines and other assets.
- Storm sewers backup up during rain events which can cause flooding
- The Floodplain Manager requires training to fully implement the NFIP program within the city.
- The shoreline of the Tonawanda Creek is eroded. The Canal Authority has control over mitigation efforts along the designated canal corridor.
- The City was not able to identify permanent housing locations
- The city lacks up to date emergency equipment.
- Emergency response along the Ellicott Creek, Niagara River and Barge Canal can be improved

9.42.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.42-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Threat of terrorist attacks at mass gatherings and/or along rail lines. Funding for increased security.	Man-Made Hazard	Not Identified	Police	Ongoing	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing capability
	Increase funding for updated firefighting equipment and training facilities.	Fire	Potential for a serious fire due to older construction, separation requirements, and infrastructure	Fire	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP. 2. 3.
	HAZMAT in transit: Increased funding for additional training of 1st responders. Increase security along rail lines.	Man-Made Hazard	Not Identified	Office of Emergency Management	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP. 2. 3.
	Erosion control: Continuing natural erosion of the riverbed along the city shoreline.	Natural	Not Identified	City Engineer	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP. 2. 3.
	Tree Removal to reduce or avoid damage secondary to wind, ice, and storms.	Natural	Not Identified	Parks and Recreation	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP. 2. 3.
	Update/revise floodplain management ordinances to be consistent with	Flood	Not Identified	Building Dept.	In Progress	Cost Level of Protection Damages Avoided;		1. Include in 2022 HMP. 2. 3.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	potential future new FIRMs.					Evidence of Success		

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The City of Tonawanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The city maintains a Fire Prevention and Fire Training Program with personnel assigned to carry out and coordinate these efforts.
- The Comprehensive Emergency Management Plan was updated in 2018.
- The Railroad Emergency Plan developed and adopted in 2017.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Tonawanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.42-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	-	-	X	-	-	X
Cyber Attack	X	X	-	X	-	-	X	-	-	X
Earthquake	X	X	-	X	-	-	X	-	-	X
Expansive Soils	X	X	-	X	-	-	X	-	-	X
Extreme Temperature	X	X	-	X	-	-	X	-	-	X
Flood	X	X	X	X	X	X	X	X	X	X
Hazardous Materials	X	X	-	X	-	X	X	-	-	X
Landslide	X	X	-	X	-	-	X	-	-	X
Pandemic	X	X	-	X	-	-	X	-	-	X
Severe Storm	X	X	-	X	-	-	X	-	-	X
Severe Winter Storm	X	X	-	X	-	-	X	-	-	X
Utility Failure	X	X	X	X	X	-	X	-	-	X
Wildfire	X	X	-	X	-	-	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.42-19 summarizes the comprehensive range of specific mitigation initiatives the City of Tonawanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.42-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City Tonawanda-001	Protect the City DPW facility from loss of power	1	All Hazards, Utility Failure	**Problem**: The City DPW facility provides a range of critical operations including snow plowing, ditch cleaning and road repair. The facility lacks backup power. **Solution**: The City DPW will conduct an engineering analysis to confirm the need for and determine the appropriate size of generator. City DPW will install and maintain backup power at the facility.	Yes	No	Within 2 years	City Department of Public Works	~$75,000	Continuity of critical services for all hazards	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, Municipal Budget	High	SIP	ES
2022-City Tonawanda-002	Backup power for Tonawanda Towers & 284 Main Street apartments	1	All Hazards	**Problem**: Tonawanda Towers and the Kibler apartments at 284 Main Street are residential high-rise buildings that lack adequate backup power. Firefighters have had to carry residents multiple flights of stairs in emergency events. **Solution**: Assist owner of Tonawanda Towers and Kibler Apartments to apply for funding to purchase and install a backup generator at the residential high-rise.	No	No	Within 3 years	Owner of Tonawanda Towers & 284 Main Street	~$75,000 per generator installed	Ensure safety within and orderly evacuation of the high-rise building during an emergency	BRIC, HMGP, FEMA	High	EAP	PI
2022-City Tonawanda-003	Update firefighting equipment and training facilities.	1	Wildfire, All Hazards	**Problem**: The City lacks the full range of firefighting equipment to respond to all hazard events as they occur. This includes the ability to effectively respond to	No	No	Within 3 years	City Fire Department, City Board	$1.3 million	Ensure Fire Department is fully capable of responding to emergencies cause by	USDA Community Facilities Grant Program, EMPG,	High	LPR	ES

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				hazardous material releases. **Solution**: The City has assessed needs for firefighting equipment and training. City Fire Department will procure two new Fire Department Pumpers and a hazmat initial response trailer to contain hazmat situations.						different hazards	Municipal Budget			
2022-City Tonawanda-004	Protect City Hall to the 0.2% annual chance flood event	1	Flood	**Problem:** City Hall is in the Special Flood Hazard Area and is exposed to the flood hazard. Town Hall houses Emergency Management and Police services that are available on a cross-municipal basis **Solution:** The City will conduct an engineering analysis determine best methods to protect City Hall from flooding. City Engineer will implement appropriate mitigation measures.	Yes	No	Within 3 years	City DPW	TBD by engineering analysis	Ensure continuity of operations at this critical facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-City Tonawanda-005	Support control of erosion along the Tonawanda Creek shoreline	1,2	Flood	**Problem**: The shoreline of the Tonawanda Creek is eroded. **Solution**: The City DPW will work with the State Canal Authority to reduce erosion along the Tonawanda Creek shoreline. The Canal Authority will oversee	No	No	Within 5 years	City Engineer	TBD by engineering feasibility analysis	Protect properties along the shore from the negative impacts on creek shoreline erosion.	FEMA HMGP, BRIC	High	NSP	NR

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				implementation of the mitigation measures.										
2022-City Tonawanda-006	Identify permanent housing locations	1	All Hazards	**Problem:** The city has not identified permanent housing locations to use during and after and emergency. **Solution:** The city will coordinate with the county and neighboring municipalities to identify permanent housing locations and will secure these locations as needed.	No	No	Within 3 years	City Emergency Manager	Staff time	Ensure that locations for permanent housing are identified	Municipal budget	High	LPR	ES
2022-City Tonawanda-007	Residential Property Flood Mitigation	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims **Solution:** The city will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the city will collect required property-owner information and develop a FEMA grant application and BCA.	No	No	Within 3 years	City Council, FPA	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, Homeowner cost-share	High	SIP	PP

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-City Tonawanda-008	Upgrade storm sewers	1	Flood, Severe Storm	**Problem:** Specified storm sewers flood and overtop during heavy rain events. **Solution:** City DPW will determine correct sizing for storm sewers, and will then replace existing infrastructure as appropriate.	No	No	Within 3 years	City Engineer	TBD by engineering analysis	Protect against flooding due to poor water drainage	BRIC, HMGP	High	SIP	SP
2022-City Tonawanda-009	Improve Fire Department emergency response on the Niagara River, Barge Canal, and Ellicott Creek	1	All Hazards	**Problem:** The Fire Department provides All Hazard response to water emergencies on the Niagara River, State Barge Canal, Ellicott Creek as well as other areas of Western New York through mutual aid. The current inflatable boat with a 15 hp motor no long meets the needs of water rescue particularly on the Niagara River. The boat lacks power to work against the current. It limits the number of people that can be on the boat. It is difficult to perform EMS treatment to victims on the boat. **Solution:** Solution: Under the direction of the Fire Chief, the Boat would be replaced. The recommendation is 19'4" Rhibcraft Rescue Boat with trailer. This boat would have 115 hp outboard capable of close shore operations. The boat would	No	No	2 years	Fire Department	$75,000	Enhanced Emergency Response along busy waterways	EMPG, municipal budget	High	LPR	ES

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				be equipped with LED search lights, emergency light bars, radios, control counsel, dive ladder, etc. The rigid hull will be less vulnerable to damage from rocks than the current inflatable and able to operate in waterways with ice flows.										
2022-City Tonawanda-010	Improve Hazmat response along rail lines	1	Hazmat	**Problem:** Rail lines carry large amounts of hazardous materials through the city and expose residents to hazmat exposure. **Solution:** City will seek funding and/or provide training of 1st responders. Increase security along rail lines. Work with rail freight companies.	No	No	Within 2 years	Fire Department	TBD by needs assessment	Protect residents and properties from hazardous materials releases	HMPG, BRIC, municipal budget	High	SIP	ES
2022-City Tonawanda-011	Remove trees that can cause damage	1	Utility Failure	**Problem:** In different parts of the city, trees threaten to cut power lines by tree falls. **Solution:** The City Parks Department will conduct a complete tree trimming or remove trees to reduce the risk of power failure.	No	No	Within 2 years	City Parks Department	$20,000 per year	Ensure that power is not cut to residents, businesses, and emergency facilities	Municipal budget	Medium	NSP	PR
2022-City Tonawanda-012	Update/revise floodplain management ordinance and provide FPA training	1	Flood	**Problem:** The Floodplain Management Ordinance may not accommodate information contained in future new FIRMs. **Solution:** The city FPA will update the flood management ordinance to	No	No	Within 2 years	FPA	Staff time	Ensure that floodplain management in the city reflects most up to date info	Municipal budget	High	LPR	PR

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				be consistent with future FIRMs. The FPA staff will be trained to effectively used these FIRMS and to administer the ordinance.										
2022-City Tonawanda-013	Emergency Communications equipment	1	All Hazards	**Problem:** Most other town and city departments have switched to P25 communications equipment. Emergency Management equipment is outdated. **Solution:** The Director of Emergency Management will acquire approximately 75 portable Kenwood P25 units, 15 mobile radios and eight radio heads for use by the Fire Department and the Emergency Management staff during emergency events.	No	No	1 year	Emergency Management Department	$176,425	Enhanced communication during emergencies	EMPG, Municipal budget	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.42-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City Tonawanda-001	Protect the City DPW facility from loss of power	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-City Tonawanda-002	Backup power for Tonawanda Towers & 284 Main Street apartments	0	1	0	1	1	1	1	1	1	1	1	0	1	1	11	High
2022-City Tonawanda-003	Update firefighting equipment and training facilities.	1	1	1	1	1	1	0	1	1	1	1	0	1	0	11	High
2022-City Tonawanda-004	Protect City Hall to the 0.2% annual chance flood event	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-005	Support control of erosion along the Tonawanda Creek shoreline	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-006	Identify permanent housing locations	0	1	0	1	1	1	0	1	1	1	1	0	1	1	10	High
2022-City Tonawanda-007	Residential Property Flood Mitigation	0	1	0	1	1	1	0	1	1	1	0	1	1	1	10	High
2022-City Tonawanda-008	Upgrade storm sewers	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2022-City Tonawanda-009	Improve Fire Department emergency response on the Niagara River, Barge Canal, and Ellicott Creek	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	High

Table 9.42-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-City Tonawanda-010	Improve Hazmat response along rail lines	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-011	Remove trees that can cause damage	0	1	0	1	1	1	1	1	1	1	0	0	1	1	10	Medium
2022-City Tonawanda-012	Update/revise floodplain management ordinance and provide FPA training	1	1	0	1	1	1	0	1	1	1	0	0	1	1	10	High
2022-City Tonawanda-013	Emergency Communications equipment	1	1	0	1	1	1	0	1	1	1	1	1	1	1	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.42.9 Action Worksheets

The following action worksheets have been developed by the City of Tonawanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

City of Tonawanda Action Worksheet			
Project Name:	Protect the City DPW facility from loss of power		
Project Number:	2022-City Tonawanda-001		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The City DPW facility provides a range of critical operations including snow plowing, ditch cleaning and road repair. The facility lacks backup power.		
Action or Project Intended for Implementation			
Description of the Solution:	The City DPW will conduct an engineering analysis to confirm the need for and determine the appropriate size of generator. City DPW will install backup power at the facility. The City DPW will maintain the backup generator.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect facility from power failure	**Estimated Benefits (losses avoided):**	Ensures continuity of flood protection services at the DPW facility
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	~$75,000 estimate	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	FEMA HMGP, BRIC USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	City DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct a dedicated solar array	Very High	Variable power output
	Remove DPW facility	High	Lose the services provided by the facility.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the City DPW facility from loss of power	
Project Number:	2022-City Tonawanda-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the DPW
Property Protection	1	Project will protect the DPW facility from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 2 years
Agency Champion	1	City DPW
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

City of Tonawanda Action Worksheet			
Project Name:	Update firefighting equipment and training facilities.		
Project Number:	2022-City Tonawanda-003		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	Currently 2 of 3 Fire Department Pumpers are substandard. In addition the lack of Foam equipment limits hazmat responses in some situations. Engine 1, a 1996 model, has a rotten frame which has been reinforced stop gap patch. The Pumper has a large amount of rust and corrosion which weaken the whole truck. The age of the pumper exceeds the NFPA 1901 age for reserve and front line equipment. Engine 2, a 2003 American LaFrance, has had tank, diesel engine and pump issues. In addition each year replacement parts become more limited due to the bankruptcy of American LaFrance and no new parts being manufactured. This engine exceeds the NFPA 1901 standards for first line firefighting equipment. These two Pumpers must be replaced to allow proper fire suppression and rescue operations for All Hazard Situations. This is a carryover item from the original plan. In addition the department needs a Hazmat initial response Trailer to help contain situations until mutual aid Hazmat Teams arrive		
Action or Project Intended for Implementation			
Description of the Solution:	Under the leadership of the Fire Chief, two Pumpers with 750 gal water tank, 30 gal foam tank, LED lighting, proper emergency lights and radio systems, etc. to be purchased. Cost would be $1,200,000. The newer technologies, now as standard equipment on the new apparatus, will provide consistency of operations with other department apparatus. This provides for consistency of operation by the pump operators. A 6x12 hazmat utility trailer will be acquired by the City (with appropriate equipment) for initial responses to Hazmat incidents in the city. Cost approximately $25,000.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Protect community from all hazards	**Estimated Benefits (losses avoided):**	Improves ability of Fire Department and Emergency Management to respond to emergency events
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	$1.3 million	**Mitigation Action Type:**	Emergency Services
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	USDA Community Facilities Grant Program, EMPG, Municipal Budget
Responsible Organization:	Fire Department, City Board	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct a dedicated solar array	Very High	Variable power output
	Remove DPW facility	High	Lose the services provided by the facility.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Update firefighting equipment and training facilities.	
Project Number:	2022-City Tonawanda-003	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will improve emergency response to life threatening situations
Property Protection	1	Project will improve emergency response to property threatening situations
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	0	Within 3 years
Agency Champion	1	Fire Department
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

City of Tonawanda Action Worksheet			
Project Name:	Upgrade storm sewers		
Project Number:	2022-City Tonawanda-008		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Specified storm sewers flood and overtop during heavy rain events.		
Action or Project Intended for Implementation			
Description of the Solution:	City DPW will determine correct sizing for storm sewers, and will then replace existing infrastructure as appropriate.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by engineering analysis	**Estimated Benefits (losses avoided):**	Protect against flooding due to poor water drainage
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by engineering analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	BRIC, HMGP
Responsible Organization:	City Engineer	**Local Planning Mechanisms to be Used in Implementation if any:**	Capital improvements, hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Close roadways that experience flooding	Low	Loss of access
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Upgrade storm sewers	
Project Number:	2022-City Tonawanda-008	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Within 3 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Improve Fire Department emergency response on the Niagara River, Barge Canal and Ellicott Creek		
Project Number:	2022-City Tonawanda-010		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Fire Department provides All Hazard response to water emergencies on the Niagara River, State Barge Canal, Ellicott Creek as well as other areas of Western New York through mutual aid. The current inflatable boat with a 15 hp motor no long meets the needs of water rescue particularly on the Niagara River. The boat lacks power to work against the current. It limits the number of people that can be on the boat. It is difficult to perform EMS treatment to victims on the boat. The Fire Department provides 24 hour manned emergency response on the area waterways, both in the city and through mutual aid. The Fire Department works in concert with the Police Department patrol boat. The Fire Department Boat can get into areas that the Police Boat is unable to access. The current boat lacks spotlights, has limited rescue equipment, and is vulnerable to ice.		
Action or Project Intended for Implementation			
Description of the Solution:	Under the direction of the Fire Chief, the Boat would be replaced. The recommendation is 19'4" Rhibcraft Rescue Boat with trailer. This boat would have 115 hp outboard capable of close shore operations. The boat would be equipped with LED search lights, emergency light bars, radios, control counsel, dive ladder, etc. The rigid hull will be less vulnerable to damage from rocks than the current inflatable and able to operate in waterways with ice flows.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	All Hazard Water Rescue	**Estimated Benefits (losses avoided):**	Improve emergency response on waterways
Useful Life:	10 years	**Goals Met:**	1
Estimated Cost:	$74,788.00	**Mitigation Action Type:**	Emergency Services
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	EMPG, municipal budget
Responsible Organization:	Fire Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Emergency Services

Three Alternatives Considered (including No Action)			
	Action	**Estimated Cost**	**Evaluation**
Alternatives:	No Action	$0	Problem continues.
	Repair current boat	High cost	Will not be a permanent solution, infeasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

action and Prioritization		
Project Name:	Improve Fire Department emergency response on the Niagara River, Barge Canal and Ellicott Creek	
Project Number:	2022-City Tonawanda-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	0	
Property Protection	1	Improved Fire response to property emergencies
Cost-Effectiveness	0	
Technical	1	
Political	1	The community supports these investments
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	1	
Total	1	
Priority (High/Med/Low)	11	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

City Tonawanda Action Worksheet			
Project Name:	Emergency Management equipment		
Project Number:	2022-City Tonawanda-015		
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Communications between agencies is critical in emergency situations. As Niagara County has moved to trunked P25 radios, the Fire Department and Police Department lacks communications with the City of North Tonawanda. Tonawanda and North Tonawanda back up each other in Police and Fire incidents. In addition Erie County is gradually migrating radios such as the Sheriff Department, fire ground etc to P25 non trunked. These changes make reduces the agencies the City of Tonawanda departments can communicate with on a daily bases or in an all hazard situation		
Action or Project Intended for Implementation			
Description of the Solution:	Under the direction of the Director of Emergency Management, The Police Department would acquire 15 Kenwood P25 portable radios under State Contract to complete the migration to P25 units. The cost would be $28,125. The Fire Department would acquire 53 portables at $99,375 and 12 mobile radios at $22,800, Emergency Management 3 Mobile radios at $5,700 and 3 portables at $5625. 8 radio heads for updating the dispatch equipment at a cost of $14,800. Install of all equipment is included in the State Contract Pricing. Installation and programming of the radios will be performed by FM Communications. Under State Contract. Total Project cost is $176,425		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Ensure effective emergency communications	**Estimated Benefits (losses avoided):**	Protects residents during emergencies.
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	$176,425	**Mitigation Action Type:**	Education and Awareness
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 1 year
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	City Emergency Management	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Purchase cell phones for all emergency staff	High	Not as effective as purchase of new P25 units
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Emergency Management equipment	
Project Number:	2022-City Tonawanda-015	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will enable improved emergency response
Property Protection	1	Project will protect resident's property via improved emergency response
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	The city has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	1	Within 1 year
Agency Champion	1	City Emergency Management
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 81-Section-9.42-Tonawanda-C-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.43 Town of Tonawanda

This section presents the jurisdictional annex for the Town of Tonawanda. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Tonawanda's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.43.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Tonawanda's hazard mitigation plan primary and alternate points of contact. The Town of Tonawanda followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including the Emergency Services and Police Department. The Emergency Services Director and the Chief of Police represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.43-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Robert Lutz, Emergency Services Address: 1835 Sheridan Drive, Buffalo, NY 14223 Phone Number: 716-440-9293 Email: rlutz@tonawanda.ny.us	Name/Title: James Stauffiger, Chief of Police Address: 1835 Sheridan Drive, Buffalo, NY 14223 Phone Number: 716-879-6607 Email: jstauffiger@tonawanda.ny.us
NFIP Floodplain Administrator	
Name/Title: Matt Sutton, Town Engineer Address: 2919 Delaware Avenue, Kenmore, NY 14217 Phone Number: 716-877-8805 Email: msutton@tonawanda.ny.us	

9.43.2 Municipal Profile

The Town of Tonawanda is 30 square miles in size. The town incorporated in 1836, having been formed from the original Town of Buffalo. The town is bounded on the west by the Town of Grand Island, on the south by the Village of Kenmore and the City of Buffalo and on the east by the Town of Amherst. The City of Tonawanda parted from the Town of Tonawanda in 1903 and that municipality is entirely contained within the town.

The area's original inhabitants, the Iroquois Indians, named this area after the Tonawanda Creek (Town of Tonawanda 2005). Tonawanda became an important crossroads in America's westward expansion. French missionaries and explorers visited in the 1600s. The British secured the territory from the French in 1759 and yielded it to the United States in 1796. During the War of 1812, British soldiers burned the Village of

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Tonawanda. The completion of the Erie Canal in the 1820s brought a new wave of workers and settlers and trade and traffic developed swiftly. The town prospered as an agricultural and trading center.

The town has a close relationship with the Village of Kenmore; collectively the two are known as "Ken-Ton". The town was established in 1836. In 1899, Kenmore incorporated as a village, and remained the town's primary residential and commercial district while the rest of the town was developed into suburban housing during the 1940s and 1950s (Town of Tonawanda 2020).

According to the U.S. Census, the 2010 population for the Town of Tonawanda was 58,144. The estimated 2019 population was 57,027, a 1.9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 20.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.43.3 Jurisdictional Capability Assessment and Integration

The Town of Tonawanda performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.43.3). The Town of Tonawanda's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Tonawanda. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.43-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 54, Building Code Administration	Local, State	Building Department
Comment: This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code). The Code requires that that all roofs, paved					

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
areas, yards, courts, and courtyards shall be drained into a storm sewer system. The building storm sewer shall be so constructed that no stormwater shall run over sidewalks and driveways, into streets or onto other properties.					
Zoning Code	Yes	No	Chapter 215, Zoning	Local	Building Department/Planning
Comment: The regulations of the Zoning Local Law of the Town of Tonawanda, County of Erie, State of New York are made in accordance with a comprehensive plan and are designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and general welfare; to provide adequate light and air; to prevent overcrowding of land; to avoid undue concentration of population; to make provision for, so far as conditions may permit, the accommodations of solar energy systems and equipment and access to sunlight necessary therefor; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. The Zoning Code requires the following in relation to hazard mitigation: • development must be sensitive to the physical and environmental limitations, such as limited space, floodplains, and wetlands, characterizing much of the land within the Waterfront Mixed Use District. • Where plans for improvements to the public space include adding or replacing sidewalk, the area between curb and sidewalk shall be landscaped to provide a minimum five-foot snow storage area. • Two Mile Creek and Rattlesnake Creek Buffers. Along the creeks or their tributaries shall be maintained in its natural state or as landscaped open space. The setback distance shall be measured from the average adjacent high-water line of the water body.					
Subdivision Ordinance	Yes	No	Chapter 185, Subdivision	Local	Planning/Tech Support
Comment: The purpose of this chapter is to provide for orderly, efficient growth within the community and to afford adequate facilities for the transportation, housing, comfort, convenience, safety, health, and welfare of its population. The subdivision ordinance requires that existing and proposed buildings, environmental features such as steep slopes, watercourses, waterbodies, wetlands, and wooded areas be protected from natural hazard exposure. Features to be retained or those to be removed should be so indicated. A preliminary plat for a major subdivision shall include grading, erosion control and landscaping plans.					
Stormwater Management Ordinance	Yes	Yes	Chapter 73, Stormwater Management	Local	Town Engineer
Comment: It is the intention of the Town Board of Tonawanda to protect the health and welfare of those residing in the Town of Tonawanda by preventing the dangers arising from improper drainage, unwise diversion, use and obstruction of streams and watercourses and to plan for the present and future use of natural drainage systems and watercourses. The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. This chapter seeks to meet those purposes by achieving the following objectives: A. Meet the requirements of minimum measures 4 and 5 of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised; B. Require construction activities to conform to the substantive requirements of the NYS Department of Environmental Conservation SPDES General Permit for Construction Activities, Permit No. GP-02-01, or as amended or revised; C. Minimize increases in stormwater runoff from construction activities to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; D. Minimize increases in pollution caused by stormwater runoff from construction activities which would otherwise degrade local water quality; E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Chapter 185, Property Condition Disclosure Act	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 215-153, Zoning, Article XXIII	Local	Planning and Development
Comment: Site Plan review is part of the town’s development review and incorporates exposure to hazards. The purpose of this article is to define procedures for the Town Planning Board with assistance from the town's Development Services Staff for review of development					

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
proposed throughout the town to ensure that design elements follow the protection of the health, safety and overall welfare of the community. The intent of site plan review is to evaluate site plans and require changes consistent with minimizing conflicts which may result between the site layout and design of proposed uses and natural site conditions and features and/or existing or planned adjacent uses. Site plan review is also responsible for ensuring that development comply with clearly calculated planning goals and policies such as are provided in the town's Comprehensive Plan and other area-specific planning documents.					
Environmental Protection Ordinance	Yes	Yes	Chapter 76, Environmental Quality Review	Local/State	Planning and Development
Comment: The Environmental Quality Review incorporates consideration of hazard exposure.					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 92, Flood Damage Prevention	Local	FPA
Comment: It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (1) Regulate uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; (4) Control filling, grading, dredging and other development which may increase erosion or flood damages; (5) Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and (6) Qualify for and maintain participation in the National Flood Insurance Program. The Chapter requires an elevation of BFE+2 feet for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 165 Sewers, Part 3 Nonstormwater Discharges to MS4, MS4 General Permit GP-0-15-003 – 5/1/2015	Local/State	Engineering
Comment: MS4 regulations mandate that 1) It shall be unlawful for any person to place, deposit or cause to be deposited in any unsanitary manner on public or private property within the Town of Tonawanda, wherein a sanitary sewer district or drainage district has been created, any human excrement, garbage, or other objectionable waste. 2) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain, which in turn is connected directly or indirectly to a public sanitary sewer.					
Emergency Management Ordinance	No	Yes	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	No	No	Town of Tonawanda. December 2005. Town of Tonawanda Comprehensive Plan.	Local	Planning Board, Town Board

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The primary purpose of the Comprehensive Plan is to guide redevelopment in the eastern portion of the town and guide the development of significant vacant parcels in the western portion of the town to help the town ensure it remains a great place to live, work and play.					
Capital Improvement Plan	Yes	No	Capital Improvement Plan, 2020	Local	Town Board/Comptroller
Comment: The Capital Improvement Plan can contain needed mitigation projects.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	Yes	Yes	Town of Tonawanda Stormwater Management Plan	Local	Town Engineering
Comment: The Town of Tonawanda is classified by the U.S. Environmental Protection Agency (EPA) Phase II rule as an operator of a small municipal separate storm sewer systems (MS4s) based on our population and urban character. Subsequently, we are required to develop and implement a stormwater management program. Here in Western New York, similar communities have formed a WNY Stormwater Coalition which is coordinated by the Erie County Department of Environment and Planning, Environmental Compliance division.					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	Yes	No	Tonawanda Tomorrow Comprehensive Plan (2015)	Local	Planning and Development
Comment: Comprehensive Plans provide guidance on economic development strategy.					
Shoreline Management Plan	Yes	No	Local Waterfront Revitalization Plan (2008)	Local/State	Town Board, Planning Board, Building Department
Comment: The LWRP is integrated into the town's development review process and considers exposure to natural hazards. The LWRP aims to reduce flooding and erosion. The program extends the designated coastal boundary 1,000 feet inland from River Road to provide greater protection of waterfront resources. Buildings and other structures will be sited in the coastal area to minimize damage to property and the endangering of human lives caused by flooding and erosion. Buildings and other structures within special flood hazard areas, including areas identified as special flood hazards on the flood insurance study maps will be sited to minimize damage to property and human life. In the Tonawanda waterfront, any new development or substantial improvements shall be sited outside the flood hazard area or shall be raised above the base floodplain level. Any permitted uses built within the area designated as the 100-year floodplain shall be flood proof including according to guidelines on Anchoring, construction materials and methods, subdivision proposals, and specific standards.					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	Yes	No	Comprehensive Land Use Plan (2015) & Complete Streets Policy (2016)	Local	Planning and Development Technical Support

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: Transportation planning is part of the town's comprehensive planning					
Climate Change /Resilience/ Sustainability Plan	No	Yes	Comprehensive Land Use Plan (2015	Local	Town Board
Comment: The Town's Comprehensive Plan acknowledges the impact of climate change upon land use, development, and public safety within the Town.					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other:	-	-		-	
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of Tonawanda. December 2021. Town of Tonawanda Comprehensive Emergency Management Plan.	Local, County	Town Emergency Manager
Comment: The CEMP establishes the following objectives: 1) Strategic investments in sewer infrastructure to address environmental concerns. 2) Ensure adequate protections against natural disasters through appropriate flood protection regulations and other disaster planning efforts.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	Pandemic Operation Plan, 2021	Local	TTPD - Emergency Services
Comment: The town recently developed a Pandemic Operations Plan, completed April 2021.					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Tonawanda to oversee and track development.

Table 9.43-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning and Development site plan review and Building Department issuance of building permits

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Separate Floodplain Development Permits are issued by the Town Engineer
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes	The Office of Planning and Development maintains an inventory of vacant lands available for development. The town also has a Brownfield Opportunity Area Plan that showcases these properties: Tonawandaopportunity.com The lands East of Military Road are mainly built out (95%).

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Tonawanda and their current responsibilities which contribute to hazard mitigation.

Table 9.43-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	The mission of the Department of Planning and Development is to help improve the quality of our neighborhoods through best practices in urban planning and the effective administration of U.S. Housing and Urban Development (HUD) programs. This includes the Residential Rehabilitation Program and our First Time Homebuyer Program for income-qualified households as well as our Micro-Enterprise Loan Program for small businesses. The Office of Planning and Development administers several local initiatives that provide decent housing, sound infrastructure investment, economic opportunities, and many public services that improve the quality of town neighborhoods. The Department is in the process of implementing several long-term planning objectives outlined in the town's Comprehensive Plan including a comprehensive zoning law update, neighborhood revitalization plans, cleanup efforts along River Road, and several public infrastructure investments.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Commission preserves and improves the quality of the natural and man-made environment within the Town of Tonawanda, in the face of population growth, urbanization and technological change with their accompanying demands on natural resources, are found to be of increasing and vital importance to the health, welfare and economic well-being of present and future inhabitants and to require forthright action by the governing body of the Town of Tonawanda.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	The Department of Planning and Development forwards economic development efforts for the town.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	Highway Department staff ensure safe passage over town roads and regularly maintain a variety of facilities. The Forestry Department is responsible for: • Planting and maintaining 31,000 trees in the public rights of way • Pruning and removing dead trees and trees that are endangering public health or property • Identifying the sites where there are few trees and planting new trees, so our town continues to enjoy the benefits of an urban forestry The Forestry Department also includes information about Emerald Ash Borer on their webpage. The Highway Department is responsible for ensuring the safety and maintaining the condition of all town streets and rights of way. Services provided include: • Facility maintenance • Issuing permits for work to be performed in the town highway rights of way • Curb cut permits • Street cut permits • Storm receiver cleaning • Road maintenance and repair • Snow plowing and salting of streets • Street sign maintenance and repair • Street sweeping • Tree planting • Tree removal / tree trimming
Construction/Building/Code Enforcement Department	Yes	Tom Duncan, Building Department. The Building Department is responsible for the following activities: • Reviewing plans for new residential construction and issuance of permits for new houses and additions, garages, swimming pools and storage sheds and restrictions on fence installations • Reviewing site proposals for development of vacant property and redevelopment of existing land uses and coordinating the review process with all town departments, Erie County and other interested parties • Reviewing building plans for new commercial buildings and renovations to existing structures • Reviewing plans and issuance of permits for electrical work, plumbing and sump pumps • Issuing permits for temporary shelters and temporary structures, signs, communication towers and antennae, above ground and underground tank installations and removals, operating permits, Christmas tree sales and outdoor dining permits • Issuing contractor's licenses and licenses for Master Plumbers and Master Electricians • Issuing zoning compliance decisions and the submittal of Zoning Board of Appeals applications. • Coordinating reviews for rezone applications, special use permits, street cut permits and backflow prevention device applications • Performing fire safety inspections

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Emergency Management/Public Safety Department	Yes	The Town of Tonawanda Police Department's Emergency Services Bureau mission is to assure the safety and health of all its employees and residents before, during and after natural or man-made large-scale emergencies. This is done through continuous evaluation of emergency plans, training and education, outreach and establishing public and private partnerships with both the business sector as well as community organizations. The main responsibility of this bureau is to conduct a hazard analysis of the town to develop a plan identifying resources to address any hazard or emergency which might occur. The Bureau works very closely with the Department of Homeland Security, the New York State Department of Homeland Security and Emergency Services, the Erie County Department of Emergency Services, and the United States Coast Guard.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	TTPD – James Stauffiger, Chief Police Integrated Public Alert and Warning System - FEMA The town uses a special needs registry form, an online form for business and commercial property emergency notification form, and the Ready Erie preparedness mobile app.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Highway/Technical Support. Town Highway Department staff trim tree branches and keep floodways clear.
Mutual aid agreements	Yes	Fire, Police, Snow, School, Highway – mutual aid agreements increase capacity
Other	Yes	The Water and Sewer Maintenance Division operates and maintains the town's water distribution, sanitary sewer and storm sewer systems from its facility located at 525 Belmont Avenue. The water distribution system consists of roughly 375 miles of water mains, 2,200 hydrants and 5,000 valves, providing water to over 65,000 persons with over 23,000 accounts. The water system provides bulk water to the Village of Kenmore. The town's sewer systems consist of 300 miles of sanitary sewer and 270 miles of storm sewer. Water and Sewer Maintenance manages rehabilitation programs and coordinates with federal and state regulatory agencies and consulting engineering firms working on sewer system projects. This division also coordinates cleaning, maintenance and replacements for sewer system elements using sewer construction, maintenance, and rehabilitation techniques. The Information Technology (IT) Department is responsible for the delivery and management of information technology resources supporting town departments and the community. The IT Department actively works to streamline processes as well as promote compliance with Federal and State cybersecurity standards. Key responsibilities relating to hazard mitigation include: • Data center and server management • Cybersecurity and disaster recovery • Contract and project management • Strategic planning

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		The Town of Tonawanda Department of Youth, Parks and Recreation is responsible for maintenance of Park facilities, buildings, and grounds.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning and Development, Technical Support, Town Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Three engineers on staff: Matt Sutton, Randy Pekarski
Planners or engineers with an understanding of natural hazards	Yes	Planning and Development and Technical Support staff at Town Hall
Staff with expertise or training in benefit/cost analysis	Yes	Planning and Development
Professionals trained in conducting damage assessments	Yes	FPA
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	GIS Consultant, Planning and Development, Technical Support
Scientist familiar with natural hazards	No	Rely on local universities or NYS
NFIP Floodplain Administrator (FPA)	Yes	FPA
Surveyor(s)	No	-
Emergency Manager	Yes	TTPD – Emergency Services Bureau Robert Lutz
Grant writer(s)	Yes	Contracted – O'Connell Assoc, Community Planning and Development office
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Stormwater reporting, Tech Support – Engineer Assistant

Fiscal Capability

The table below summarizes financial resources available to the Town of Tonawanda.

Table 9.43-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Tonawanda.

Table 9.43-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Public Information Office, Town Police Department, Supervisors Office, Town Clerk – Freedom of Information Law Officer
Personnel skilled or trained in website development	Yes	Tech Support Office – Chuck Schultz
Hazard mitigation information available on your website	Yes	Community Emergency Response Team volunteer force of residents prepared to assist with emergency response efforts.
Social media for hazard mitigation education and outreach	Yes	The Town Police Department uses Facebook and Twitter to broadcast natural hazard related information.
Citizen boards or commissions that address issues related to hazard mitigation	No	The town provides free training for the Community Emergency Response Team.
Other programs already in place that could be used to communicate hazard-related information	Yes	Emergency Services Bureau / PSD: "I Am Responding" communications platform which generates mass text and email notification to Industry and safety managers
Warning systems for hazard events	Yes	Town Police Department – James Stauffiger, Chief; Emergency Services Bureau / PSD: IPAWS – FEMA the town uses a special needs registry form, an online form for business and commercial property emergency notification form, and the Ready Erie preparedness mobile app.
Natural disaster/safety programs in place for schools	No	-
Other	Yes	Fire Prevention Programs

Community Classifications

The table below summarizes classifications for community programs available to the Town of Tonawanda.

Table 9.43-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Average for all five Fire Districts is "4"	2017
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.43-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Moderate
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong* *Capacity exists and is in use*
Moderate *Capacity may exist; but is not used or could use some improvement*
Weak *Capacity does not exist or could use substantial improvement*

9.43.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Matt Sutton, Town Engineer, is the designated Floodplain Administrator.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Tonawanda.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.43-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Tonawanda	32	56	$8,514,400	8	6

Source:
Notes: FEMA 2020a and FEMA 2020b
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

Areas in the Town of Tonawanda that are prone to flooding include along the town's northern boundary in low lying areas near Tonawanda Creek and Ellicott Creek are in the 1 percent annual flood boundary, zone AE and along the town's west boundary along the Niagara River in the 1 percent annual flood boundary, zone A and AE. These areas are sometimes subject to wave action. The town does not maintain a list of homeowners interested in flood mitigation. As a mitigation measure, the town maintains a list of all Letters of Map Change (LOMA/LOMR-F). There are no known RiskMAP projects currently underway in the town. The town did not identify how many (if any) properties have been mitigated. The town's flood hazard maps were updated in 2019 and adequately address the flood risk within the jurisdiction.

NFIP Compliance

The Town of Tonawanda does not have any outstanding NFIP compliance violations that need to be addressed. The most recent Community Assistance Visit (CAV) was in September 2017. The Engineering Department and the FPA are responsible for floodplain administration. One staff member in the Building Department is a Certified Floodplain Manager. The town does not have access to resources to determine possible future flooding conditions from climate change. The town did not identify if the floodplain management staff needs any assistance or training to support its floodplain management program. Training has typically been provided by the NYS Floodplain and Stormwater Manager's Association. The town has not made any Substantial Damage determinations can use permit data to make such determinations. The town's floodplain management program meets minimum requirements. NFIP Administration services provided by the town include permit review, development review, GIS and inspection and the town aims to put more effort into hazards informational outreach. The town does not participate in the Community Rating System and feels it does not have the available resources to do so. There is a current NFIP violation at one location where work has been stopped.

9.43.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of Tonawanda has identified the following routes and procedures to evacuate residents prior to and during an event. Note that these routes are owned/maintained by the NYSDOT, Erie County and the town respectively.

- The Grand Island Bridge is a west bound avenue of egress that can potentially be impacted by hazardous materials spills,
- Major eastbound evacuation routes include I-290, Sheridan Drive, Brighton Road, and Kenmore Avenue.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Major N/S routes are River Road, Military Road, Delaware Avenue and Colvin Boulevard

With the complex nature and unpredictability of weather and location for potential hazardous material release evacuation routes would be decided at the time of incident. This information would be broadcast to the public by local officials thru mass media: Radio and TV, social media, twitter, and if needed IPAWS.

Sheltering

The town states that primary contact for shelter operations would be the Erie County Department of Homeland Security and Emergency Services as well as the American Red Cross. The Town of Tonawanda has identified the following emergency shelters within the town boundary:

Table 9.43-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Hoover School	249 Thorncliff	300	Unknown	Yes	Yes	Unknown	Unknown
Multiple Schools	Ken-Ton School District	5000	Unknown	Yes	Yes	Unknown	Unknown

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Tonawanda has identified the following sites suitable for placing temporary housing units.

Table 9.43-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town of Tonawanda Aquatic Center	1 Pool Plaza	100	Parking lot and one building	Parking lot does not have utilities but inside the building has utilities.	None
Town Tonawanda Senior Center	291 Ensminger	25	Parking lot and building	Parking lot does not have utilities but inside the building has utilities.	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Tonawanda did not identify any locations for relocating homes away from the floodplain.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.43-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work the county to identify permanent housing locations, per Proposed Action #2022-Town Tonawanda-010					

9.43.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.43-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.43-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	1	0	2	0	4	0	3	0	3	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	10	0	11	0	13	0	1	0	12	0	7	0
Total Permits Issued	**11**	**0**	**13**	**0**	**17**	**0**	**4**	**0**	**15**	**0**	**9**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Unifrax	Manufacturing	2	55 Pirson Parkway	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Project is expanding again
Pine Pharmaceuticals	Manufacturing	1	355 Riverwalk Parkway	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer	Project is expanding again

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
				from HazMat Roadways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines		
Amazon Delivery	Warehouse and distribution	1	800 Riverwalk Parkway	½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area, ½ Mile Buffer from HazMat Pipelines, Expansive Soils	Complete	
Solar Farms	Energy production	Several	Various	Unknown	Complete and more projects are pending	
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
Pine Pharmaceuticals	Manufacturing	1	355 Riverwalk Parkway	Unknown	Unknown	

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

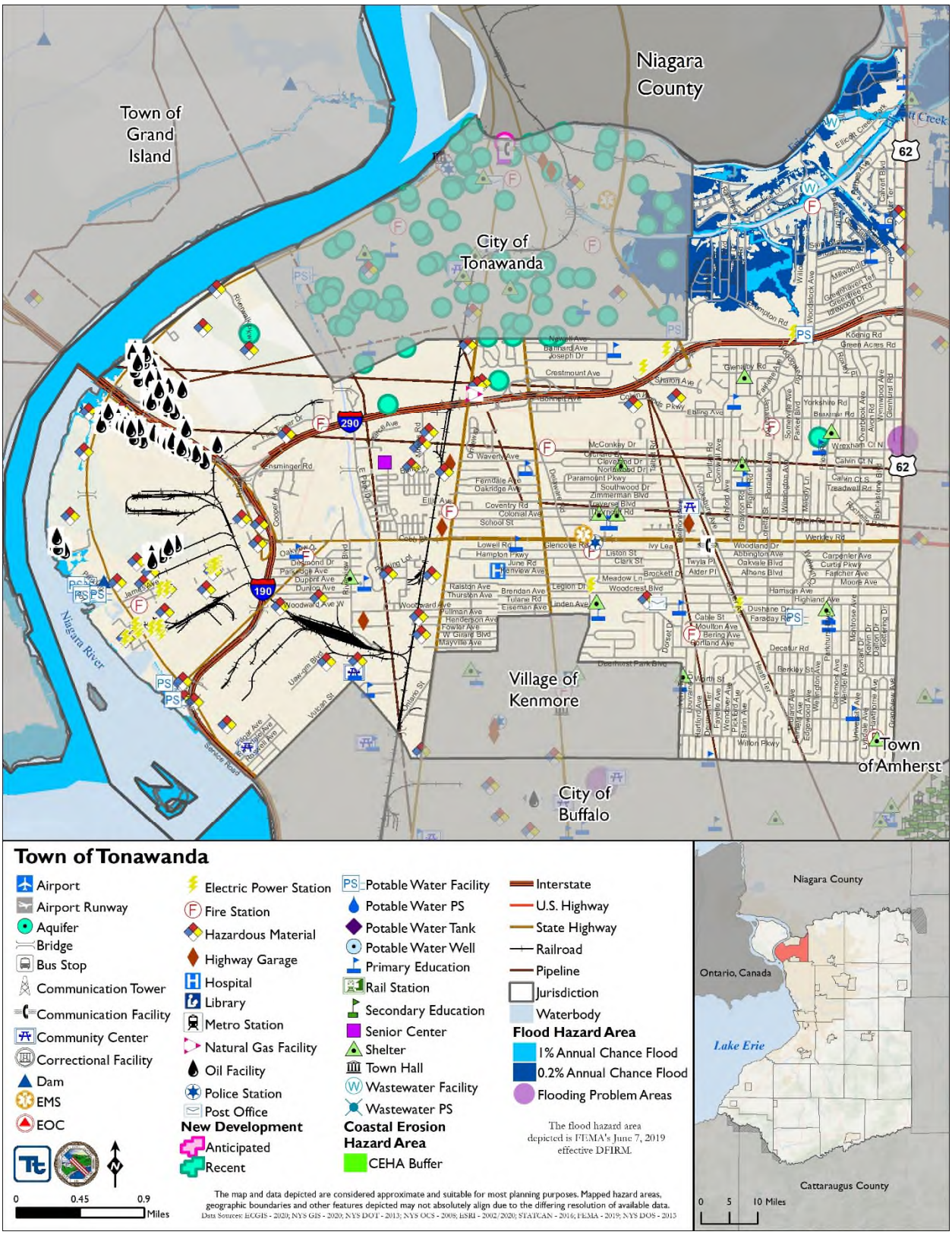
9.43.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of Tonawanda's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Tonawanda has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

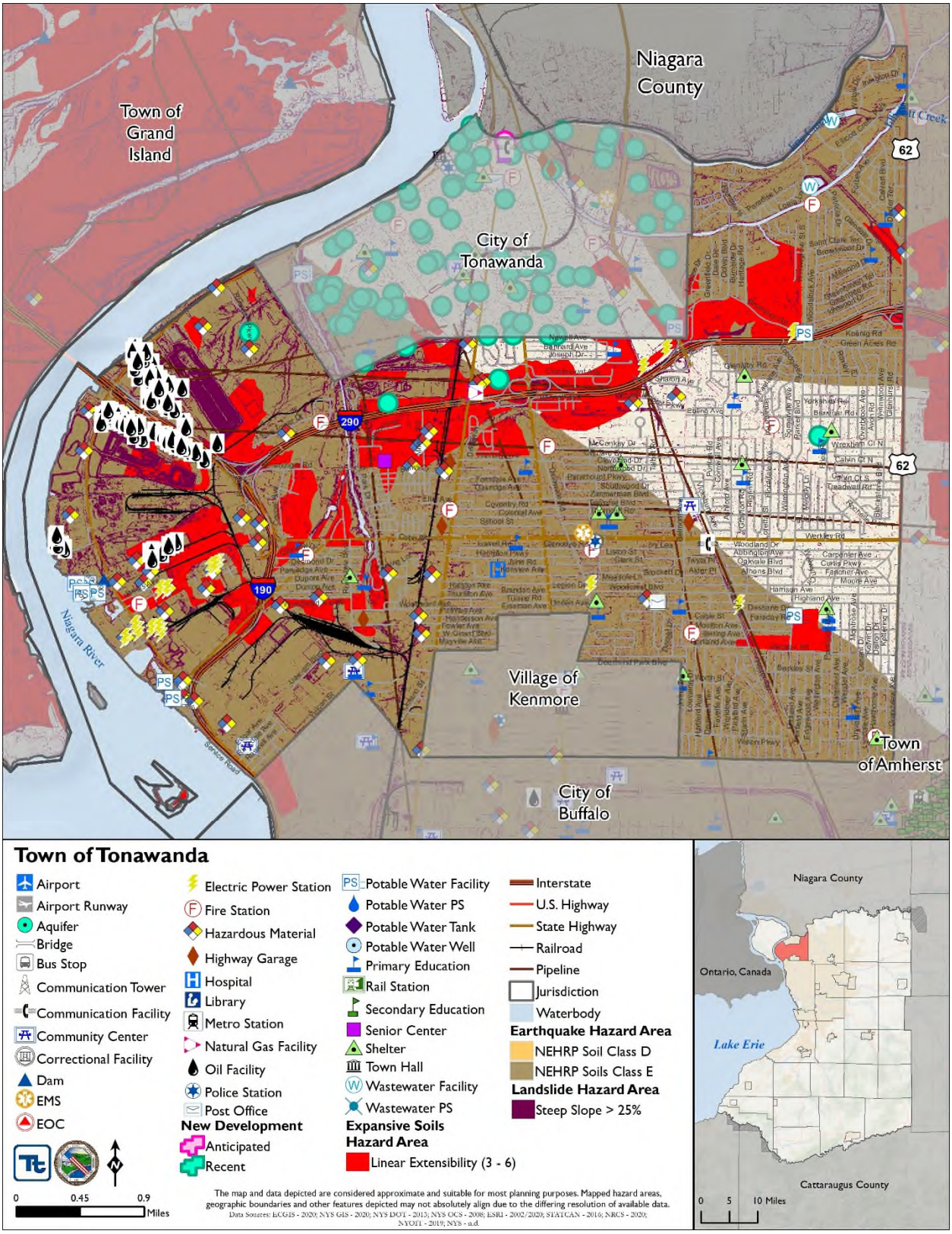
Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.43-1. Town of Tonawanda Hazard Area Extent and Location Map 1



Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.43-2. Town of Tonawanda Hazard Area Extent and Location Map 2



Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.43-3. Town of Tonawanda Hazard Area Extent and Location Map 3

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of Tonawanda's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.43-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.43-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
August 11-15, 2015	Flash Flood	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 28-29, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 6, 2015	Thunderstorm Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 12, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 18, 2015	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 11, 2017	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 8, 2017	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 13, 2017	Winter Storm	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
July 20, 2017	Tornado	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
August 4, 2017	Thunderstorm Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
December 10-15, 2017	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
December 24-29, 2017	Lake-effect Snow	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 2, 2018	Blizzard	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 6, 2018	Lightning	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
February 24, 2019	High Wind	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
February 24, 2019	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
November 27, 2019	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 12, 2020	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
January 18, 2020	Lakeshore Flooding	No	While this hazard event impacted municipalities within the county, the Town of Tonawanda did not report damage.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of Tonawanda's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

rankings of potential natural hazards for the Town of Tonawanda. The Town of Tonawanda has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following change due to relative rates of occurrence:

- Change the Hazardous Materials risk from Low to High.

Table 9.43-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	High	Low	Medium	Low	High

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	High	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.43-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
United Refining Company	Oil Facility	X	X	2022-Town Tonawanda-012

Identified Issues

After review of the Town of Tonawanda's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Tonawanda has identified the following vulnerabilities within their community:

- There is a lack of backup power for the Town of Tonawanda Municipal building.
- There are several industrial areas with single point of entry/egress that may experience evacuation issues during a hazard event. This includes the most recently developing areas in the category are the Riverwalk Parkway/Solar Park which now is home to an Amazon distribution hub and Pirson Parkway.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- Emergency operators/responders in the town do not all use the same communications platforms.
- The Public Safety building at 1835 Sheridan Drive has an old and unreliable backup generator which has failed in the past. The building houses the Police Department, EMS, Public Safety dispatch and primary computer servers for the town.
- The Town Highway facility provides a range of critical operations and lacks backup power.
- The Park Fire Station at 2 Military Road and the Sheridan Park Fire Station lack a backup generator and is thus vulnerable to interruption of services caused by utility failure.
- The town's pumping station lacks backup power and is vulnerable to utility failure.
- The town's Water Resources facilities contain vulnerable outdoor storage of chlorine. A leak could impact local homes and businesses. This issue needs to be addressed at both the water and the wastewater treatment plants.
- Existing storm sewers need to be rebuilt.
- Floodplain managers require training to carry out their functions most effectively.
- The town does not participate in the Community Rating System.
- The United Refining Company is in the 0.2 percent annual chance flood.
- Residential properties have flooded repeatedly.
- The town was unable to identify permanent housing locations.

9.43.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.43-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	All Hazards	Not Identified	Technical Support/ Town Board Action	In Progress.	Cost		1. Include in 2022 HMP 2. Partial progress: Tech Support has proposed via 2021 Capital Improvement Program to implement a generator backup for the data center located within the Municipal Building 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Adopt the new FIRM's and replace our local law with DEC's model floodplain management law. They will also assist us with preparing policies and procedures to administer the program. Have personnel attend Flood Plain Managers training.	Flooding	Not Identified	Technical Support/Town Board Action	Complete	Cost		1. Discontinue 2. 3. Completed
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Work with local homeowners of repetitively flooded properties to determine interest in inclusion in a grant application to FEMA for mitigation project funding (floodproof/elevate/acquire) and apply to FEMA on homeowner behalf.	Flooding	Not Identified	Technical Support/Town Board	In Progress	Cost		1. Include in 2022 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
	Cleaning of existing storm sewer. The Town of Tonawanda Water Department will flush existing storm sewer	Flooding	Not Identified	Water Resources	In Progress	Cost		1. Include in 2022 HMP 2. Purchasing new equipment to better facilitate cleaning of storm sewers and sanitary lines on a five-year cycle.
						Level of Protection		

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	systems of silt and debris to correct flooding problems. Currently this is done over a five-year period.					Damages Avoided; Evidence of Success		3.
	Rebuild existing storm catch basins. The Town of Tonawanda Highway Department will rebuild existing storm catch basins to alleviate restriction caused by broken concrete in catch basin. This is done on an as needed basis.	Flooding	Not Identified	Highway Dept.	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Update/revise floodplain management ordinances to comply with latest FEMA regulations.	Flooding	Not Identified	Technical Support	Complete	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Completed
	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2022 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Require staff involved in floodplain management and ordinance enforcement to	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	become Certified Floodplain Managers (CFMs).					Damages Avoided; Evidence of Success		3.
	Join the Community Rating System (CRS).	Flooding	Not Identified	Technical Support	In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
	Install creek gauging stations. Conduct annual flood channel inspections/clearing.	Flood	Not Identified	Technical Support	In Progress	Cost		1. Do not Include
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Tonawanda has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Town Police Department has identified the need for emergency equipment and quotes for equipment costs have been procured. The town aims to acquire the following; upgraded police/EMS radio systems to be P25 compliant; includes dispatch radio, mobile radios, and portables.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Tonawanda participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.43-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	X	X	X	X	-	-	X
Cyber Attack	X	X	-	X	X	X	X	-	-	X
Earthquake	X	X	-	X	X	X	X	-	-	X
Expansive Soils	X	X	-	X	X	X	X	-	-	X
Extreme Temperature	X	X	-	X	X	X	X	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	X	X	-	X	X	X	X	-	-	X
Landslide	X	X	-	X	X	X	X	-	-	X
Pandemic	X	X	-	X	X	X	X	-	-	X
Severe Storm	X	X	-	X	X	X	X	-	-	X
Severe Winter Storm	X	X	-	X	X	X	X	-	-	X
Utility Failure	X	X	-	X	X	X	X	-	-	X
Wildfire	X	X	-	X	X	X	X	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.43-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Tonawanda would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.43-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Tonawanda-001	Improve emergency communications so that systems are interoperable	2	All Hazards	**Problem**: Emergency operators/responders in the town do not all use the same communications platforms. **Solution**: Upgrade to emergency communications for police/EMS radio system to be P25 compliant. This is to include dispatch radio, mobile radio, and portables.	No	No	Within 2 years	Town Police Department	TBD by feasibility analysis	Improved emergency response	EMPG	High	SIP	ES
2022-Town Tonawanda-002	Replace backup power generator at the Public Safety building	1	All Hazards, Utility Failure	**Problem**: The Public Safety building at 1835 Sheridan Drive has an old and unreliable backup generator which has failed in the past. The building houses the Police Department, EMS, Public Safety dispatch and primary computer servers for the town. **Solution**: Town staff will conduct an engineering analysis to determine the appropriate size backup generator to purchase. The Fire Department will ensure that the generator is installed and maintained.	Yes	No	Within 2 years	Town Engineer and Emergency Services/Police Department	TBD by feasibility analysis	Continuity of emergency services during hazard events	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, town budget	High	SIP	ES

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town Tonawanda-003	Establish evacuation routes from specified locations	1	All Hazards	**Problem:** There are several industrial areas with single point of entry/egress that may experience evacuation issues during a hazard event. This includes the most recently developing areas in the category are the Riverwalk Parkway/Solar Park which now is home to an Amazon distribution hub and Pirson Parkway. **Solution:** The town will work with property owners to establish safe evacuation routes.	No	No	Within 3 years	FPA, Emergency Management, Fire Department	Staff time	Secure safe passage out of specified facilities by providing clear evacuation routing	Municipal budget	High	LPR	ES
2022-Town Tonawanda-004	Protect the Sheridan Park Fire District #4 – Station #2 facility from power failure	1, 2	All Hazards, Utility Failure	**Problem**: The Sheridan Park Fire Station facilities lacks a backup generator and is thus vulnerable to interruption of services caused by utility failure. Many emergency services are provided through the facility. **Solution**: The town will encourage the Fire District to conduct an engineering analysis to determine the most appropriate generator to install. The Fire	Yes	No	Within 1 year	Sheridan Park Fire District #4	Staff time	Continuity of services during emergencies	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	EAP	PI

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Department will oversee installation and maintenance of the generator.										
2022-Town Tonawanda-005	Protect the town's pump stations and elevated water towers from utility failure	1	All Hazards, Utility Failure	**Problem**: The town's pumping stations, and elevated water towers lack backup power and are vulnerable to utility failure. **Solution**: The town will conduct an engineering analysis to determine the most appropriate generators to install. The Town Water Resources Department will oversee installation of the generators and maintenance thereafter.	Yes	No	Within 3 years	Town Tonawanda Water Resources Department	TBD by engineering analysis	Continuity of services during emergencies	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-Town Tonawanda-006	Secure chlorine storage at Town Water Resources facilities	1	HazMat	**Problem:** The town's Water Resources facilities contain vulnerable outdoor storage of chlorine. A leak could impact local homes and businesses. This issue needs to be addressed at both the water and the wastewater treatment plants. **Solution:** The town will conduct an analysis to determine the best ways to mitigate the chlorine	Yes	No	Within 3 years	Town Tonawanda Water Resources	TBD during engineering analysis	Protect community from potential impact of leaks from the chlorine tanks.	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				HazMat threat at the two facilities. The Highway Department will implement this solution.										
2022-Town Tonawanda-007	Clean existing storm sewers to protect portions of the town from flood hazard	1, 2	Flood	**Problem:** Storm sewers backup up due to clogs during rain events which can cause flooding. **Solution:** Purchase new equipment to clean storm sewers and sanitary lines on a regular cycle. Some pipes are also undersized. Alternately, purchase new equipment to repair/replace stormwater systems.	No	No	Within 2 years	Town Tonawanda Water Resources	TBD per engineering analysis	Reduce flood risk	Municipal budget	High	SIP	SP
2022-Town Tonawanda-008	Floodplain Administrator to attend training on floodplain management. Require these staff to become Certified Floodplain Managers. Also require staff to examine the Flood Damage Prevention Ordinance to ensure that it meets requirements.	3	Flood	**Problem:** Floodplain Managers require training and certification to fully implement the NFIP program within the town. The staff should also ensure that the Flood Damage Prevention Ordinance meets required standards. **Solution:** Obtain/host training and certification for floodplain managers in part so they can determine the status of	No	No	Within 2 years	ECDHSES, FPA	$3,000	Certified floodplain managers are trained to implement an effective floodplain management program	County and town budgets	High	LPR	PR

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the Flood Damage Prevention Ordinance.										
2022-Town Tonawanda-009	Consider joining the Community Rating System	3	Flood	**Problem:** The town does not participate in the important CRS program. **Solution:** The town will carefully consider the value of joining the CRS. If joining the program is determined to be worthwhile, the town will apply to join the program.	No	No	Within 2 years	Town Emergency Manager, FPA	Staff time	Reduce flood insurance rates	Town budget	High	LPR	PR
2022-Town Tonawanda-010	Identify locations and capacity for permanent housing and shelters	1	All Hazards	**Problem:** The town is not able to identify locations for permanent housing to be used after a natural disaster. **Solution:** The town will work with the county to identify locations and permanent housing for use after a natural disaster.	No	No	Within 2 years	FPA, Town Highway Department	Staff time	Ensure that residents have a potential option for permanent housing	Municipal budget	High	LPR	ES
2021-Town Tonawanda-011	Protect United Refining Company facility to the 0.2% annual chance flood	1, 2	Flood	**Problem:** The United Refining Company is in the Special Flood Hazard Area. **Solution:** The town will contact the facility	Yes	Yes	Within 5 years	Town Board, Town Engineer	TBD by engineering feasibility analysis	Ensure continued services at this critical facility	FEMA HMGP, BRIC, USDA Community Facilities	High	EAP	PI

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				managers of the privately owned dam and discuss options for protecting the dam to the 0.2% annual chance flood event.							Grant Program, EMPG			
2022-Town Tonawanda-012	Acquire emergency popup shelters	1, 2	All Hazards, HazMat	**Problem:** Need for sheltering locations in case of hazmat or terrorist event. **Solution:** Town Emergency Management will acquire and deploy emergency popup shelters. These will supplement fixed site shelters and can potentially be available for use very quickly after a disaster.	No	No	Within 3 years,	Town Emergency Management	TBD by engineering feasibility	Immediate set up of popup mobile shelters after hazard event	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	ES
2022-Town Tonawanda-013	Expand Fire Training Facility	1	Wildfire, All Hazards	**Problem:** The current fire training facility has a small, structurally deteriorating block building that was modified as a maze training building. **Solution:** Demolish current structure and replace with a larger multi-functional facility	No	No	Within 3 years	Town Emergency Management	TBD by engineering feasibility	Increase fire training options and response effectiveness	EMPG, BRIC, Assistance to Firefighters Grant Program	High	SIP	PP
2022-Town Tonawanda-014	Residential Property Flood Mitigation	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties.	No	No	Within 3 years	Town Board, FPA	TBD per cost and number of properties to	Remove residents and homes from the flood	BRIC, HMGP, FMA, cost-share with	High	SIP	PP

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2784

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA.					be purchased.	threatened homes	homeowners			
2022-Town Tonawanda-015	Protect Senior Center and 169 Sheridan Parkside from power failure	1	All Hazards	**Problem:** The town's Senior Center is located at 291 Ensminger Road. Meals on Wheels deliveries are dispatched from the town building at 169 Sheridan Parkway. Both are subject to frequent power outages. Increasing summertime temperatures make this more important. The town has an aging	Yes	No	Within 1 year	Parks and Recreation Department	$150,000	Protect Senior residents from impacts of power failure and loss of air conditioning	FEMA, BRIC, HMPG, USDA Community Facilities Grant Program , EMPG, and municipal budget	High	SIP	ES

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				population and low incomes. **Solution:** The Town Engineer will procure and install at the Senior Center a 3 phase 120/208 v 600-amp main backup generator and will then maintain the generator. The Town will also consider outfitting a cooling center within the Senior Center.										
2022-Town Tonawanda-016	Implement Long-term Planning Objectives	1	All Hazards	**Problem:** The Department is in the process of implementing several long-term planning objectives outlined in the town's Comprehensive Plan including a comprehensive zoning law update, neighborhood revitalization plans, cleanup efforts along River Road, and several public infrastructure investments. **Solution:** The Town will complete the long-term planning	No	No	3 years	Town Board, Planning Board	Staff Time, consultant costs	Through long-term planning efforts protect residents from hazard impact	Municipal budget	High	LPR	PR

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Packet Pg. 2786

Table 9.43-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard (s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				processes that support hazard mitigation										
2022-Town Tonawanda-017	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	1	All Hazards	**Problem:** The Town Hall municipal building lacks backup power **Solution:** The Town engineer will determine the correct generator to install at Town Hall. The Town Youth, Parks and Recreation Department will then procure and install this generator and maintain it.	No	No	1 year	Town Engineer, Town Department of Youth, Parks and Recreation	TBD by engineer's feasibility study	Ensure continuity of emergency services during a hazard event	FEMA, HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	SIP	PP
2022-Town Tonawanda-018	Rebuild existing storm catch basins.	1	Flood	**Problem:** Specified storm catch basins require rebuilding **Solution:** The Town Highway Department will rebuild and maintain specified catch basins to alleviate restriction caused by broken concrete in catch basin. This is done on an as needed basis.	No	No	1 year	Town Highway Department	TBD by engineering analysis	Ensure continuity of access over important town roads	FEMA, BRIC, HMGP, municipal budget	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Tonawanda-001	Improve emergency communications so that systems are interoperable	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Town Tonawanda-003	Establish evacuation routes from specified locations	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2022-Town Tonawanda-004	Protect the Sheridan Park Fire District #4 – Station #2 facility from power failure	1	0	1	1	1	1	0	1	1	0	1	1	1	1	11	High
2022-Town Tonawanda-005	Protect the town's pump stations and elevated water towers from utility failure	1	0	0	1	1	1	0	1	1	1	1	1	1	1	11	High
2022-Town Tonawanda-006	Secure chlorine storage at Town Water Resources facilities	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Tonawanda-007	Clean existing storm sewers to protect portions of the town from flood hazard	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-008	Floodplain Administrator to attend training on floodplain management	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-009	Consider joining the Community Rating System	1	1	1	1	1	0	1	1	1	1	0	1	1	1	12	High

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town Tonawanda-010	Identify locations and capacity for permanent housing	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2022-Town Tonawanda-011	Protect United Refining Company facility to the 0.2% annual chance flood	1	1	1	1	1	1	0	1	1	1	0	0	1	0	10	High
2022-Town Tonawanda-012	Acquire emergency popup shelters	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-013	Expand Fire Training Facility	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-014	Residential Property Flood Mitigation	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2022-Town Tonawanda-015	Protect Senior Center from power failure	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-015	Protect Senior Center and 169 Sheridan Parkway from power failure	1	1	1	1	1	1	1	1	1	1	0	1	1	0	12	High
2022-Town Tonawanda-016	Implement Long-term Planning Objectives	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2022-Town Tonawanda-017	Backup power generation for Town of Tonawanda Municipal Building located at 2919 Delaware Ave, Kenmore, NY 14217 to prevent loss of government functions	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.43-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
functions																	
2022-Town Tonawanda-018	Rebuild existing storm catch basins.	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.43.9 Action Worksheets

The following action worksheets have been developed by the Town of Tonawanda to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Tonawanda Action Worksheet			
Project Name:	Expand the Fire Training Facility		
Project Number:	2022-Town Tonawanda-013		
Risk / Vulnerability			
Hazard(s) of Concern:	Wildfire, All Hazards		
Description of the Problem:	The current fire training facility has a small, structurally deteriorating block building that was modified as a maze training building.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Fire Department and Highway Departments will collaborate to demolish the current structure and replace with a larger, multi-functional facility		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Improve fire and emergency response	**Estimated Benefits (losses avoided):**	Increase fire training options and response effectiveness
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by engineering analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation1			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	3 years	**Potential Funding Sources:**	EMPG, BRIC, Assistance to Firefighters grant program.
Responsible Organization:	Town Emergency Manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Rent fire training facility from another town	High	No such facilities available
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the town's pump stations and elevated water towers from utility failure.	
Project Number:	2022-Town Tonawanda-013	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the water infrastructure
Property Protection	1	Project will improve emergency response for all properties
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Wildfire
Timeline	1	Within 3 years
Agency Champion	1	Town Emergency Management
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Tonawanda Action Worksheet			
Project Name:	Protect town Senior Center located at 291 Ensminger Drive (Senior Center) and 169 Sheridan Parkway from utility failure		
Project Number:	2022-Town Tonawanda-015		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards, Utility Failure		
Description of the Problem:	The town's Senior Center located at 291 Ensminger Road is subject to frequent power outages. The same is true for 169 Sheridan Parkway a town building from where Meals on Wheels are distributed. Increasing summertime temperatures make this more important. The town has an aging population and low incomes.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Engineer procure and install at the Senior Center and 169 Sheridan Parkway potentially a 3 phase 120/208 v 600-amp main backup generator. Outfit a cooling center at the Senior Center.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of flood protection services at the Highway Department facility. Shelter services for seniors
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD by engineering analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	1 year
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	BRIC, HMPG, municipal budget
Responsible Organization:	Parks and Recreation Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct a dedicated solar array to supply backup power	High	Variable power output.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect town Municipal facility located at 291 Ensminger Drive (Senior Center) from utility failure	
Project Number:	2022-Town Tonawanda-015	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the town
Property Protection	1	Project will protect the town facility from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards, Utility Failure
Timeline	1	Within 2 years
Agency Champion	1	Parks and Recreation Department
Other Community Objectives	0	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 82-Section-9.43-Tonawanda-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.44 Town of Wales

This section presents the jurisdictional annex for the Town of Wales. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the municipality risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.44.1 Hazard Mitigation Planning Team

The following individuals have been identified as the municipality hazard mitigation plan primary and alternate points of contact. The Town of Wales followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Supervisor, Emergency Manager, and Deputy Emergency Manager. The Emergency Manager represented the community on the Erie County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.44-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Walter Raichel – Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-860-5691 Email: wraichel@gmail.com	Name/Title: Ellen M. Bapst – Deputy Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-457-4151 Email: bapst14139@gmail.com
NFIP Floodplain Administrator	
Name/Title: Walter Raichel – Emergency Manager Address: 12345 Big Tree Rd, Wales Center, NY Phone Number: 716-860-5691 Email: wraichel@gmail.com	

9.44.2 Municipal Profile

The Town of Wales is situated in the eastern part of Erie County is located southeast of the City of Buffalo. The town is 36 square miles in area. The Town of Aurora makes up the western boundary, the Town of Holland is to the south, the Town of Marilla on the north and Wyoming county on the east.

Wales is one of the earliest towns formed in Erie County. It was created from the large original town of Willink. The area was named for Wales (of Britain) which this pastoral town resembles. The first white settlers arrived in the Town of Wales in 1804. NYS Route 400 runs through the town. The Buffalo Creek flows northward through the town.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

According to the U.S. Census, the 2010 population for the Town of Wales was 3,005. The estimated 2019 population was 3,020, a nearly zero percent change from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.9 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.44.3 Jurisdictional Capability Assessment and Integration

The Town of Wales performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.44.3). The municipality identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of Wales. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.44-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 84 - Building Construction Enforcement, Adopted 1993	Local	Code & Building Enforcement
Comment: *For the purpose of promoting the general welfare of the Town of Wales, the Town Board does hereby enact this article to regulate the use and occupation of property within the Town of Wales in accordance with the powers and authority granted it under the New York Town Law. This article contains provisions for building zoning permits, certificates of occupancy and inspections.*					
Zoning Code	Yes	No	Chapter 200 – Zoning; Adopted 1956, Zoning	Local	Code & Building Enforcement
Comment: *The municipal zoning ordinance includes the following guideline: A special use permit application must include a written description of and plans for water supply, sewage disposal and storm drainage with evidence of acceptability by the Erie County Health Department. The town is divided into four zoning districts – agricultural, residential, business, and manufacturing.*					
Subdivision Ordinance	Yes	No	Chapter 181 – Subdivision of Land; approved 8/2/1971	Local	Code & Building Enforcement
Comment: *The Subdivision ordinance has been developed with, but not limited to the following guidelines: 1) An easement shall be provided for all natural drainageways with more than two-hundred-acre watersheds and all utility lines when such utility line or lines do not fall within a dedicated right-of-way. All easements shall be plotted on the preliminary plat and subdivision plat. A clause shall be inserted in the deed of*					

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
each lot affected by an easement indicating that the easement exists and its purpose. Except as further required in this section, easements shall have a minimum width of 10 feet. Where a subdivision is traversed by a drainageway, channel or stream, a drainageway easement conforming substantially to the lines of such watercourse shall be provided. The easement shall be 20 feet wide or such width as will be adequate to preserve natural drainage and to provide sufficient width for maintenance. 2) The subdivider shall not be permitted to leave any surface depressions which will collect pools of water. 3) Preliminary plats must include proposed provision of water supply, fire protection, disposal of sanitary waste, stormwater drainage, street trees, streetlighting fixtures, street signs, sidewalks and other data.					
Stormwater Management Ordinance	No	Yes – for county	-	-	-
Comment:					
Post-Disaster Recovery Ordinance	Yes	No	Chapter 103	Local	Emergency Manager and Code & Building Enforcement
Comment:					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: *Property condition disclosure statement. 1. Except as is provided in section four hundred sixty-three of this article, every seller of residential real property pursuant to a real estate purchase contract shall complete and sign a property condition disclosure statement as prescribed by subdivision two of this section and cause it or a copy thereof, to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale. A copy of the property condition disclosure statement containing the signatures of both seller and buyer shall be attached to the real estate purchase contract. Nothing contained in this article or this disclosure statement is intended to prevent the parties to a contract of sale from entering into agreements of any kind or nature with respect to the physical condition of the property to be sold, including, but not limited to, agreements for the sale of real property "as is".*					
Growth Management	No	No	-	-	-
Comment:					
Site Plan Review	Yes	Yes	Chapter 200, Adopted 1956, Zoning	Local and State	Planning Board
Comment: *Site plan review is intended to reduce the potential for development that might pose a threat to the community and or the environment within the Town of Wales.*					
Environmental Protection Ordinance	Yes	Yes	Chapter 200, Adopted 1956, Zoning	Local	Planning Board
Comment: *Environmental Protection is incorporated into zoning. These are meant to promote sustainable development to increase resilience and safety for the community.*					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 103 – updated 2019, Flood Damage Prevention.	Local	Code Enforcement Officer
Comment: *It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:* *(1) Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;* *(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;* *(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;* *(4) Control filling, grading, dredging and other development which may increase erosion or flood damages;* *(5) Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and (6) Qualify and maintain for participation in the National Flood Insurance Program.* *An enclosed area beneath the lowest elevated floor, 18 inches or more in height, which is used to service the underside of the lowest elevated floor. The elevation of the floor of this enclosed area, which may be of soil, gravel, concrete or other material, must be equal to or above the lowest adjacent exterior grade. The enclosed crawl space area shall be properly vented to allow for the equalization of hydrostatic forces which would be experienced during periods of flooding.* *The Code Enforcement Officer is appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.*					

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Municipal Separate Storm Sewer System (MS4)	No	Yes – for municipalities within metropolitan areas.	-	-	-
Comment:					
Emergency Management Ordinance	Yes	Yes	In various sections of Chapter 103, 104, 203, 120, and 100.	Local	Various
Comment: *The sections discuss the coordination between municipal agencies, county, and state during and after a disaster as well as any preparation needed prior to the disaster event. Each chapter has its own area of concern during a hazard event including housing, emergency evacuation, communication, municipal services, and transportation.*					
Climate Change Ordinance	No	No	-	-	-
Comment:					
Disaster Recovery Ordinance	No	No	-	-	-
Comment:					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment:					
Other	No	No	-	-	-
Comment:					
Planning Documents					
Comprehensive Plan	Yes	No	Regional Comprehensive Plan, 2004	Local	Planning Board
Comment: *In accordance with Section 272-a of Town and Section 7-722 of Village law, this plan is intended to help promote the health, safety and general welfare of the Town or Village and to give due consideration to the needs of the people of the region of which the Town or Village is a part.*					
Capital Improvement Plan	No	No	-	-	-
Comment:					
Disaster Debris Management Plan	No	No	-	-	-
Comment:					
Floodplain or Watershed Plan	No	No	-	-	-
Comment:					
Stormwater Plan	No	No	-	-	-
Comment:					
Open Space Plan	No	No	-	-	-
Comment:					
Urban Water Management Plan	No	No	-	-	-
Comment:					
Habitat Conservation Plan	No	No	-	-	-

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Economic Development Plan	Yes	No	2012	Local	Multi-jurisdictional
Comment: *The goals and intent of the plan includes: 1) The five municipalities will establish a regional comprehensive plan implementation committee to monitor future planning actions and provide continuing input and updates into the regional plan. 2) Implement site clearance standards, wetland protection regulations and erosion and sediment control measures. 3) Create zoning overlay districts to protect natural features. 4) Adoption of local wetland regulations to protect State and Federal wetlands. 5) Require and enforce the use of erosion and sediment control for all new development and redevelopment. Adopt setback standards to establish vegetated buffer areas along creek corridors to prevent erosion. 6) Communities in the region should pursue joint efforts (grant applications, pooling resources, joint studies, joint environmental conservation committees, etc.) as a unique and useful strategy for preserving and protecting resources and addressing other cross-jurisdictional environmental problems.*					
Shoreline Management Plan	No	Yes – for shoreline communities	-	-	-
Comment:					
Community Wildfire Protection Plan	No	No	-	-	-
Comment:					
Forest Management Plan	No	No	-	-	-
Comment:					
Transportation Plan	No	No	-	-	-
Comment:					
Climate Change /Resilience/ Sustainability Plan	No	No	-	-	-
Comment:					
Agriculture Plan	No	No	-	-	-
Comment:					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment:					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Disaster Response Plan, 2009	Local	Emergency Management
Comment: *The intent of the comprehensive emergency management plan (especially the evacuation annex) is meant to provide municipalities and community members the necessary means to prepare for and coordinate during hazard events and minimize avoidable damage.*					
Strategic Recovery Planning Report	No	No	-	-	-
Comment:					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment:					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment:					
Continuity of Operations Plan	No	No	-	-	-
Comment:					
Public Health Plan	No	No	-	-	-
Comment:					
Other	No	-	-	-	-
Comment:					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of Wales to oversee and track development.

Table 9.44-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code & Building Enforcement, Town Board Special Use Permit
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	None – the town is relatively rural and sparsely populated

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Wales and their current responsibilities which contribute to hazard mitigation.

Table 9.44-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	The Planning Board has full approval authority, and binding jurisdictional authority regarding all residential subdivision developments, on which the Town Board may make recommendations. This Board is also charged with generating and reviewing proposed ordinances intended to become part of Wales Town Law, review and recommendation on proposed zoning changes and review from time to time of existing zoning codes with recommendations for updating and appropriate changes.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Zoning Board of Adjustments	Yes	The Zoning Board of Appeals hears and deliberates on cases from citizens seeking relief from the Town ordinances. Decisions of this Board are based on strict criteria defined by the State and may be appealed by court action.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Highway Department – conducts maintenance on roads, and various other infrastructure systems across the town.
Construction/Building/Code Enforcement Department	Yes	Code & Building Enforcement – reviews and issues permits for residential and non-residential property development.
Emergency Management/Public Safety Department	Yes	Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code RED
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Town Roads
Mutual aid agreements	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	CEO
Surveyor(s)	No	-
Emergency Manager	Yes	Emergency Manager
Grant writer(s)	No	-
Resilience Officer	No	-

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Wales.

Table 9.44-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes, with board approval
Capital improvements project funding	Yes, with board approval
Authority to levy taxes for specific purposes	Yes, with board approval
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, with board approval
Incur debt through special tax bonds	Yes, with board approval
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes, with board approval
Other federal or state Funding Programs	Yes, with board approval
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Wales.

Table 9.44-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Emergency Manager
Personnel skilled or trained in website development	Yes	Code Official Clerk and town clerk
Hazard mitigation information available on your website	Yes	The town maintains a municipal website where they post news and upcoming events and meetings.
Social media for hazard mitigation education and outreach	Yes	The town has a Facebook page where they post community events and announcements
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Town website, social media, radio, and TV
Warning systems for hazard events	Yes	Town website and social media; CodeRED

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Outreach Resources	Available? (Yes/No)	Comment:
Natural disaster/safety programs in place for schools	Yes	School Superintendent
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Wales.

Table 9.44-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	TBD	2021
Public Protection (ISO Fire Protection Classes 1 to 10)	No	No public water	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:

N/A *Not applicable*

NP *Not participating*

- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.44-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Weak
Cyber Attack	Moderate
Earthquake	Weak
Expansive Soils	Moderate
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Moderate

**Strong* *Capacity exists and is in use*

Moderate *Capacity may exist; but is not used or could use some improvement*

Weak *Capacity does not exist or could use substantial improvement*

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.44.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Walter Raichel, Town Emergency Manager and Building Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Wales.

Table 9.44-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of Wales	1	4	$2,133	1	1

Source: *FEMA 2020a, FEMA 2020b*
Notes: *Data from 2020-21*
RL *Repetitive Loss; SRL* *Severe Repetitive Loss*

Flood Vulnerability Summary

The town describes flood-prone areas to be along creeks and farmland within the town. The town does not maintain a list of property owners interested in flood mitigation. There are currently no RiskMAP projects within the jurisdiction. As the building inspector makes substantial damage determinations, there are no specific guidelines established and are determined on a case to case basis. There are no properties that have been mitigated within the town and the current flood maps adequately address the existing sites that have flooding.

NFIP Compliance

The building inspector is in charge of floodplain management, and there are no certified floodplain managers on staff. Given the town's size the town does not have adequate resources to determine future flooding conditions from climate change, nor given the part time and volunteer staff, training is not required nor relevant to increase the town's capabilities. The building officer provides permit and site plan review, and inspection of whether site is located in a floodplain. The town does not have specific guidelines to determine substantial improvement measures at the same time does not have any outstanding violation issues. The municipality is also no aware of any barriers to increasing the effectiveness of the NFIP program.

The town's most recent CAV date on record is 07/17/1997 and is due for a new one. The town has documented that the local chapter for the flood damage prevention ordinance is number 103 titles "Flood Damage Prevention B-26-2008". The town National Flood Insurance Program meets the requirements of the program through the minimum 2 fee freeboard requirement, for example, and local ordinances, plans, and programs, also meet and support the NFIP requirements. The town is not interested in joining the FEMA Community Rating System.

9.44.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evacuation Routes and Procedures

The Town of Wales has identified the following routes and procedures to evacuate residents prior to and during an event.

- Route 20A (East/West)
- Route 78 (South)
- Interstate 400 (North/South)

Sheltering

The Town of Wales has identified the following designated emergency shelters within the town.

Table 9.44-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Town Hall	12345 Big Tree Rd, Wales Center, NY 14169	50	Yes	Yes	Yes	None	None

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of Wales has identified the following sites suitable for placing temporary housing units.

Table 9.44-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Open Land	12345 Big Tree Road	20-25 Acres	Flat Land	Available on demand.	None
Town Park	Rt 20A	30 Acres	Open Space	Available on demand.	None

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of Wales has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.44-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
Town Park	Route 20A	30 Acres	Land	None	Would need to draw water and sewer lines

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.44.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.44-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.44-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	**1**	**0**	**5**	**0**	**3**	**0**	**1**	**0**	**4**	**0**	**2**	**0**
Multi-Family	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Other (commercial, mixed-use, etc.)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Permits Issued	**1**	**0**	**5**	**0**	**3**	**0**	**1**	**0**	**4**	**0**	**2**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
No Recent Development to Report					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
No Future Development Planned					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

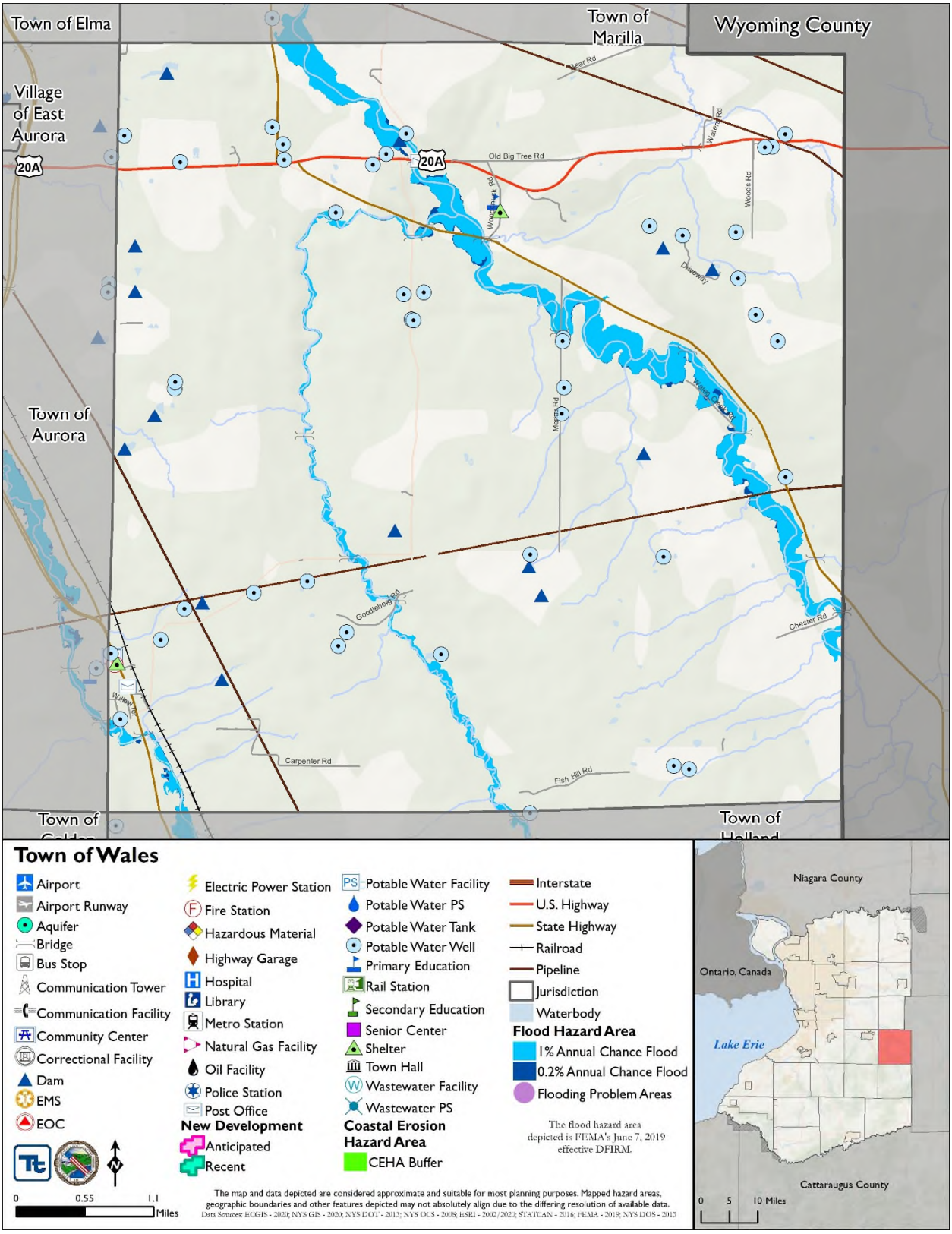
9.44.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the municipality risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Wales has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

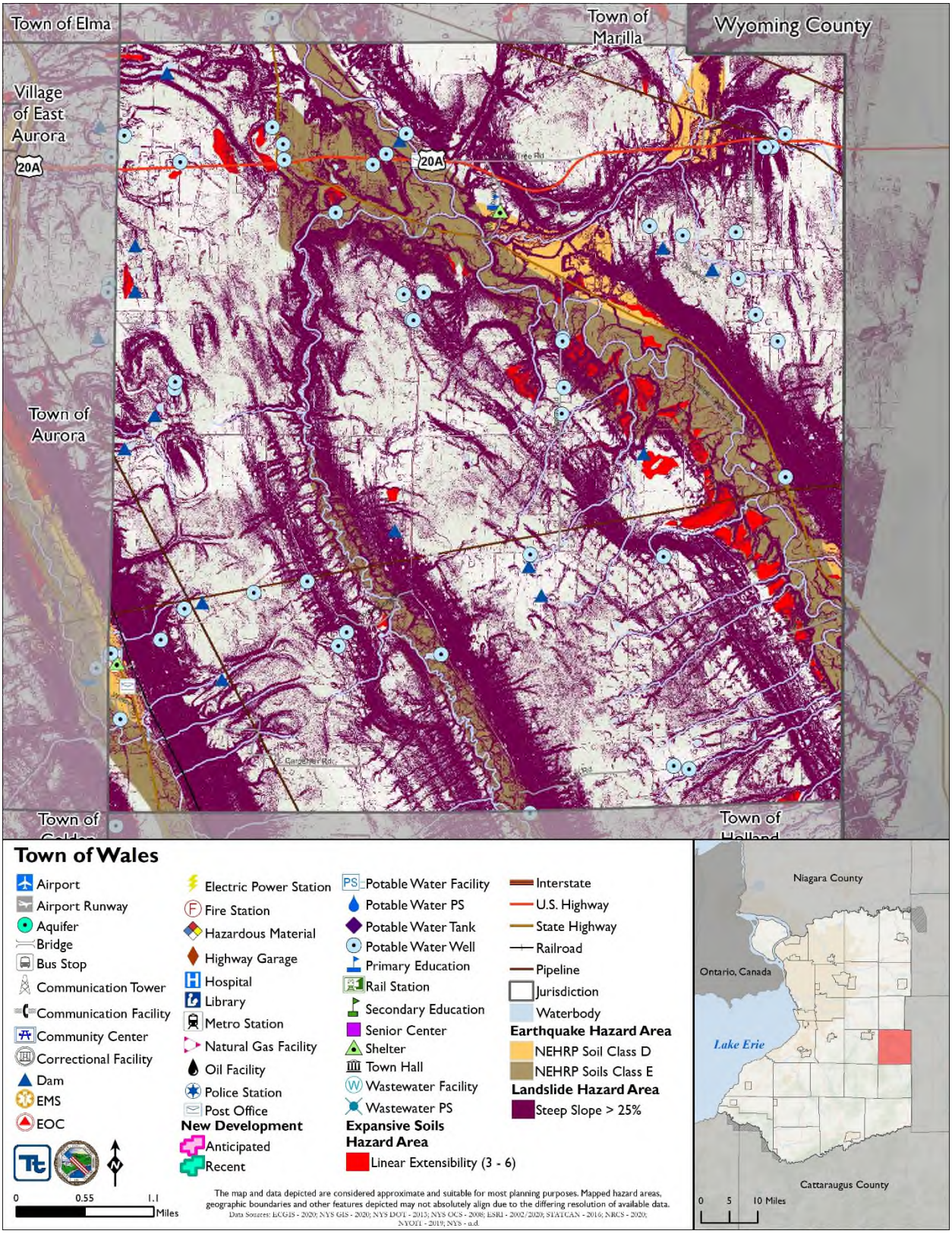
Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.44-1. Town of Wales Hazard Area Extent and Location Map 1



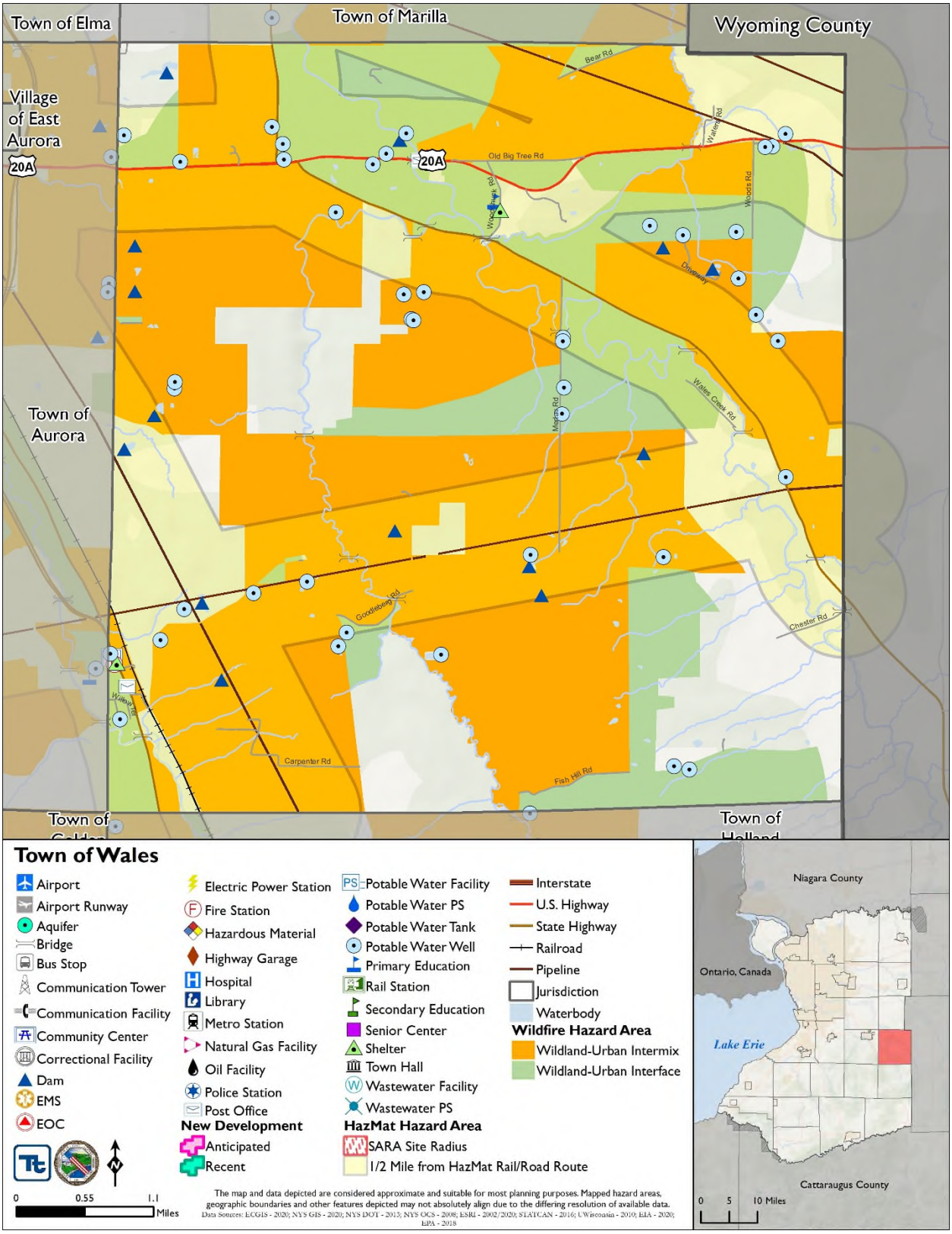
Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.44-2. Town of Wales Hazard Area Extent and Location Map 2



Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.44-3. Town of Wales Hazard Area Extent and Location Map 3



Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The municipality history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.44-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.44-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	A strong clipper crossed the Great Lakes and brought snow and blowing snow to the region and some of the coldest air of the season. The snowfall amounts were enhanced downwind of Lake Ontario and upslope east of Lake Erie where snowfall amounts around a foot were recorded. Gusty winds accompanied the system and produced reduced visibilities in blowing snow.	Although the County was impacted, the town did not report damages
August 11-15, 2015	Flash Flood	No	Showers and thunderstorms developed along the leading edge of a well-defined shortwave moving from Southern Ontario into Western New York. The storms moved across southern Erie county and rapidly intensified. Instantaneous rainfall rates of four to six inches and hour were observed on radar. Actual measure amounts were around two inches, however than rain fell in less than a half hour. The intense rainfall rates combined with steepening terrain along the edge of the Boston Hills produced significant flash flooding in the vicinity of Boston, Colden and Glenwood. Numerous homes were flooded along Boston State Road along Eighteen Mile Creek.	Although the County was impacted, the town did not report damages
October 28-29, 2015	High Wind	No	Strong southwest winds developed in the wake of the system on Wednesday the 28th. Winds gusts were measured to 69 mph at Fort Drum and 62 mph at Dunkirk. The strong winds downed trees and power lines. Damage was reported in Dunkirk and Lacona. Roads were blocked by downed trees and wires in Forestville, Sardinia, Cheektowaga, and South Wales.	Although the County was impacted, the town did not report damages
November 6, 2015	Thunderstorm Wind	No	A line of thunderstorms accompanied a sharp cold front during the late morning hours. The thunderstorms produced a	Although the County was impacted, the town did not report damages

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			wind gust that downed a 120-foot light standard at the downtown ballpark. The light standard destroyed a nearby parked car.	
November 12, 2015	High Wind	No	A strong cold front crossed the region around noon. This was followed by a period of strong winds to the lee of Lakes Erie and Ontario. Wind gusts were measured to 60 mph. The winds downed trees and power lines with scattered power outages reported. Several roads were blocked by fallen trees. Specific damage locations in the City of Buffalo included Fulton, Hayward, Tacoma and Shoshone Streets. In Evans Center, a tree knocked down by the wind sheared off a gas line to a home then struck a car. In Niagara County, trees were downed on wires on Forest and Chew Roads in Lewiston. In Adams, a tree took down power lines then landed on a truck.	Although the County was impacted, the town did not report damages
November 18, 2015	High Wind	No	Behind a departing area of high pressure, a deep low pressure system moved from the Plains towards James Bay. A strong southeast downslope flow developed along the Lake Erie shoreline. Wind gusts were measured to 63 mph at Dunkirk. In Brant, Route 249 was closed by downed trees and power lines. In Sheridan and Silver Creek, a portion of Route 5 was also closed by downed power lines.	Although the County was impacted, the town did not report damages
January 11, 2017	High Wind	No	Gusty winds accompanied the passage of a deepening storm system crossing the upper Great Lakes. Wind gusts were measured to 64 mph at Dunkirk, Batavia and Niagara Falls Airport. Other wind gusts included: 60 mph at Buffalo Airport and 58 mph at Fort Drum and Rochester Airport. The strong winds downed trees and power lines. Several thousand customers were without power. Numerous roads were closed because they were blocked by fallen trees. Structural damage was reported in Buffalo and Cheektowaga as roofs were blown off the Buffalo Motor and Generator Corporation and the gymnasium of a school. There was also damage reported to several home and cars caused by falling trees. The Skyway in Buffalo was closed for several hours due to the wind conditions making travel on the elevated span unsafe.	Although the County was impacted, the town did not report damages
March 8, 2017	High Wind	No	Unusually deep low pressure moved from northwest Ontario across Hudson Bay. The low brought strong winds to	Although the County was impacted, the town did not report damages

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			the entire region with sustained winds up to 49 mph and wind gusts as high as 81 mph. A significant amount of damage resulted with hundreds of thousands left without power	
March 13, 2017	Winter Storm	No	Low pressure over the Great Lakes combined with low pressure lifting north along the Atlantic coast to bring significant snowfall to the entire region. Snow began across the region during the late evening into the early overnight hours of the 13th-14th. The snow continued through the day Tuesday (14th) before tapering off during the afternoon of the 15th. Most schools and some businesses closed on Tuesday. Snowfall records were set at Buffalo and Rochester.	Although the County was impacted, the town did not report damages
July 20, 2017	Tornado	No	A nearly stationary frontal zone was located just to the north of the area over far southern Ontario, Canada. A weak wave of low pressure tied to a cluster of thunderstorms moved east along this stalled frontal zone during the late morning and early afternoon. The storms moved onshore from Lake Erie with damage beginning in Hamburg before moving across Orchard Park. Windows of hundreds of car windows were blown out at the Hamburg Fairgrounds where trees were downed and several buildings including the Grandstand sustained damage.	Although the County was impacted, the town did not report damages
August 4, 2017	Thunderstorm Wind	No	Showers and thunderstorms developed along and ahead of an advancing cold front. The thunderstorms produced damaging winds that downed trees and power lines. In Buffalo, the winds partially tore the roof off a building at Utica Street and Massachusetts Avenue. In Weedsport, a trampoline was lifted and landed on a house. The thunderstorms also produced hail up to one inch in diameter near Adams.	Although the County was impacted, the town did not report damages
December 10-15, 2017	Lake-effect Snow	No	Cold air deepened over the eastern Great Lakes with heavy lake snows developing east of Lakes Erie and Ontario. The wind direction was from the west-southwest for most of the event, directing the heaviest snow into the nearby Buffalo Southtowns off Lake Erie, and areas just south and east of Watertown off Lake Ontario.	Although the County was impacted, the town did not report damages
December 24-29, 2017	Lake-effect Snow	No	Lake effect snow developed early Christmas morning and continued continuously for about 72 hours, before diminishing late in the day on Wednesday the 27th	Although the County was impacted, the town did not report damages

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 2, 2018	Blizzard	No	This storm was a rare lake effect blizzard, producing a period of blizzard conditions northeast of Lakes Erie and Ontario. A strong pressure gradient developed between a strong high over the Ohio Valley and low pressure just north of the Great Lakes on the 2nd with wind gusts of 40 to 50 mph northeast of Lakes Erie and Ontario.	Although the County was impacted, the town did not report damages
October 6, 2018	Lightning	No	A weakening surface low tracked northeast across Lake Huron during the afternoon hours with its corresponding warm front extending to the east across Lake Ontario then snaking south ahead of the higher terrain east of Syracuse. This placed all of western New York within the warm sector of the aforementioned storm system.	Although the County was impacted, the town did not report damages
February 24, 2019	High Wind	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds. The track of the strong surface low was a classic high wind track for our region.	Although the County was impacted, the town did not report damages
February 24, 2019	Lakeshore Flooding	No	Low pressure over the central Plains rapidly deepened as it moved into the central Great Lakes, ending up as a 970 mb low over western Quebec. A strong cold front trailing the low sliced through western New York trailing it and ushering in very gusty winds.	Although the County was impacted, the town did not report damages
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	A strong cold frontal passage near midday flipped what was southeast flow around to the southwest abruptly and drove a lake seiche onto the eastern shores of Lake Erie. The combination of higher than normal water level on Lake Erie and the increase in water led to flooding along the New York shoreline of the lake for a short period. Lake Erie peaked at Buffalo Harbor at 9.64 feet above low water datum. Water from the lake inundated Canalside in Downtown Buffalo and Route 5 at Hoover Beach. It also damaged the new pier at Dunkirk.	Although the County was impacted, the town did not report damages
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	A deepening area of consolidated low pressure tracked from the north shoreline of Lake Erie to Toronto, and then along the northern shoreline of Lake Ontario Thursday evening, October 31st. This system brought recorded breaking Halloween rains to our region, damaging wind gusts, a large Lake Erie seiche, a smaller Lake Ontario	Although the County was impacted, the town did not report damages

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			seiche, and river flooding in the North Country	
November 27, 2019	Lakeshore Flooding	No	Strong low pressure moved from the central Great Lakes to north of Lake Ontario. The trailing cold front entered western New York early in the afternoon of 11/27 and swept through later that evening. While the track of the surface low was very favorable, the event was atypical in that the surface low reached its maximum intensity across the western Great Lakes and filled quite rapidly by the time it passed to our north. Despite the weakening low, soundings were favorable for a warning criteria wind event across western New York, with 50-60 knots for a 3-5 hour period in the cold advection behind the cold front.	Although the County was impacted, the town did not report damages
January 12, 2020	Lakeshore Flooding	No	Post-frontal winds mixed well behind an early morning cold front. This brought wind gusts across much of western New York, especially along the Lake Erie shore, Buffalo, and Batavia area that exceeded 65 mph. Widespread non-thunderstorm wind damage was reported in all lakeshore counties from Monroe westward along Lake Ontario and all counties bordering Lake Erie, as well. High winds drove a seiche on Lake Erie, resulting in water flooding Route 5 in Hamburg, additional damage to the Dunkirk Pier and break wall, damage to the Buffalo break wall, and flooding in Canalside in downtown Buffalo. The seiche peaked the water level in Buffalo at 9.85 feet above low water datum.	Although the County was impacted, the town did not report damages
January 18, 2020	Lakeshore Flooding	No	A relatively deep, progressive mid-level trough crossed southern Ontario and the Lower Great Lakes Saturday night and early Sunday, January 18-19. The associated weak surface low tracked across southern Ontario in the process with widespread mixed synoptic precipitation eventually giving way to disorganized lake snows by daybreak Sunday. As the cold air deepened and the cap rose to nearly 10,000 feet, multiple bands of moderate to occasionally heavy lake snow became established east of the lakes.	Although the County was impacted, the town did not report damages
2020-21	COVID 19 - EM 3504	Yes	National Pandemic that affected the entire nation, including the Town of Lancaster and Erie County	Business closings, social distancing, masking, and numerous deaths reported.

Notes:

EM *Emergency Declaration (FEMA)*

FEMA *Federal Emergency Management Agency*

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

DR *Major Disaster Declaration (FEMA)*
N/A *Not applicable*

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the municipality risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Wales. The Town of Wales has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- Cyber attack is not a threat to the community and thus has been re ranked from medium to low.
- Earthquakes have not occurred in the past and thus the ranking has changed from high to low.
- Given the amount of traffic along Route 20 carrying hazardous materials on a daily basis, the town believes it poses a threat and would like to increase the HazMat rating from low to medium.
- Wildfires have never occurred and thus would like to reduce the ranking from high to low.

Table 9.44-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Low	Low	Low	Medium	Low	Medium

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	Medium	Medium	Medium	Low

Note: *The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction*

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.44-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Erdman Dam	Dam	Yes	Yes	003

Source: GIS 2021

Identified Issues

After review of the municipality hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of Wales has identified the following vulnerabilities within their community:

- The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standardbreds and needs to increase overall capacity.
- The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year.
- The Erdman Dam is located within the 100-year floodplain. Given the ownership is private, the town does not have authority to conduct an assessment and make improvements.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.

Specific areas of concern based on resident response to the Erie County Hazard Mitigation Citizen survey include:

- None

9.44.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.44-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
No Previous Projects for the Town of Wales	-	-	-	-	-	Cost	-	-
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Wales has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Fire hall recently installed a new diesel generator to power the entire building in 2021
- The town recently developed a heating shelter on Route 20, in 2018. The facility is used for severe winter storms.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Wales participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.44-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		X							X	
Cyber Attack		X							X	
Earthquake		X							X	
Expansive Soils		X							X	
Extreme Temperature		X							X	
Flood		X		X		X	X		X	
Hazardous Materials		X							X	
Landslide		X							X	
Pandemic		X							X	
Severe Storm		X							X	
Severe Winter Storm		X							X	
Utility Failure		X							X	
Wildfire		X							X	

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.44-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Wales would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.44-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.44-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Town of Wales -001	Fire Hall Expansion and Retrofitting	1,2	All	**Problem**: The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standardbreds and needs to increase overall capacity. In addition, the current facility also has issues around flooding and erosion due to surrounding stormwater related issues. The facility operation is thus compromised during extreme weather events when the facility needs to be in full operation. **Solution**: The fire company is looking to purchase the adjacent property that is currently an abandoned property. The fire hall would like to build an additional building and or an extension that could be used as storage and facility expand existing capabilities. The town might need additional backup power but would determine once the facility design phase is complete. To mitigate flooding, the existing facility would also need to retrofitted to mitigate and or eliminate flooding in the facility. An additional study might also need to be	Yes	Yes	5 years	Fire District for the Town of Wales	$2 million	Expanded capabilities for the region.	HMGP, FMA, Firefighters Assistance grant	High	SIP	SP, ES

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				conducted to better understand the issues pertaining to flooding, since it is not located in the floodplain.										
2022-Town of Wales -002	Develop Public Water Supply	1,2	Utility Failure	**Problem**: The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year. **Solution**: The town would like to create a public water supply system for the northern portion of the town that has continuous water shortages. The town would need to work with the Town of Aurora to connect Erie County public utilities and have access to continuous water supplies. The project has previously been proposed, but the Town of Aurora and Village of East Aurora determined the project to be infeasible due to financial constraints. Thus the Town of Wales would need to apply for FEMA grant funding to expand county utilities to the northern portion of the town. This project would also need to include the Erie County Water Department.	No	New	5 years	Town of Wales Public Works Department/ Erie County water Department	$7 million	Water Supply Met	HMGP, BRIC, WQIP	High	SIP	SP
2022-Town of	Dam Examination/ Outreach	1,4	Flood	**Problem**: The Erdman Dam is located within the 100-year floodplain. Given the	Yes	No	5 years	Town Board	Low	Flood Mitigation	Municipal Budget	High	EAP	PI

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Wales -003				ownership is private, the town does not have authority to conduct an assessment and make improvements. **Solution**: The town would need to conduct outreach to the dam owner and provide mitigation recommendations as well as guidance on potential grant funding opportunities through FEMA. The town shall conduct outreach within the 5 years before the upcoming hazard mitigation plan update.										
2022-Town of Wales -004	Residential Property Flood Mitigation.	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood - prone areas that experience	No	No	Within 3 years	Code Enforcement Officer	TBD per cost and number of properties to be purchased.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost share by homeowners	High	SIP	PP

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				frequent flooding (high risk areas).										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

Table 9.44-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Town of Wales -001	Fire Hall Expansion and Retrofitting	1	1	1	1	1	-1	-1	1	1	1	1	1	1	1	10	High
2022-Town of Wales -002	Develop Public Water Supply	1	1	1	1	1	0	-1	1	1	1	0	1	1	1	10	High
2022-Town of Wales -003	Dam Examination/ Outreach	1	1	1	1	0	0	1	1	1	1	0	1	1	1	11	High
2022-Town of Wales -004	Residential Property Flood Mitigation.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie

9.44.9 Action Worksheets

The following action worksheets have been developed by the Town of Wales to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Fire Hall Expansion and Retrofitting		
Project Number:	2022-Town of Wales -001		
Risk / Vulnerability			
Hazard(s) of Concern:	All		
Description of the Problem:	The town fire hall is under capacity and does not accommodate the equipment for the town. The trucks are not able to fit in the existing building. With continuously new requirement from the state, the facility is unable to continue to meet standardbreds and needs to increase overall capacity. In addition, the current facility also has issues around flooding and erosion due to surrounding stormwater related issues. The facility operation is thus compromised during extreme weather events when the facility needs to be in full operation.		
Action or Project Intended for Implementation			
Description of the Solution:	The fire company is looking to purchase the adjacent property that is currently an abandoned property. The fire hall would like to build an additional building and or an extension that could be used as storage and facility expand existing capabilities. The town might need additional backup power but would determine once the facility design phase is complete. To mitigate flooding, the existing facility would also need to retrofitted to mitigate and or eliminate flooding in the facility. An additional study might also need to be conducted to better understand the issues pertaining to flooding, since it is not located in the floodplain.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year storm	**Estimated Benefits (losses avoided):**	Expanded Fire and Emergency Services/ State Compliance
Useful Life:	25 years	**Goals Met:**	1,2
Estimated Cost:	$2 Million	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	3 years once funding secured
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	HMGP, BRIC, Assistance to Firefighters Grant Program
Responsible Organization:	Wales Fire District	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Build New/ additional facility	High	Potentially higher cost
	Expand existing facility	High	Most cost effective
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Fire Hall Expansion and Retrofitting	
Project Number:	2022-Town of Wales -001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	The project protects life
Property Protection	1	The project protects property
Cost-Effectiveness	1	This is most cost effective after detailed analysis
Technical	1	This project is technically feasible
Political	1	This has no political opposition
Legal	-1	There are land purchase complications
Fiscal	-1	This project requires funding
Environmental	1	This has positive impact on environment
Social	1	There are positive impacts produced from this project
Administrative	1	This has administrative support
Multi-Hazard	1	This project addresses multiple hazards the timeline is feasible
Timeline	1	The timeline is feasible
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Develop Public Water Supply		
Project Number:	2022-Town of Wales -002		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure		
Description of the Problem:	The town does not have public utilities and Tworod Road and the northern section of the town experiences water shortages due to low water table and limited water supply. While the snow often helps with the water supply, given climate change, there continues to be less water every year.		
Action or Project Intended for Implementation			
Description of the Solution:	The town would like to create a public water supply system for the northern portion of the town that has continuous water shortages. The town would need to work with the town of Aurora to connect Erie County public utilities and have access to continuous water supplies. The project has previously been proposed, but the town of Aurora and Village of East Aurora determined the project to be infeasible due to financial constraints. Thus the town of Wales would need to apply for FEMA grant funding to expand county utilities to the northern portion of the town. This project would also need to include the Erie County Water Department.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Drought/ Water quality	**Estimated Benefits (losses avoided):**	Stable water supply for all residents
Useful Life:	30 years	**Goals Met:**	1,2
Estimated Cost:	$7 million	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	2 years once funding secured
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	HMGP, BRIC, WQIP, CSC Grant
Responsible Organization:	Town DPW, Erie County Water Department	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Build Emergency Water Supply Tank	Low	Problem continues but emergency supply available – less ideal
	Expand Public Water Supply	High	Best option in the long run.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Develop Public Water Supply	
Project Number:	2022-Town of Wales -002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property value
Cost-Effectiveness	1	This is the most cost effective measure in the long run
Technical	1	The technical issues have not been identified
Political	1	The political climate is positive
Legal	0	The legal issues are complex but solvable
Fiscal	-1	The town needs resources
Environmental	1	This has a positive environmental impact
Social	1	This has a positive social impact
Administrative	1	The administration is supportive of project if funding is available
Multi-Hazard	0	This only addresses a single hazard
Timeline	1	The timeline is feasible
Agency Champion	1	Yes
Other Community Objectives	1	Yes
Total	10	
Priority (High/Med/Low)	High	

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Residential Property Flood Mitigation		
Project Number:	2022-Town of Wales -004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the county will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/ purchase/ moving/ elevating residential homes in the flood -prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the Special Flood Hazard Area?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	100-year	**Estimated Benefits (losses avoided):**	Remove residents and homes from the flood threatened homes
Useful Life:	10 years	**Goals Met:**	1
Estimated Cost:	TBD per cost and number of properties to be purchased	**Mitigation Action Type:**	Structural and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	3 years once funding secured
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	BRIC, HMGP, FMA, cost share by homeowners
Responsible Organization:	Code Enforcement Officer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Elevate all roadways	$1 million+	Not feasible; roads won't flood but homes will remain vulnerable
	Install floodwalls around neighborhoods	$500,000+	Can reduce accessibility to these areas during an emergency
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Evaluation and Prioritization		
Project Name:	Residential Property Flood Mitigation	
Project Number:	2022-Town of Wales -004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	This project protects life
Property Protection	1	This project protects property value
Cost-Effectiveness	1	This is the most cost effective measure in the long run
Technical	1	
Political	1	
Legal	1	
Fiscal	1	The town has the capabilities to conduct the outreach portion of the project
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	To be completed within 5 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Attachment: 83-Section-9.44-Wales-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.45 Town of West Seneca

This section presents the jurisdictional annex for the Town of West Seneca. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of West Seneca's risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.45.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of West Seneca's hazard mitigation plan primary and alternate points of contact. The Town of West Seneca followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: Emergency Manager, Captain of WSPD/WSOEM, and Engineer. The Captain of Administration / Liaison to WS OEM represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.45-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eric Conley, Emergency Manager Phone Number: (716) 352-1994 Email: conleye@westsenecapolice.org	Name/Title: James Unger, Captain West Seneca Police Department/ OEM Phone Number: (716) 558-3142 Email: ungerj@westsenecapolice.org
NFIP Floodplain Administrator	
Name/Title: Steve Tanner, Engineer, West Seneca Engineering Department Phone Number: (716) 558-3220	
Additional Contributors	
Name/Title: David Johnson, Engineer Method of Participation: Provided data and information.	

9.45.2 Municipal Profile

The town is 21 square miles in area and incorporated in 1851. Four hamlets are situated in the town; Middle Ebenezer, Upper Ebenezer, Lower Ebenezer and New Ebenezer. The Seneca Indians were the original inhabitants of the town. In 1851 parts of Cheektowaga, Hamburg, and East Hamburg were organized to form the town of Seneca which later was renamed West Seneca. Many Germans immigrated to the town in the 1840s. Some of these new residents took up residence in original Seneca structures. The Buffalo Creek runs through the town. The New York State Thruway, US Routes 20 and 219, and NYS Routes 16, 78, 240, 277, 354 and 400 traverse the town.

The Town of West Seneca is an established first-ring suburban community of Buffalo with residential, retail, commercial and industrial sectors. According to the U.S. Census, the 2010 population for the Town of West Seneca was 44,711. The estimated 2019 population was 45,344, a 1.4 percent increase from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.4 percent of the population is 5 years of age or younger and 21.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.45.3 Jurisdictional Capability Assessment and Integration

The Town of West Seneca performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.45.3). The Town of West Seneca's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Town of West Seneca. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.45-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Building Code NYS 2020; Town Code Ch. 55	State	Department of State
Comment: NYS Uniform and Energy Code 2020; This chapter shall provide for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (Uniform Code) in the Town of West Seneca. This chapter is adopted pursuant to § 10 of Article 2 of the Municipal Home Rule Law. Except as otherwise provided within this chapter, state law, or within the Uniform Code, all premises, regardless of use, are subject to the provisions which follow.					
Zoning Code	Yes	Yes	Town of West Seneca Zoning Ordinance	Local	Town Board
Comment: As part of the Comprehensive Development Plan for the Town of West Seneca, this Zoning Ordinance, set forth in the text and maps which constitute this chapter, is adopted in order to promote public health, safety, morality and the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent overcrowding of the land and undue concentration of population; to secure safety from fire, flood, panic and other dangers; to lessen congestion in the streets and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; to encourage the most					

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
appropriate use of land in order to protect and conserve property values throughout the town; and to bring about the gradual conformity of land and buildings to the Comprehensive Master Plan.					
Subdivision Ordinance	Yes	Yes	Town Code Chapter 103	Local	Town Board
Comment: The regulations herein contained are adopted for the purpose of providing for the sound growth and development of the town, of affording adequate sites and facilities for the distribution, transportation, safety, health and welfare of its population, and of providing reasonable and equitable requirements in the interest of developers, investors and home owners so as to ensure stable property values.					
Stormwater Management Ordinance	Yes	Yes	Town of West Seneca Zoning ordinance Chapter 102-A	Local	Town Board
Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 102A-1 hereof. This chapter seeks to meet those purposes by achieving the following objectives: • Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS45), Permit No. GP-02-02, or as amended or revised; • Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised; • Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature and stream bank erosion and maintain the integrity of stream channels; • Minimize the total annual volume of stormwater runoff which flows from land development activities which would otherwise degrade local water quality; • Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and • Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	-	-	-	-
Comment: None					
Site Plan Review	Yes	Yes	Town of West Seneca Zoning Code Chapter 102	Local	Town Board
Comment: It is the intention of this chapter to promote the efficient use and layout of land, and take into consideration the health, safety and general welfare of the public and of the residents and users of the proposed development. This will be accomplished through sound site planning that includes standards in the design, layout, landscaping and construction of development.					
Environmental Protection Ordinance	Yes	Yes	Town Code Chapter 10	Local	Town
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019					
Flood Damage Prevention Ordinance	Yes	Yes	Building Code & Town Code Chapter 77	Local	Floodplain Administrator
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. Meets state requirements - BFE+2 feet for all construction in the SFHA (residential and non-residential) It is the purpose of this local law to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. This is accomplished by elevating structures above the BFE. For residential structures within Zone A, when no base flood elevation data are available new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade. When BFE data are available, then an elevation of the base flood of two feet is required. For non-					

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
residential structures, new construction and substantial improvements of any non-residential structure, together with attendant utility and sanitary facilities, shall either: (i) have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or (ii) be floodproofed so that the structure is watertight below two feet above the base flood elevation.					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Town Code Chapter 78B	Local	Not Identified
Comment: This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.					
Emergency Management Ordinance	No	-	-	-	-
Comment: None					
Climate Change Ordinance	No	-	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	-	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	-	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					
Planning Documents					
Comprehensive Plan	Yes	Yes	Adopted by resolution 4/25/2016 Town of West Seneca Board	Local	Town Board
Comment: Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level					
Capital Improvement Plan	No	-	-	-	-
Comment: None					
Disaster Debris Management Plan	No	-	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	-	-	-	-
Comment: None					
Stormwater Plan	No	-	-	-	-
Comment: None					
Open Space Plan	Yes	No	Included in Town Comprehensive Plan	Local	Town Board
Comment: Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses.					
Urban Water Management Plan	No	-	-	-	-
Comment: None					

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Habitat Conservation Plan	No	-	-	-	-
Comment: None					
Economic Development Plan	No	-	-	-	-
Comment: None					
Shoreline Management Plan	N/A	-	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	-	-	-	-
Comment: None					
Forest Management Plan	No	-	-	-	-
Comment: None					
Transportation Plan	No	-	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	-	-	-	-
Comment: None					
Agriculture Plan	No	-	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Town of West Seneca Disaster Plan	Local	WS OEM
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).					
Strategic Recovery Planning Report	No	-	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	-	-	-	-

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this? (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Continuity of Operations Plan	Yes	No	Town of West Seneca Disaster Plan WSPD GOP O 58.3	Local	WS OEM WSPD Town Board
Comment: According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations.					
Public Health Plan	Yes	Yes	Due to NYS on 4/1/2021	Local	Town Board
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Town of West Seneca to oversee and track development.

Table 9.45-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	There are few residential development areas left, the town industrial park is about 50 percent built out

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of West Seneca and their current responsibilities which contribute to hazard mitigation.

Table 9.45-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Seven members
Zoning Board of Adjustments	Yes	Five members
Planning Department	Yes	One Staff through Code Enforcement Office
Mitigation Planning Committee	No	The town is looking to establish one
Environmental Board/Commission	Yes	Town Environmental Conservation Commission
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Public Works/Highway Department	Yes	Staff of approx. 100, tasked with all road work and maintenance, town parks, buildings, and grounds maintenance, sewers
Construction/Building/Code Enforcement Department	Yes	Six staff
Emergency Management/Public Safety Department	Yes	One Emergency Manager, police liaison, integrated with other town officials
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Code Red, Social Media
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Sewer crew of three under the Highway Department. Tree Maintenance Plan
Mutual aid agreements	Yes	Erie County Emergency Management Aid Plan/Fire Mutual Aid Plan/Police Mutual Aid Plan
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering/CPL
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering/ Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Engineering/CPL
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Engineering/Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Engineering/CPL
Surveyor(s)	Yes	Engineering/CPL
Emergency Manager	Yes	One EM, two deputies, police liaison
Grant writer(s)	Yes	Private Contractor
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of West Seneca.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes, CARES/FEMA DR
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of West Seneca.

Table 9.45-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Town Supervisor/WSPD and OEM PIO
Personnel skilled or trained in website development	Yes	Private Contractor
Hazard mitigation information available on your website	Yes	Westseneca.net
Social media for hazard mitigation education and outreach	Yes	Town of West Seneca/WSPD/OEM Facebook and Twitter
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Code Red/Facebook and Twitter
Warning systems for hazard events	Yes	Code Red/Facebook and Twitter
Natural disaster/safety programs in place for schools	Yes	WSCSD
Other	No	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of West Seneca.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Note:
N/A Not applicable
NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.45-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Strong
Landslide	Strong
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

**Strong Capacity exists and is in use*
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.45.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Steve Tanner, Town Engineer

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of West Seneca.

Table 9.45-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Town of West Seneca	123	186	$786,473	18	67

Source: *FEMA 2019*

Notes: *Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.*

RL *Repetitive Loss; SRL Severe Repetitive Loss*

Flood Vulnerability Summary

The areas prone to flooding in the Town of West Seneca include Lexington Green, areas along Buffalo Creek, Cazenovia Creek, Buffalo River, and Ebenezer Brook. The Building Department maintains a list of flood damaged properties. The town does not maintain a list of property owners interested in flood mitigation, but they do offer assistance with determine preliminary floodplain elevations for all residents who inquire. No RiskMAP projects are currently underway. The town makes Substantial Damage determination by in person inspections. In 2014, Lexington Green flooding: approximately 75 single family homes and a second flooding happened a few months later and affected the 75 homes again were declared damaged from flooding. The other flood was on School Street in 2019, where 10 residential buildings were declared damaged from flooding. No properties have been mitigated in the town. The town's flood hazard maps do not adequately address the flood risk. Ice damming occurs regularly along Cazenovia Creek and Buffalo Creek. It is impossible to determine where snags will occur, and water will back up. Ice dam flooding is not always contained within mapped floodplains.

NFIP Compliance

The Engineering department is responsible for floodplain management. There are not any certified floodplain management on staff. The town has access to resources to determine possible future flooding conditions from climate change. The town has identified that the floodplain management staff needs training on emerging technologies, and climate change effects on flooding and correlation between Great Lake elevation rise and flooding in upstream municipalities. The town's NFIP administration provides permit review, preliminary elevation determination, and inspections. In order to determine if proposed development on an existing structure would qualify as a substantial improvement is through a coordinated review effort between the Consulting Town Engineer and the Town Code Enforcement Officer.

There have not been any major barriers to running an effective NFIP program. The town has outstanding NFIP compliance violations that need to be addressed. The town has been monitoring items such as campers, trailers, and RVs placed in the floodplain by property owners. The most recent Community Assistance Visit (CAV) was on September 10, 2018. The town's flood damage prevention ordinance is Chapter 77- Flood Damage Prevention, last amended 1992. The town's floodplain management does not meet the minimum requirements because the ordinance does not include the required 2' freeboard. Other plans that support the floodplain management include the Site Plan Review, Stormwater Pollution Prevention Plan reviews and MS4 reviews for new projects. The Planning Board limits development in the floodplain to none, as best as possible.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.45.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Town of West Seneca has identified the following routes and procedures to evacuate residents prior to and during an event.

- Evacuation routes will be situational dependent. The county/state maintain an evacuation route system during a natural disaster (i.e. snow event). The Town of West Seneca is part of the NITECC (County/State) emergency action plan for closure of the RT 400, RT 219, and I-90.

Sheltering

The Town of West Seneca has identified the following designated emergency shelters within the town.

Table 9.45-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Union Fire Co	1845 Union Rd West Seneca, NY 14224	100	Yes	Yes	Yes	Basic EMS & Paramedics as needed	Red Cross trailer on site.

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Town of West Seneca has identified the following sites suitable for placing temporary housing units.

Table 9.45-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify temporary housing locations (2022-T. West Seneca-014).					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Town of West Seneca has identified the following areas suitable for relocating homes outside of the floodplain.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None identified. The town will work with the county to identify permanent housing locations (2022-T. West Seneca-014).					

9.45.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.45-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.45-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	56	0	54	0	38	0	15	0	27	0	38	0
Multi-Family	4	0	4	0	0	0	1	0	6	0	9	0
Other (commercial, mixed-use, etc.)	15	0	8	0	12	0	12	0	16	0	6	0
Total Permits Issued	**75**	**0**	**66**	**0**	**50**	**0**	**28**	**0**	**77**	**0**	**53**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
965 Center Road – Townhouses	Residential	28	965 Center Road	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, ½ Mile Buffer from HazMat Railways, Hazardous Materials Facilities Hazard Area	Completed
Crystal Creek	Residential	60	299 Leydecker Road	Wildland-Urban Intermix Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	In Progress
Rosina Foods	Commercial	1 building 100,000 SF+	3100 Clinton Street	NEHRP Soil Class D and E Hazard Area, ½ Mile Buffer from HazMat Roadways, Hazardous Materials Facilities Hazard Area	In Progress
Ebenezer Rail Car	Commercial	1building 100,000 SF+	1005 Indian Church Road	None	Completed

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Type of Development	2015	2016	2017	2018	2019	2020
Beam Mack Truck Center	Commercial	1 building	1500 North America Drive	None	Completed	
CPI Process	Commercial	1 building	2800 North America Drive	None	Completed	
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years						
None Anticipated						

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

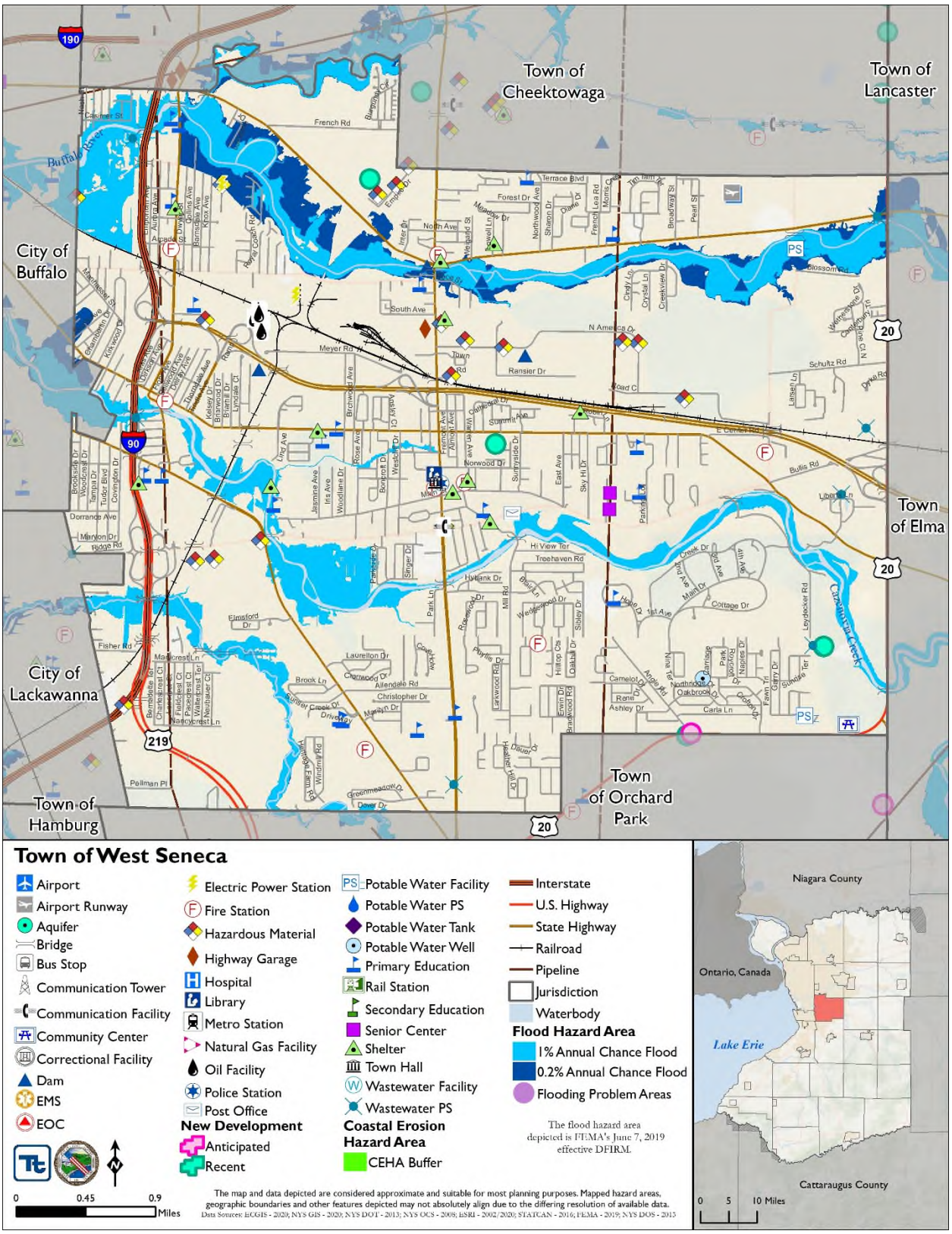
9.45.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Town of West Seneca's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of West Seneca has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

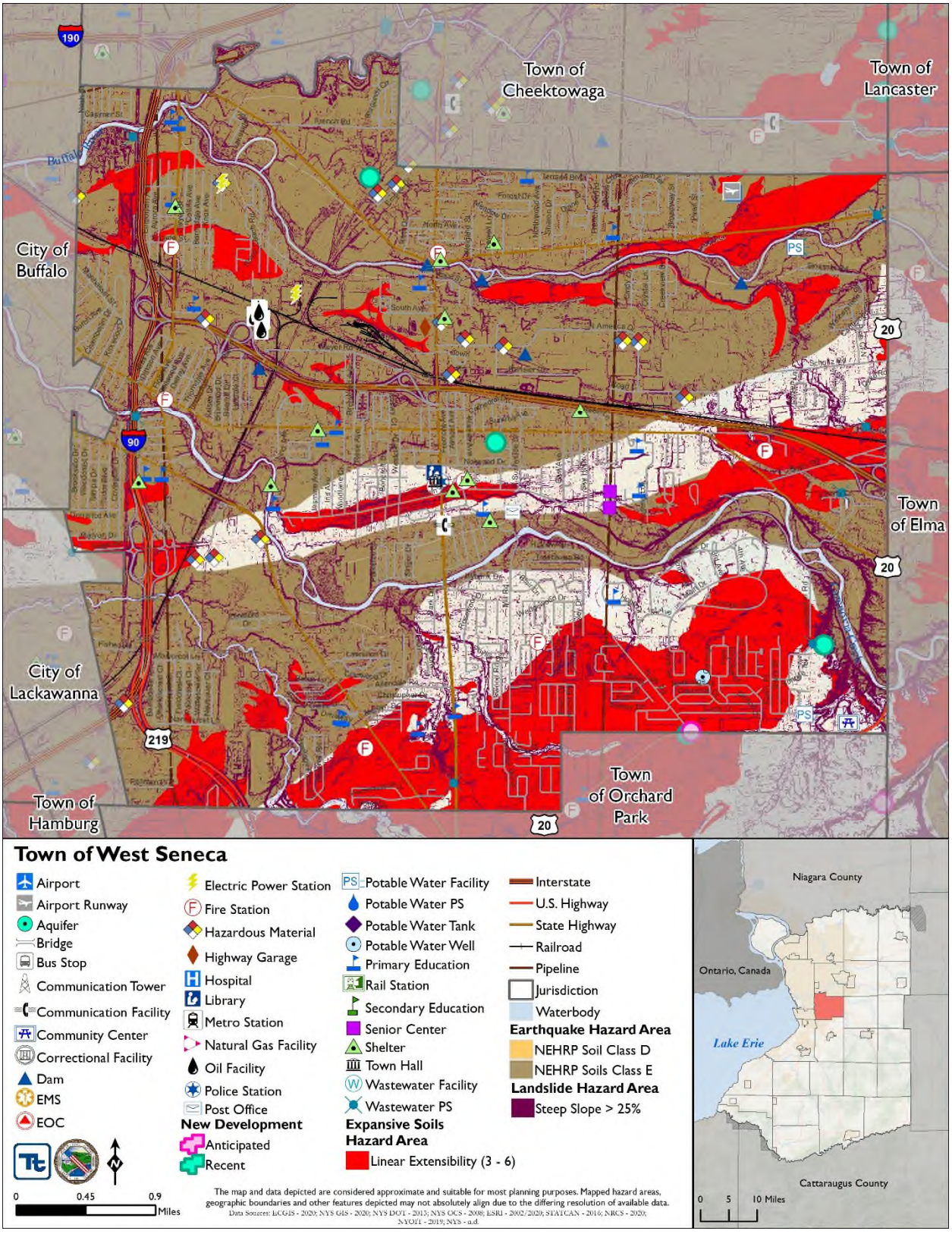
Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.45-1. Town of West Seneca Hazard Area Extent and Location Map 1



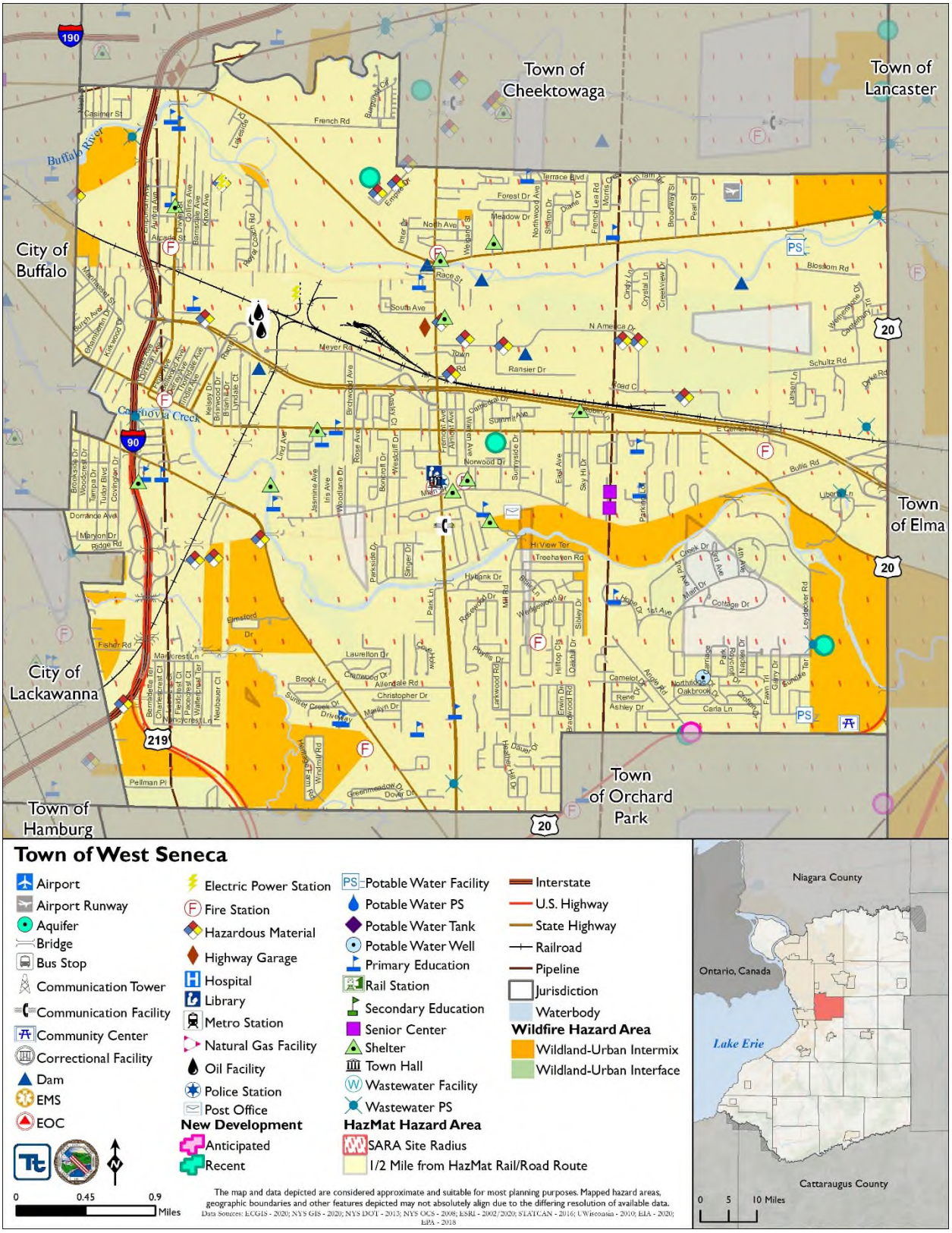
Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.45-2. Town of West Seneca Hazard Area Extent and Location Map 2



Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.45-3. Town of West Seneca Hazard Area Extent and Location Map 3



Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Town of West Seneca's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.45-14 provides details regarding municipal-specific loss and damages the town experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.45-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 1-9, 2015	Lake-effect Snow	No	No losses/costs from damages identified
August 11-15, 2015	Flash Flood	No	No losses/costs from damages identified
October 28-29, 2015	High Wind	No	No losses/costs from damages identified
November 6, 2015	Thunderstorm Wind	No	No losses/costs from damages identified
November 12, 2015	High Wind	No	No losses/costs from damages identified
November 18, 2015	High Wind	No	No losses/costs from damages identified
January 11, 2017	High Wind	No	No losses/costs from damages identified
March 8, 2017	High Wind	No	No losses/costs from damages identified
March 13, 2017	Winter Storm	No	No losses/costs from damages identified
July 20, 2017	Tornado	No	No losses/costs from damages identified
August 4, 2017	Thunderstorm Wind	No	No losses/costs from damages identified
December 10-15, 2017	Lake-effect Snow	No	No losses/costs from damages identified
December 24-29, 2017	Lake-effect Snow	No	No losses/costs from damages identified
January 2, 2018	Blizzard	No	No losses/costs from damages identified
October 6, 2018	Lightning	No	No losses/costs from damages identified
February 4, 2019	Ice Jam Flooding	No	Municipality identified – Several residences evacuated on School Street
February 24, 2019	High Wind	No	No losses/costs from damages identified
February 24, 2019	Lakeshore Flooding	No	Sewer backup pumping at sewer lift stations, salting of ice covered roads
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	No losses/costs from damages identified
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Road flooding due to heavy rains
November 27, 2019	Lakeshore Flooding	No	No losses/costs from damages identified
January 12, 2020	Lakeshore Flooding	No	Wind caused trees down, stop signs down. Removed tree debris and placed portable stop signs.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Municipal Summary of Damages and Losses
January 18, 2020	Lakeshore Flooding	No	Salting and plowing of roads
June 2, 2020	Flood, Heavy rain flooding	No	Municipality identified – highway pumps, barricades for roads
July 17, 2020	Flood	No	Municipality identified – road closure/barricades. Pumping at sewer lift stations
November 15, 2020	High Wind	No	Municipality identified – Trees down, power outage

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Town of West Seneca's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of West Seneca. The Town of West Seneca has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- The town increased the flood ranking from low to high due to reoccurring ice jam flooding and creek bed erosion.
- The town increased the Hazardous Materials Incidents ranking from low to medium because the town has a large volume of commercial traffic on I-90, Routes 400, and 219. There is also the North America Industrial Park within the town that houses several commercial industries using hazardous materials.
- The town increased the wildfire ranking from low to medium because the old Lehigh Valley line along I-90 is under-maintained and has the potential to threaten homes.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood*	Hazardous Materials*
Low	Medium	High	Medium	Medium	High	Medium

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire*
Low	High	High	High	High	Medium

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.45-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Ebenzer Dam	Dam	X	X	2022-T. West Seneca-002
Ferrand Manufacturing Co Dam	Dam	X	X	2022-T. West Seneca-003
Gardenville 230 Station	Hazardous Material	-	X	2022-T. West Seneca-004
Borden Rd Potable Water Facility	Potable Water Facility	X	X	2022-T. West Seneca-005
Promise House	Primary Education	X	X	2022-T. West Seneca-006
West Seneca West Senior High School	Primary Education	X	X	2022-T. West Seneca-007
Borden Clinton Pump Station	Wastewater Pump Station	X	X	2022-T. West Seneca-008
Clinton Transit Pump Station	Wastewater Pump Station	-	X	2022-T. West Seneca-008
Ashmund Road Wastewater Pump Station	Wastewater Pump Station	X	X	2022-T. West Seneca-009
Wastewater Pump Station near the Buffalo River	Wastewater Pump Station	X	X	2022-T. West Seneca-010

Source: HAZUS-MH 4.2

Identified Issues

After review of the Town of West Seneca's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Town of West Seneca has identified the following vulnerabilities within their community:

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

- During the last two major rain events in June and July 2020, there have been flooding issues in the area of 945 Center Road. Other areas of repeated roadway flooding during heavy rains include:
    - 550 Orchard Park Road; 3300 Seneca St; 160 Lein Road (Viaduct); Fisher Court. Neighborhood, Molnar Avenue, Jasmine Ave
- Throughout the past five years, there has been a number of generalized heavy rainfalls resulting in road flooding.

- Ice jam flooding continues to be a yearly concern during the spring thaw. There was one significant event on February 4, 2019 in the School Street neighborhood on Buffalo Creek. Several residences were evacuated and suffered significant structural damage. This flooding event also disrupted power to the pump station at Fairfax & Ashmund resulting in additional pumps being rented to assist the neighboring community's sewer needs.

9.45.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-17. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Continue mitigation efforts in area streams	Stream Flooding	Highway, WSOEM, Engineering Dept	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. See 2022-Town of West Seneca-016 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
2	Create Public Education Program for Residents	Stream Flooding	Highway, WSOEM, Engineering Dept.	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability of public education efforts for residents in Floodprone areas
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
3	Secure funding to buyout properties in floodplain	Stream flooding	Highway, WSOEM, Engineering Dept., Town Govt	Yearly Ice Jam flooding in Buffalo and Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. See 2022-Town of West Seneca-015 3.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
4	Continue support of the NWS and Storm Watchers Program	Severe Storm, Severe Winter Storm	WSOEM	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks, Severe Snow and Wind Events	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability, WSOEM trains in this area
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
5	Create legislation that will promote “Best Practices” and provide ongoing funding	Stream Flooding	Highway, WSOEM, Engineering Dept	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	No Progress	Cost	-	1. Discontinue 2. 3. WSOEM does not create legislation. Any legislation regarding flooding is taken care of on the Town Government level with input from Engineering
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
6	Complete various construction &	Stream Flooding	Highway, WSOEM,	Yearly Ice Jam flooding in Buffalo And Cazenovia Creeks	In Progress	Cost	-	1. Include in 2022 HMP 2. A shared file will be created to maintain a list of all mitigation and maintenance efforts and a schedule
						Level of Protection	-	

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	_maintenance projects; Create a schedule for ongoing maintenance of completed projects		Engineering Dept			Damages Avoided; Evidence of Success	-	maintained for same. See 2022-Town of West Seneca-016 3.
7	Create a Weather Awareness & Discount Purchase Plan	Severe Storm, Severe Winter Storm	Office of Disaster Preparedness	Raise public awareness for severe weather events	No Progress	Cost	-	1. Discontinue 2. 3. Not relevant
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
8	Create a cooperative that maintains program with Town and National Grid, NYSEG	Severe Storm, Severe Winter Storm	Highway Dept.	Power and other utility loss during significant weather events	Ongoing Capability	Cost	-	1. Do not include in 2022 HMP 2. 3. Ongoing capability, ongoing efforts in collaboration with utility companies help in the event of wind and snow events to maintain power and other critical utilities
						Level of Protection		
						Damages Avoided; Evidence of Success		
9	Residential cooperative buying & storage of de-icing materials	Severe Storm, Severe Winter Storm	Highway Dept.	Provide residents with de-icing materials	Complete	Cost	-	1. Do not include in 2022 HMP 2. 3. WS Highway maintains a shared services agreement with surrounding jurisdictions through mutual aid plans
						Level of Protection		
						Damages Avoided; Evidence of Success		
10	Lobby for stringent hazardous materials release laws, enforcement & penalties	Hazardous Materials	Office of Disaster Preparedness	Increase HazMat release laws, enforcement, & penalties to decrease spills and releases	No Progress	Cost	-	1. Discontinue 2. 3. WSOEM is not a lobbying agency
						Level of Protection		
						Damages Avoided; Evidence of Success		
11	Educate public on proper procedures to take if a hazardous material is	Hazardous Materials	WSOEM	Educate the public on HazMat in the event of a release near their location to prevent injuries or death	Ongoing Capability	Cost	-	1. Discontinue 2. 3. Ongoing capability - WSOEM will continue public education efforts in all facets of residents disaster planning
						Level of Protection		
						Damages Avoided;		

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	released near their locations					Evidence of Success		
12	Establish a radio system that allows interagency communication	Terrorism	Police & Fire Departments	Lack of Interop Comms	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Ongoing capability – the county has significantly upgraded interop communications countywide. WSPD now carriers Fire Mobiles in the supervisors' vehicles in the even of unified command situations and has access to the same interop channels
13	Establish a radio-based travel advisory system, possibly in cooperation with Amber Alert System and/or various message signs	Transportation Accidents	Police Dept.	Travel advisories could potentially decrease transportation accidents and traffic jams	No Progress	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. WSPD cannot "establish" a radio system, yet works within the NYS DOT and NITTEC frameworks with their capabilities for advisories
14	Update/revise floodplain management ordinances to comply with latest FEMA regulations	Flood	Engineering Dept.	Yearly ice jam flooding in Buffalo and Cazenovia Creeks	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Engineering will continue to comply with latest FEMA guidelines and update the WS Town Code as appropriate
15	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs	Flood	Engineering Dept.	Yearly Ice Jam flooding in Buffalo and Cazenovia Creeks	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	-	1. Discontinue 2. 3. Engineering will continue to comply with latest FEMA guidelines and update the West Seneca Town Code as appropriate
16	Join the Community Rating System (CRS)	Flood	Highway, WSOEM, Engineering Dept., Town Govt	Decrease cost of flood insurance for businesses and residents in the floodplain	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	- - -	1. Discontinue 2. 3. Ongoing capability

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of West Seneca has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- Cayuga creek mitigation efforts

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of West Seneca participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.45-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X								X
Cyber Attack	X	X								X
Earthquake	X	X		X			X			X
Expansive Soils	X	X								X
Extreme Temperature	X	X								X
Flood	X	X	X	X	X		X	X	X	X
Hazardous Materials	X	X		X			X			X
Landslide	X	X								X
Pandemic	X	X								X
Severe Storm	X	X								X
Severe Winter Storm	X	X	X					X	X	X
Utility Failure	X	X								X
Wildfire	X	X		X			X			X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.45-19 summarizes the comprehensive range of specific mitigation initiatives the Town of West Seneca would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.45-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-West Seneca-001	Flood mitigation for 945 Center Road	1, 2	Flood	**Problem**: During the last two major rain events in June and July 2020, there have been flooding issues in the area of 945 Center Road. The town has been in contact with Erie County DPW and the local developer of the property to try and come up with a solution to help alleviate the problem in the future. **Solution**: Continue to work with DPW and the local developer to minimize the impact of flooding problems. Conduct engineering studies when drainage issues are identified to determine the best project to mitigate flooding.	No	None	Within 5 years	Town, Erie County DPW, local developer	TBD on projects	Flooding mitigated on 945 Center Road	County budget, BRIC, FEMA HMGP	High	SIP, LPR	PR
2022-Town of West Seneca-002	Work with the Ebenzer Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The Ebenzer Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the facility to the 0.2% annual chance flood event.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach	The dam owner will be aware of options to protect the dam to the 0.2% annual chance flood event.	Town Budget	High	EAP	PI
2022-Town of West Seneca-003	Work with the Ferrand Manufacturing Co Dam owner on how they can protect their dam to the 0.2% annual	1, 2, 3	Flood	**Problem**: The Ferrand Manufacturing Co Dam is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and discuss options for protecting the	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach	The dam owner will be aware of options to protect the dam to the 0.2% annual chance	Town Budget	High	EAP	PI

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	chance flood event			facility to the 0.2% annual chance flood event.						flood event.				
2022-Town of West Seneca -004	Assess the flood risk at the Gardenville 230 Station	1, 2, 3	Flood	**Problem**: The Gardenville 230 Station is in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach	Ensures continuity of operations of the facility	Town Budget	High	EAP	PI
2022-Town of West Seneca -005	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Borden Road Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Borden Road Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP
2022-Town of West Seneca -006	Protect the Promise House to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The Promise House is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Promise House to protect it to the 0.2% annual	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.									
2022-Town of West Seneca-007	Protect the West Seneca West Senior High School to the 0.2% annual chance flood event	1, 2	Flood	**Problem**: The West Seneca West Senior High School is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the West Seneca West Senior High School to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP
2022-Town of West Seneca-008	Assess the flood risk at the Clinton Transit and Borden Clinton Pump Stations	1, 2, 3	Flood	**Problem**: The Clinton Transit Pump Station and Borden Clinton Pump Station are in the 0.2% annual chance flood event. **Solution:** The FPA will contact the facility owner and assess the flood risk at the facility.	Yes	None	Within 6 months for outreach	FPA	<$100 for outreach	Ensures continuity of operations of the facility	Town Budget	High	LPR, SIP	PP
2022-Town	Protect the Ashmund	1, 2, 3	Flood	**Problem**: The Ashmund Road Wastewater Pump Station is in	Yes	None	Within 5 years			Ensures continuity	FEMA HMGP,	High	LPR, SIP	PP

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
of West Seneca -009	Road Wastewater Pump Station to the 0.2% annual chance flood event			the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Ashmund Road Wastewater Pump Station to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.				Engineer, facility manager	TBD by feasibility assessment	of operations of the facility	BRIC, USDA Community Facilities Grant Program, EMPG			
2022-Town of West Seneca -010	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	1, 2, 3	Flood	**Problem**: The Wastewater Pump Station near the Buffalo River is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event. **Solution**: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater Pump Station near the Buffalo River to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers	Yes	None	Within 5 years	Engineer, facility manager	TBD by feasibility assessment	Ensures continuity of operations of the facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG	High	LPR, SIP	PP

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Once the most cost-effective option is identified, the town will carry out the option.										
2022-Town of West Seneca-011	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1, 2, 3	Earthquake	**Problem**: The Verizon facility, several dams, electric power stations, hazardous material facilities, oil facilities, and the West Seneca Post Office are in the city are in the earthquake hazard area. **Solution**: Assess the structures and determine if they are at risk of earthquakes and determine necessary mitigation measures to protect them from earthquakes	Yes	None	Within 6 months for outreach	Town of West Seneca	<$100 for outreach, TBD by engineering study	The facility owners are aware of options to protect the facilities facility from potential earthquake damage	Town Budget	High	EAP	PI
2022-Town of West Seneca-012	Work with the private facility owner to protect the facility from wildfires	1, 2, 3	Wildfire	**Problem:** Speedway 9976 is located in the wildfire hazard area. **Solution:** Work with the property owner to determine the risk from wildfires and identify possible property maintenance actions that can help protect the facility.	Yes	None	Within 6 months for outreach	Town of West Seneca	<$100 for outreach	The facility owner is aware of options to protect the facilities from potential wildfire damage	Town Budget	High	EAP	PI
2022-Town of West Seneca-013	Protect the critical facilities on the Town of West Seneca from HazMat incidents	1, 2, 3	Hazardous Materials Incidents	**Problem:** All of the critical facilities in the Town of West Seneca may be at risk of being exposed to hazardous materials incidents. **Solution:** Develop and maintain a plan or procedures to ensure that the facilities can safely	Yes	None	Within 6 months for outreach	Town of West Seneca	<$100 for outreach, TBD by engineering study	Continuity of operations in place	Town Budget	High	LPR	ES

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				continue their operations or be shut down if personnel are evacuated from the buildings due to a hazmat release.										
2022-Town of West Seneca-014	Permanent and Temporary Housing	1, 2, 3	All Hazards	**Problem:** The town does not have any designated Temporary or Permanent Housing locations to be used to house displaced residents, or to use to relocate homes that experience repetitive flood damages and losses, respectively. **Solution:** The town will work with Erie County Emergency Services to identify, purchase and designate sites to be owned by the jurisdiction that meet applicable local zoning requirements and floodplain laws for the purpose of relocation of repetitive loss flood-damaged homes to preserve the tax base and population size. If there is no land available, the town will work with the County to identify land in neighboring jurisdictions for the same purpose. The town will also seek to identify and designate land meeting the same requirements for the purpose of placing temporary housing units for displaced residents.	No	None	Short	Town of West Seneca	Medium	High	Town Budget	High	LPR	ES
2022-Town of West Seneca-015	Repetitive Loss Owner Outreach	1, 2, 3	Flood	**Problem:** There are 18 Repetitive Loss properties within the town, and 67 NFIP policy holders living within the 1% SFHA.	No	No	6 months	Town of West Seneca Engineering	Low	High	Municipal Budget	High	EAP	PI

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Solution: The town will work to notify all property owners with residences within the floodplain and support flood mitigation projects at these addresses. If interested, the town will support grant applications, project development, and administrative tasks related to flood mitigation projects including retrofitting, hardening, and elevation as necessary.										
2022-Town of West Seneca-016	Lexington Green Berm	1, 2, 3	Severe Winter Storm, Flood	**Problem:** The Town experiences yearly Ice Jam flooding in Buffalo and Cazenovia Creeks. **Solution:** The number one priority for the Town of West Seneca is to pursue a long term and more permanent solution to mitigate yearly ice jam flooding in the Buffalo and Cazenovia creeks. Each year the Town takes mitigation efforts such as creek bed and ice retention structure maintenance, ice cutting and breaking efforts in collaboration with the City of Buffalo Engineering. The Town also pre-stages pumps in the event of potential flooding and have a plan to monitor flooding and respond accordingly. The problem the Town faces is finding a more permanent solution to the yearly potential flooding in the Buffalo Creek between Union Rd. and Harlem Rd. Historically there have been	No	No	2 years	Town of West Seneca	High	High	FEMA BRIC, HMGP, USACE	High	NSP, SIP	NR, SP

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				several serious flooding events in the School St and Lexington Green neighborhoods. In fact, in the Lexington Green neighborhood, a temporary berm was created using large bags filled with stone and concrete. That temporary berm is nearing its shelf life and has begun to deteriorate beyond usefulness. Additionally, the berm was placed on a utility easement and is now being requested to be moved by said utility company. The Town will seek assistance in the financial and technical areas to assist in developing a more permanent solution to the ice jam flooding, with an emphasis on green infrastructure and natural solutions.										
2022-Town of West Seneca-017	Maryon Rd. and Ashmund Rd. Wastewater Pump Stations Generator	1, 2, 3	All Hazards	**Problem:** The Wastewater Pump Stations on Maryon Rd. and Ashmund Rd. do not have adequate backup power to maintain operations during utility failures. **Solution:** The Town will seek funding to purchase and install adequate, permanent and automatic backup generators at the above locations. The Town will ensure that the generators are protected from additional hazard events and damages.	Yes	No	6 months	Town of West Seneca	$50,000 each	High, ensures continuity of operations of critical facilities	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	High	SIP	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-West Seneca -001	Flood mitigation for 945 Center Road	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -002	Work with the Ebenzer Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -003	Work with the Ferrand Manufacturing Co Dam owner on how they can protect their dam to the 0.2% annual chance flood event	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -004	Assess the flood risk at the Gardenville 230 Station	1	1	1	1	1	1	0	0	1	1	1	0	1	0	10	High
2022- Town of West Seneca -005	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	0	0	0	0	11	High
2022- Town of West Seneca -006	Protect the Promise House to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022- Town of West Seneca -007	Protect the West Seneca West Senior High School to the 0.2% annual chance flood event	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-008	Assess the flood risk at the Clinton Transit and Borden Clinton Pump Stations	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2022- Town of West Seneca -009	Protect the Ashmund Road Wastewater	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.45-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	Pump Station to the 0.2% annual chance flood event																
2022- Town of West Seneca -010	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	1	1	1	1	1	0	0	1	1	1	0	0	0	0	10	High
2022-Town of West Seneca-011	Work with the private building owners in the town to determine if earthquake risk exists and to assess the structures and determine necessary mitigation measures to protect them from earthquakes	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-Town of West Seneca-012	Work with the private facility owner to protect the facility from wildfires	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-Town of West Seneca-013	Protect the critical facilities on the Town of West Seneca from HazMat incidents	1	1	1	1	1	0	0	1	1	1	1	1	0	0	10	High
2022-T. West Seneca-014	Permanent and Temporary Housing	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-015	Repetitive Loss Owner Outreach	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2022-Town of West Seneca-016	Lexington Green Berm	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2022-Town of West Seneca-017	Maryon Rd. and Ashmund Rd. Wastewater Pump Stations Generator	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.45.9 Action Worksheets

The following action worksheets have been developed by the Town of West Seneca to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event		
Project Number:	2022- Town of West Seneca -005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Borden Road Potable Water Facility is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Borden Road Potable Water Facility to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the facility
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	High, TBD by feasibility assessment	**Mitigation Action Type:**	EAP, SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Relocate facility	N/A	Not cost effective, may not be necessary after vulnerability assessment
	Decommission facility	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Borden Road Potable Water Facility to the 0.2% annual chance flood event	
Project Number:	2022- Town of West Seneca -005	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at facility
Cost-Effectiveness	1	
Technical	1	Town engineering can complete study
Political	1	
Legal	1	
Fiscal	0	Town will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event		
Project Number:	2022- Town of West Seneca-010		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Wastewater Pump Station near the Buffalo River is in the SFHA and vulnerable to flooding. Critical facilities need to be protected to the 0.2% annual chance flood event.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Wastewater Pump Station near the Buffalo River to protect it to the 0.2% annual chance flood event. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500-year flood	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of the facility
Useful Life:	30 years	**Goals Met:**	1, 2
Estimated Cost:	High, TBD by feasibility assessment	**Mitigation Action Type:**	EAP, SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Dependent on funding
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG
Responsible Organization:	Engineer, facility manager	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Alternatives:**	**Action**	**Estimated Cost**
	No Action	No Action	$0
	Relocate facility	N/A	Not cost effective, may not be necessary after vulnerability assessment
	Decommission facility	N/A	Not feasible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Wastewater Pump Station near the Buffalo River to the 0.2% annual chance flood event	
Project Number:	2022- Town of West Seneca-010	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Ensures safe drinking water
Property Protection	1	Reduces flooding at facility
Cost-Effectiveness	1	
Technical	1	Town engineering can complete study
Political	1	
Legal	1	
Fiscal	0	Town will seek funding
Environmental	1	No concerns
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 84-Section-9.45-West-Seneca-T-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

9.46 Village of Williamsville

This section presents the jurisdictional annex for the Village of Williamsville. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the village participated in the planning process; an assessment of the Village of Williamsville's risk and vulnerability; the different capabilities utilized in the village; and an action plan that will be implemented to achieve a more resilient community.

9.46.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Williamsville's hazard mitigation plan primary and alternate points of contact. The Village of Williamsville followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many village departments, including: Emergency Services and Public Works. The Director of Emergency Services represented the community on the Erie County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.46-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Zymanek, Amherst Emergency Services Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-839-6707 Email: jzymanek@apdny.org	Name/Title: Dominic Creamer, Amherst Emergency Services Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-839-6707 Email: dcreamer@apdny.org
NFIP Floodplain Administrator	
Name/Title: Tim Master, Code Enforcement Officer Address: 5565 Main Street, Williamsville, NY 14221 Phone Number: 716-570-2473 Email: Tmasters@village.williamsville.ny.us	
Additional Contributors	
Name/Title: Tim Bivonen, DPW Crew Chief Method of Participation: Provided capabilities information via worksheets	

9.46.2 Municipal Profile

The Village of Williamsville is in the northeast quadrant of Erie County. It is one square mile in size and lies mainly within the Town of Amherst with a small portion in the Town of Cheektowaga. Interstate 90 runs through the southern part of the village. The community developed where the major road between Batavia and Buffalo crossed Ellicott Creek. The available waterpower from the Creek attracted millers. The first mill was built by Jonas Williams in 1811. The village was named for Mr. Williams when the town incorporation in 1850. During the War of 1812, American troops stationed within the Village of Williamsville. Williamsville has several parks. Glen Park which offers views of Ellicott Creek as it falls over the Onondaga

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Escarpment. Island Park has a large pavilion and is the site of Old Home Days and the Taste of Williamsville events during the summer. The Williamsville Central School District includes the village, the eastern part of the Town of Amherst, and a small portion the Town of Clarence (Village of Williamsville 2020).

According to the U.S. Census, the 2010 population for the Village of Williamsville was 5,300. The estimated 2019 population was 5,233, a 1.3 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.1 percent of the population is 5 years of age or younger and 23.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.46.3 Jurisdictional Capability Assessment and Integration

The Village of Williamsville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6.4 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in this Jurisdictional Capability Assessment (Section 9.46.3). The Village of Williamsville's identified opportunities for integration of mitigation concepts to be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Williamsville. The comment field provides information as to where hazard mitigation has been integrated.

Table 9.46-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Codes, Ordinances, & Requirements					
Building Code	Yes	Yes	Chapter 28, Fire Prevention and Building Code Administration	Local	Building Department
Comment: The Building Code establishes that a permit for development in flood hazard areas shall be required if the proposed construction or any other development is within the area of special flood hazard. Unsafe buildings are addressed in accordance with the procedures established by Chapter 15 of the Village Code					
Zoning Code	Yes	No	Chapter 112, Village of Williamsville Zoning	Local	Planning Board, Building Department
Comment: The Chapter's purpose is to promote and protect public health, safety, comfort, convenience, prosperity and other aspects of the general welfare by providing adequate light, air and convenience of access; preventing undue concentration of population and overcrowding of land; preventing congestion in the streets; securing safety from fire, flood, panic and other dangers; and facilitating adequate provision for					

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
transportation, water, sewerage, schools, parks and other public requirements. These regulations are made with reasonable consideration, among other things, to the peculiar suitability of each district for uses, with a view to encouraging the most appropriate use of land throughout the village and conserving the value of buildings and lands therein.					
Subdivision Ordinance	No	No	-	-	-
Comment: None					
Stormwater Management Ordinance	Yes	Yes	Chapter 112-28 Stormwater Management, 2018	Local	Building Department
Comment: The purpose of this section is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 112-28A of this chapter. This section seeks to meet those purposes by achieving the following objectives: (1) Meet the requirements of minimum measures 4 and 5 of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-15-003, as amended or revised; [Amended 11-26-2018 by L.L. No. 13-2018] (2) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-0-15-003, as amended or revised; [Amended 11-26-2018 by L.L. No. 13-2018] (3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels; (4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; (5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and (6) Reduce stormwater runoff rate sand volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.					
Post-Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Real Estate Disclosure	Yes	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
Comment: In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.					
Growth Management	No	Yes	-	-	-
Comment: None					
Site Plan Review	Yes	No	Chapter 112, Zoning	Local	Building and Planning Department
Comment: Site plan review is part of the village’s land development review process. Site plan approval shall only be granted when increases in stormwater runoff shall be minimized from land development activities to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels.					
Environmental Protection Ordinance	No	Yes	-	-	-
Comment: None					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 31, Flood Damage Prevention ordinance, 2019	Local	FPA

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: The Flood Damage Prevention ordinance enforces regulations that reduce flood exposure and risk. It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program. The ordinance requires BFE+2 feet for all construction in the SFHA (residential and non-residential).					
Municipal Separate Storm Sewer System (MS4)	Yes	Yes	Chapter 81, 2003, Sewer Uses	Local, county	Village Engineer
Comment: This chapter sets forth requirements for users of the Sanitary Sewer Facilities of the Village of Williamsville and enables the Village to comply with all applicable state and federal laws, including the Clean Water Act (United States Code 33 U.S.C. § 1251 et seq.) and the General Pretreatment Regulations (Code of Federal Regulations 40 CFR 403). It is further the explicit purpose of this chapter to achieve the following: A. To prevent the introduction of pollutants into the Sanitary Sewer Facilities that will interfere with its operation. B. To prevent the introduction of pollutants into the Sanitary Sewer Facilities that will pass through the Sanitary Sewer Facilities inadequately treated, into receiving waters, or otherwise be incompatible with the Sanitary Sewer Facilities. C. To protect Sanitary Sewer Facilities personnel who may be affected by wastewater and sludge in the course of their employment and the public. D. To promote reuse and recycling of industrial wastewater and sludge from the Sanitary Sewer Facilities. E. To establish fees for the equitable distribution of the cost of operation, maintenance, treatment, and improvement of the Sanitary Sewer Facilities. F. To enable the Village of Williamsville to comply with all contractual, environmental, and legal discharge elimination system conditions, and any other federal or state laws to which the Sanitary Sewer Facilities are subject. G. To eliminate the discharge of unpolluted waters into the Sanitary Sewer Facilities. H. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02 or as amended or revised. [Added 12-17-2007 by L.L. No. 5-2007] I. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process, or discharge non-stormwater wastes. [Added 12-17-2007 by L.L. No. 5-2007] J. To prohibit illicit connections, activities, and discharges to the MS4. [Added 12-17-2007 by L.L. No. 5-2007] K. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, water containing pollutants, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment, and other pollutants into the MS4. [Added 12-17-2007 by L.L. No. 5-2007]					
Emergency Management Ordinance	No	No	-	-	-
Comment: None					
Climate Change Ordinance	No	Yes	-	-	-
Comment: None					
Disaster Recovery Ordinance	No	No	-	-	-
Comment: None					
Disaster Reconstruction Ordinance	No	No	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Planning Documents					
Comprehensive Plan	Yes	No	Village of Williamsville Community Plan & Draft Generic Environmental Impact Statement, 2015	Local	Planning Board, Village Board
Comment: The Plan contains a map of the floodplain area surrounding Ellicott Creek.					
Capital Improvement Plan	Yes	No	5-year CIP released annually	Local	Village Board
Comment: The Village Capital Improvement Program can include hazard mitigation projects.					
Disaster Debris Management Plan	No	No	-	-	-
Comment: None					
Floodplain or Watershed Plan	No	No	-	-	-
Comment: None					
Stormwater Plan	No	No	-	-	-
Comment: None					
Open Space Plan	No	Yes	-	-	-
Comment: None					
Urban Water Management Plan	No	No	-	-	-
Comment: None					
Habitat Conservation Plan	No	No	-	-	-
Comment: None					
Economic Development Plan	No	No	-	-	-
Comment: None					
Shoreline Management Plan	No	Yes	-	-	-
Comment: None					
Community Wildfire Protection Plan	No	No	-	-	-
Comment: None					
Forest Management Plan	No	No	-	-	-
Comment: None					
Transportation Plan	No	No	-	-	-
Comment: None					
Climate Change /Resilience/ Sustainability Plan	No	Yes	-	-	-

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

	Jurisdiction has this. (Yes/No)	State Mandated? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible
Comment: None					
Agriculture Plan	No	No	-	-	-
Comment: None					
Other (this could include a tourism plan, business development plan, etc.)	No	-	-	-	-
Comment: None					
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	Yes	Joint CEMP with Town of Amherst and Village Williamsville, 2019	Local	Village Emergency Manager
Comment: The CEMP provides guidance for emergency response to hazard events.					
Strategic Recovery Planning Report	No	No	-	-	-
Comment: None					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	-	-	-
Comment: None					
Post-Disaster Recovery Plan	No	No	-	-	-
Comment: None					
Continuity of Operations Plan	No	No	-	-	-
Comment: None					
Public Health Plan	No	Yes	-	-	-
Comment: None					
Other	No	-	-	-	-
Comment: None					

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Williamsville to oversee and track development.

Table 9.46-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? If yes, what department is responsible?	Yes	Planning Board approval required for site plan. Building permit required.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you have a buildable land inventory? If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No	The village is an urban environment and is almost entirely built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Williamsville and their current responsibilities which contribute to hazard mitigation.

Table 9.46-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Administrative Capability		
Planning Board	Yes	Planning Board members review development proposals considering hazard exposure, supporting development that avoids unnecessary risk.
Zoning Board of Adjustments	Yes	Zoning Board of Appeals members balance strict application of the zoning code against other considerations. Hazard exposure is part of ZBA deliberations when necessary.
Planning Department	Yes	Village planning staff administer and implement planning solutions to natural hazard issues.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Advisory Commission is composed of six members and they advise the Planning Board and Town Board on natural assets as well as natural hazard exposure.
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Community Development Department
Public Works/Highway Department	Yes	The Department of Public Works conducts paving, wastewater drainage facilities clearance, roadway maintenance and tree trimming, all with the effect of reducing natural hazard exposure. The department consists of a General Crew Chief, Working Crew Chief, and eight Motor Equipment Operators. The General Crew Chief oversees the department.
Construction/Building/Code Enforcement Department	Yes	The Building Department is responsible for regulating building construction and adherence to the building and fire codes. Building Department responsibilities include: • Reviewing construction plans and building permit applications for conformance with the Codes of the Village of Williamsville and New York State • Reviewing Site Plans (including grading, utility, parking, etc.) and related documentation for compliance with the Code of the Village of Williamsville • Referring all applicable plans to various Village of Williamsville committees including Traffic & Safety, Environmental, Historic Preservation, etc. • Reviewing and referring as applicable all Zoning Board of Appeals applications and documentation and serving as liaison to the ZBA • Reviewing and referring as applicable all exterior plans, site plans, sign permits, etc. to the Planning & Architectural Review Board (P&ARB) and serving as liaison to the P&ARB

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
		• Reviewing and processing all plumbing plans and permit applications for conformance with the Codes of the Village of Williamsville and New York State. This also includes conducting sump pump inspections required for real estate transfers • Reviewing and processing all sign permit applications for conformance with the Code of the Village of Williamsville • Conducting field inspections of all required elements of construction for conformance with the Codes of the Village of Williamsville and New York State and the submitted building permit • Conducting field inspections of all required elements of plumbing for conformance with the Codes of the Village of Williamsville and New York State and the submitted plumbing permit • Investigating all property complaints and issuing citations as applicable. Conducting follow up inspections of violations. Where required, issuing court summons for violations and participate in the court process through resolution • Conducting annual fire inspections of all public buildings including offices, mercantile, public assembly, apartments, and mixed-use buildings for conformance with the Codes of the Village of Williamsville and New York State and the submitted building permit
Emergency Management/Public Safety Department	Yes	Emergency response staff are shared among the village and the Town of Amherst and results in collaboration.
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Village DPW monitors need for hazard mitigation and the Department conducts paving, water drainage facilities clearance, roadway maintenance and tree trimming, all with the effect of reducing natural hazard exposure.
Mutual aid agreements	No	-
Other	No	Traffic and Safety Committee makes recommendations to the Village Board and Planning Board regarding traffic signs and speed limits to ensure the safety of Village residents and those who use the Village streets Tree Board works with the Village Forester assesses present municipal tree population, and works to improve and stabilize the village urban forest through future plantings that enhance the beauty of the greenspace Parks Committee- functions of this committee includes overseeing Garrison Park, Island Park, South Long Park, and Lehigh Memory Trail. The panel plans for park improvements and makes recommendations to the Village Board
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, integration of hazard mitigation):
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Officer
Surveyor(s)	No	-
Emergency Manager	Yes	With the Town of Amherst
Grant writer(s)	Yes	Contracted grant writer is used for grant application preparation
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Engineer on Contract

Fiscal Capability

The table below summarizes financial resources available to the Village of Williamsville.

Table 9.46-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes, Village Board
User fees for water, sewer, gas, or electric service	Yes, Tax Bill Assessment
Impact fees for homebuyers or developers of new development/homes	Yes, Sewer Infrastructure during redevelopment
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes, Village Board
Other federal or state Funding Programs	Yes, Village Board
Open Space Acquisition funding programs	Yes, Village Board
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Williamsville.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.46-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Village Clerk, public communications support is provided by the county's Lake Erie Watershed Planning Association.
Personnel skilled or trained in website development	Yes	Village Staff
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Lake Erie Watershed Alliance,
Other programs already in place that could be used to communicate hazard-related information	Yes	Village website
Warning systems for hazard events	Yes	The village Police Department broadcasts public emergency notices
Natural disaster/safety programs in place for schools	No	-
Other	Yes	See Table 9.46-4 above

Community Classifications

The table below summarizes classifications for community programs available to the Village of Williamsville.

Table 9.46-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	Unknown
NYSDEC Climate Smart Community	No	Registered for 2021-22	2021-22
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.46-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion	Strong
Cyber Attack	Moderate
Earthquake	Strong
Expansive Soils	Strong
Extreme Temperature	Strong
Flood	Moderate
Hazardous Materials	Weak
Landslide	Weak
Pandemic	Strong
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Strong
Wildfire	Strong

*Strong Capacity exists and is in use
Moderate Capacity may exist; but is not used or could use some improvement
Weak Capacity does not exist or could use substantial improvement

9.46.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

NFIP Floodplain Administrator (FPA)

Tim Masters, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Williamsville.

Table 9.46-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# Policies in the 1% Flood Boundary
Village of Williamsville	26	134	$518,994	5	16

Source: FEMA 2020a and 2020b
Notes:
RL Repetitive Loss; SRL Severe Repetitive Loss

Flood Vulnerability Summary

The south eastern end of the village has been impacted by flooding from Ellicott Creek. The village does not maintain a list of property owners' interest in flood mitigation. There are no RiskMAP projects currently underway in the village. The village indicated that no properties have been mitigated. The village's flood hazard maps adequately address the flood risk within the jurisdiction. The village does not have access to resources to determine possible future flooding conditions from climate change.

NFIP Compliance

The most recent Community Assistance Visit (CAV) was in December 2009. The Building Department is responsible for floodplain administration staff and one of the staff members is a certified floodplain

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

administrator. The village does have access to resources to determine possible future flooding conditions from climate change and support enforcement via permit review and inspections. The village stated that its floodplain management staff are not in need of assistance or training to support its floodplain management program. The village does not make Substantial Damage determinations and no elevations or acquisitions have been completed. The village's floodplain management meets minimum requirements. The community does not participate in the CRS.

9.46.5 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

The Village of Williamsville did not identify routes and procedures to evacuate residents prior to and during an event. The Village will coordinate with the Town of Amherst and county officials during a hazard event.

Sheltering

The Village of Williamsville did not identify any designated emergency shelters within the village.

Table 9.46-10. Designated Emergency Shelters

Site Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
None Identified. The village will collaborate with the county to identify emergency shelter locations, per Proposed Action # 2022-Village Williamsville-006							

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. The Village of Williamsville has identified the following sites suitable for placing temporary housing units.

Table 9.46-11. Temporary Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will collaborate with the county to identify temporary housing locations, per Proposed Action #2022-Village Williamsville-006					

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. The Village of Williamsville did not identify areas suitable for relocating homes outside of the floodplain.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.46-12. Permanent Housing Locations

Site Name	Site Address	Capacity (number of sites)	Type	Infrastructure / Utilities Available (water, electric, septic, etc.)	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
None Identified. The village will collaborate with the county to identify permanent housing locations, per Proposed Action # 2022-Village Williamsville-005					

9.46.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.46-13 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.46-13. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	1	0	0	0	1	0	4	0	2	0	1	0
Multi-Family	1	0	20	0	1	0	1	0	0	0	46	0
Other (commercial, mixed-use, etc.)	0	0	4	0	0	0	0	0	0	0	0	0
Total Permits Issued	**2**	**0**	**24**	**0**	**2**	**0**	**5**	**0**	**2**	**0**	**47**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
Lymestone Lofts	Residential	13	5933 Main Street	0.2% annual chance floodplain area	Approved
The Williams	Residential	unknown	Unknown	Unknown	Site Plan
Asher Crossing	Residential	unknown	Ward Road	Earthquake	Site Plan
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Asher Phase 2	Residential	60	Ward Road	Earthquake	In development
Blocher Homes	Residential	90	135 Evans Street	1% annual chance flood area	In development

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.46.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for the Village of Williamsville's risk assessment results and data used to determine the hazard ranking discussed later in this section.

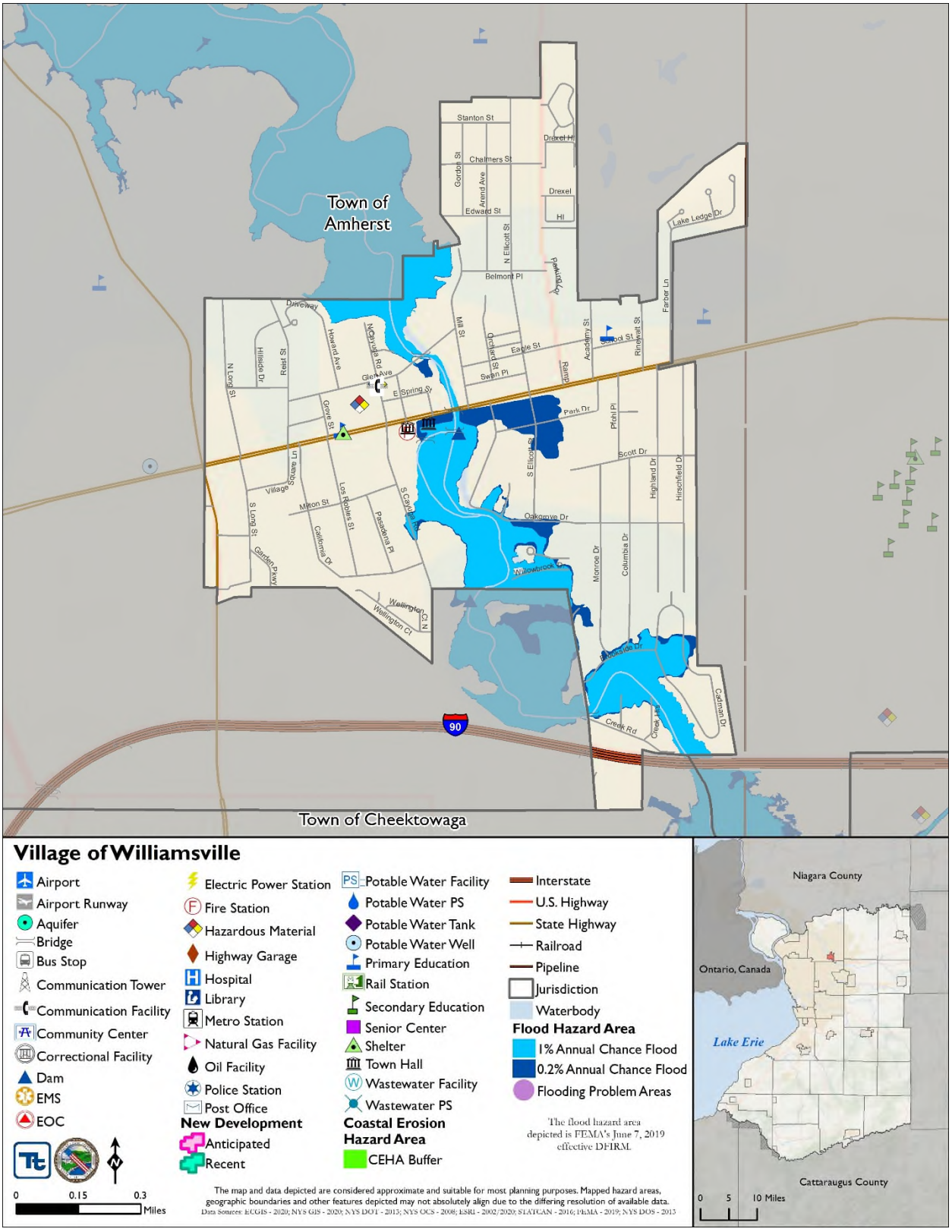
Hazard area extent and location maps were generated to illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Village of Williamsville has significant exposure. The maps also show the location of potential new development, where available. These maps are illustrated below.

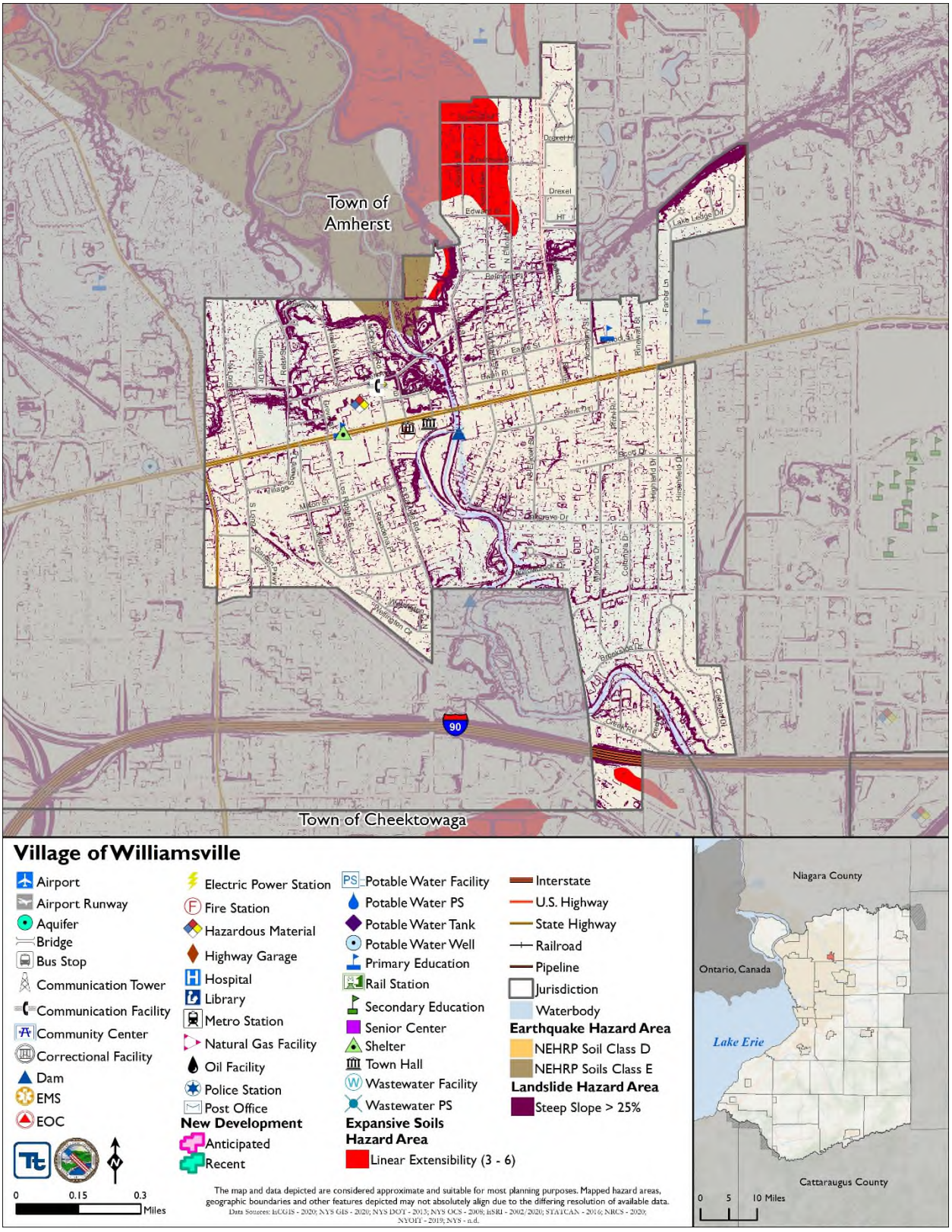
Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.46-1. Village of Williamsville Hazard Area Extent and Location Map 1



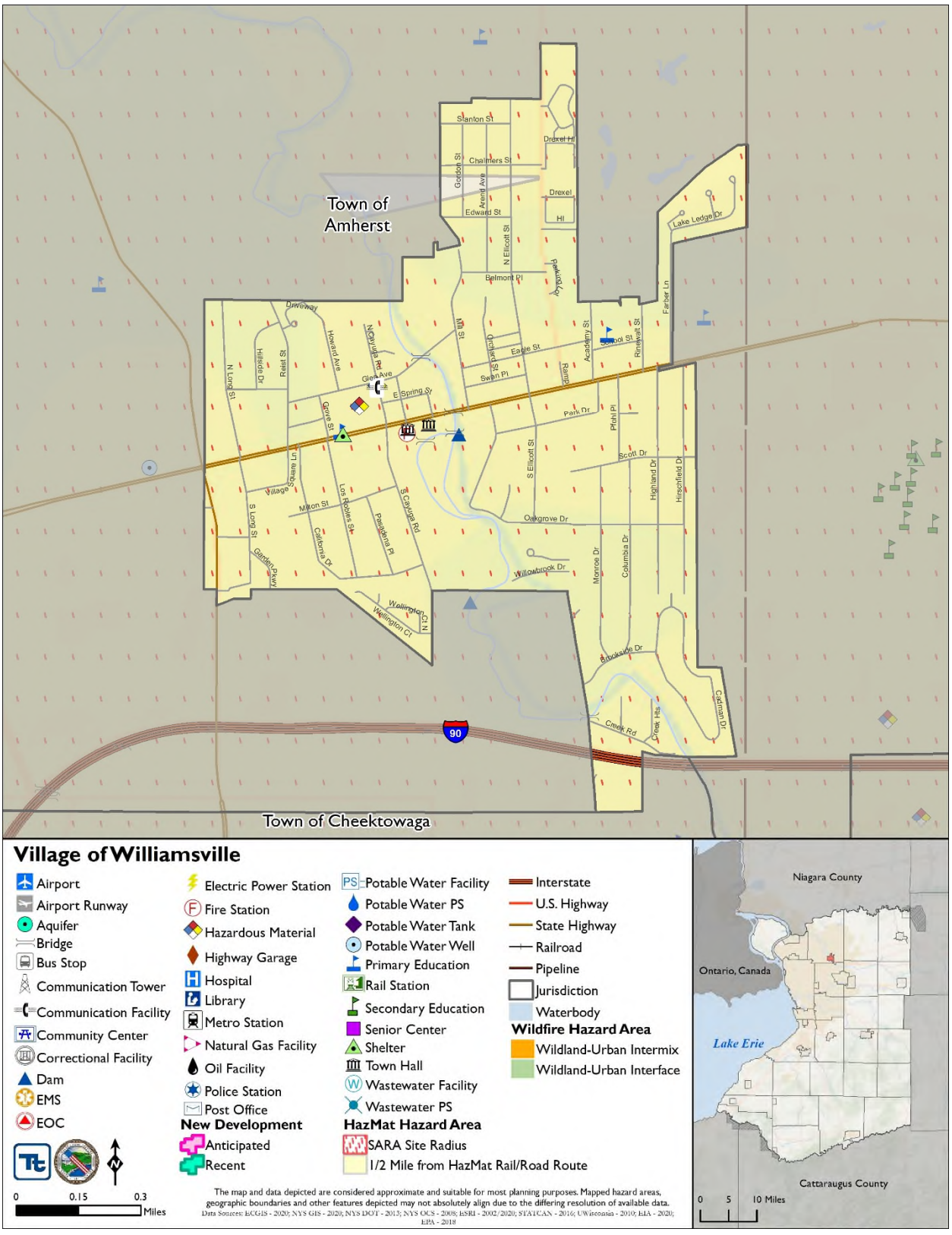
Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.46-2. Village of Williamsville Hazard Area Extent and Location Map 2



Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Figure 9.46-3. Village of Williamsville Hazard Area Extent and Location Map 3



Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Hazard Event History

Erie County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Village of Williamsville's history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. Table 9.46-14 provides details regarding municipal-specific loss and damages the village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.46-14. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 1-9, 2015	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
August 11-15, 2015	Flash Flood	No	Although the county was impacted, the village did not report any damages.
October 28-29, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 6, 2015	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
November 12, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
November 18, 2015	High Wind	No	Although the county was impacted, the village did not report any damages.
January 11, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 8, 2017	High Wind	No	Although the county was impacted, the village did not report any damages.
March 13, 2017	Winter Storm	No	Although the county was impacted, the village did not report any damages.
July 20, 2017	Tornado	No	Although the county was impacted, the village did not report any damages.
August 4, 2017	Thunderstorm Wind	No	Although the county was impacted, the village did not report any damages.
December 10-15, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
December 24-29, 2017	Lake-effect Snow	No	Although the county was impacted, the village did not report any damages.
January 2, 2018	Blizzard	No	Although the county was impacted, the village did not report any damages.
October 6, 2018	Lightning	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	High Wind	No	Although the county was impacted, the village did not report any damages.
February 24, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
October 27-November 1, 2019	Lakeshore Flooding DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
October 31-November 1, 2019	High Wind DR-4472 NY	Yes	Although the county was impacted, the village did not report any damages.
November 27, 2019	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Did your community suffer losses/costs from this event? If yes, please provide details
January 12, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
January 18, 2020	Lakeshore Flooding	No	Although the county was impacted, the village did not report any damages.
March 2020 to Present	COVID Pandemic, DR 4480	Yes	The COVID-19 pandemic killed and/or sickened thousands of Eric County residents

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Williamsville's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Williamsville. The Village of Williamsville has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the village consented with the following:

Table 9.46-15. Hazard Ranking Input

Coastal Erosion	Cyber Attack	Earthquake	Expansive Soils	Extreme Temperature	Flood	Hazardous Materials
Low	Medium	Low	Low	Medium	Low	Low

Landslide	Pandemic	Severe Storm	Severe Winter Storm	Utility Failure	Wildfire
Low	Medium	High	High	High	Low

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.46-16. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Ellicott Creek Dam	Dam	X	X	2022-Village Williamsville-001
Williamsville Dam	Dam	X	X	2022-Village Williamsville-002

Source: FEMA 2021

Identified Issues

After review of the Village of Williamsville's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Williamsville has identified the following vulnerabilities within their community:

- The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk.
- The Williamsville Dam is in the Special Flood Hazard Area.
- Floodplain Managers require training to fully implement the NFIP program within the village.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.
- Certain village roadways are impacted by poor drainage facilities.
- Certain residential properties have been repeatedly flooded
- Drainage is inadequate in specified locations in the village
- The village is not able to identify locations for temporary housing
- The village is not able to identify locations for permanent housing

9.46.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.46-17. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2022 HMP or Discontinue 2. If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Flood Mitigation Efforts to include the creek mitigation debris removal program that has been implemented. The Department of Public Works has crews out year-round performing mitigation activities as they see appropriate along the creek removing debris as necessary in accordance with State and federal regulations. This will also continue our program of working with Erie County Public works personnel.	Flooding	Not Identified	Dept. of Public Works	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete
	The Village will continue to provide roadside drainage improvements in low lying areas where the drains have proven to be minor problem areas during heavy rainfalls.	Flooding	Not Identified	Dept. of Public Works	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2022 HMP 2. Addressed by Proposed Action 2022-Village Williamsville-007 3.
	Update/revise floodplain management ordinances to be consistent with potential future new FIRMs.	Flooding	Not Identified	Building Dept.	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Complete

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Williamsville has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP:

- The Village connected roadside catch basins which eliminated ponding on certain roadways. The work was completed by the Department of Public Works.
- The Village DPW installed drainage on roadsides and rebuilt Cadman Drive Road.
- The Village retained a contractor to install permeable pavement and bioswales along Spring Street.
- The Village DPW upsized drainage pipes on California Drive to accommodate new development.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Williamsville participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.46-18. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	X	X	-	-	-	-	-	-	-	X
Cyber Attack	X	X	-	-	-	-	-	-	-	X
Earthquake	X	X	-	-	-	-	-	-	-	X
Expansive Soils	X	X	-	-	-	-	-	-	-	X
Extreme Temperature	X	X	-	-	-	-	-	-	-	X
Flood	X	X	-	X	X	X	X	-	X	X
Hazardous Materials	X	X	-	-	-	-	-	-	-	X
Landslide	X	X	-	-	-	-	-	-	-	X
Pandemic	X	X	-	-	-	-	-	-	-	X
Severe Storm	X	X	-	-	-	-	-	-	X	X
Severe Winter Storm	X	X	-	-	-	-	-	-	-	X
Utility Failure	X	X	-	-	-	-	-	-	-	X
Wildfire	X	X	-	-	-	-	-	-	-	X

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

Table 9.46-19 summarizes the comprehensive range of specific mitigation initiatives the Village of Williamsville would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.46-20 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2022-Village Williamsville-001	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	1	Flood	**Problem**: The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk. **Solution**: The village will conduct a feasibility analysis to determine the best mitigation actions to implement. The village DPW will then implement these measures.	Yes	No	Within 5 years	Village DPW	TBD per feasibility analysis	Ensure continued operation of this critical flood control facility	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, EMPG, village budget	High	SIP	SP
2022-Village Williamsville-002	Protect the Williamsville Dam to the 0.2% annual chance flood	1	Flood	**Problem**: The Williamsville Dam is in the Special Flood Hazard Area. **Solution**: The village will contact the facility manager of the privately owned dam and discuss options for protecting the dam to the 500-year flood level.	Yes	No	Within 5 years	Village DPW	Staff time for outreach	Ensure continued operation of this critical flood control facility	Municipal budget	High	EAP	PI
2022-Village Williamsville-003	Floodplain Administrator to attend training on	1	Flood	**Problem:** Floodplain Managers require training to fully implement the	No	No	Within 2 years	Village Board, FPA	$3,000	Certified floodplain managers are trained to	County and village budgets	High	EAP	PR

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	floodplain management			NFIP program within the village. **Solution:** Obtain/host training and certification for floodplain managers.						implement an effective floodplain management program				
2022-Village Williamsville-004	Address needs of Repetitive Loss Properties	1	Flood	**Problem:** Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. **Solution:** The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are	No	No	Within 3 years	Village Board, FPA	TBD per cost and number of properties to be purchased/mitigated.	Remove residents and homes from the flood threatened homes	BRIC, HMGP, FMA, cost-share by homeowners	High	SIP	PP

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				identified, the village will collect required property-owner information and develop a FEMA grant application and BCA										
2022-Village Williamsville-005	Identify locations for permanent housing	1,2	All Hazards	**Problem:** There are no identified locations for permanent housing in the village for use in case of disaster. **Solution:** The village will work with the county to identify locations for permanent housing and then seek to acquire these properties.	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	SIP	PR
2022-Village Williamsville-006	Identify locations for temporary housing	1,2	All Hazards	**Problem:** There are no identified locations for permanent housing in the village for use in case of disaster. **Solution:** The village will work with the county to identify locations for permanent housing and then	No	No	Within 2 years	FPA, Village Board	Staff time	Ensure displaced residents have a safe place to live and assemble after a flood event	Municipal budget	High	LPR	ES,

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.46-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				seek to acquire these properties.										
2022-Village Williamsville-007	Drainage improvements	1	Flood, Severe Storm	**Problem:** There are locations within the village that become inundated during heavy rains. **Solution:** The vvillage will provide roadside drainage improvements in low lying areas where the drains have proven to be minor problem areas during heavy rainfalls.	No	No	Within 2 years	Village DPW	TBD by engineering study	Protect structures and roadways from the impacts of flooding	Municipal budget, BRIC, HMGP	High	SIP	SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Critical Facility:

Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

Table 9.46-20. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2022-Village Williamsville-001	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	1	1	1	1	1	1	1	1	1	1	0	0	1	1	12	High
2022-Village Williamsville-002	Protect the Williamsville Dam to the 0.2% annual chance flood	1	1	1	1	1	1	1	1	1	1	0	0	1	0	11	High
2022-Village Williamsville-003	Floodplain Administrator to attend training on floodplain management	1	1	1	1	0	1	1	0	0	1	0	1	1	1	10	High
2022-Village Williamsville-004	Repetitive Loss Properties	1	1	1	1	1	1	1	1	1	0	0	0	1	1	11	High
2022-Village Williamsville-005	Identify locations for permanent housing	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2022-Village Williamsville-006	Identify locations for permanent housing	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2022-Village Williamsville-007	Drainage improvements	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022

9.46.9 Action Worksheets

The following action worksheets have been developed by the Village of Williamsville to aid in the submittal of grant applications to support the funding of high priority proposed actions.

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet			
Project Name:	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk		
Project Number:	2022-Village Williamsville-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Ellicott Creek Dam is in the Special Flood Hazard Area and is exposed to flood risk. The dam provides critical flood control services.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will conduct a feasibility analysis to determine the best mitigation actions to implement. The Village DPW will implement these measures.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☒	No ☐	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity flood prevention services at the Ellicott Creek Dam
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD per feasibility analysis	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	5 years	**Potential Funding Sources:**	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Village DPW	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Construct new dam	Very High	Prohibitively expensive
	Remove dam	High	Lose the flood services provided by the facility.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Protect the Ellicott Creek Dam to the 0.2% annual chance flood risk	
Project Number:	2022-Village Williamsville-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services provided by the dam
Property Protection	1	Project will protect the dam from the utility failure hazard
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	1	Within 2 years
Agency Champion	1	Village DPW
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Town of Tonawanda Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2022-Village Williamsville-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The village will work with the county to conduct outreach to flood-prone property owners, including RL/SRL property owners and provide information regarding mitigation alternatives. After preferred mitigation measures are identified, the village will collect required property-owner information and develop a FEMA grant application and BCA.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	BFE+2'	**Estimated Benefits (losses avoided):**	Provides residents the opportunity to remove themselves from flooding risk
Useful Life:	20 years	**Goals Met:**	1
Estimated Cost:	TBD per cost and number of properties to be purchased/mitigated	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation1			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 3 years
Estimated Time Required for Project Implementation:	Within 3 years	**Potential Funding Sources:**	FEMA HMGP and PDM, cost share with homeowners
Responsible Organization:	Village Board, FPA	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Require residents to leave their homes without compensation	High	Infeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2022-Village Williamsville-004	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Provides residents the opportunity to remove themselves from flooding risk
Property Protection	1	Project will protect town residents
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The village has legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 3 years
Agency Champion	1	Village Board, FPA
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Attachment: 85-Section-9.46-Williamsville-V-093021 (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Appendix F: Critical Facilities is not available to the public.

Attachment: Attachment 34-Appendix-F (RES-2022-375 : Authorizing Adoption of the 2022 Erie County, NY Hazard Mitigation Plan)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Engineering
Initiated by: **Jeffrey S. Burroughs**
Co-Sponsored by:

DOC ID: 25648 **RESOLUTION 2022-376** **ADOPTED**

Purchase of Wireless Rain Gauge

We are requesting Town Board approval to purchase a wireless rain gauge including installation from TecSmith, Inc. (quote attached). This gauge is used to monitor rainfall amounts for our monthly bypass reports. The total cost for the purchase of the rain gauge inclusive of installation will be $2,500.00.

Funding for this purchase is available from budget code G9000-2600 which requires Town Board approval.

Thank you for considering this request.

4/11/2022
Consent

FINANCIAL IMPACT:

G9000-2600; $2,500.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TECsmith Inc.
P.O. Box 383
Elma, NY 14059-0383
716-687-1418 AP/AR

Estimate

Date	Estimate #
4/5/2022	450

Name/Address
Vaishali Reberholt, PE, CPESC Assistant Municipal Engineer Town of Amherst vreberholt@amherst.ny.us 716-631-7154

Reference #
AMH040522

Description	Total
Wireless Rain Gauge and Installation.	$2,500.00
Our terms are net 30 with a 1.5% charge for each additional month	Total: $2,500.00

Signature_____

Attachment: Wireless Rain Gauge Quote (RES-2022-376 : Purchase of Wireless Rain Gauge)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Engineering
Initiated by: **Jeffrey S. Burroughs**
Co-Sponsored by:

DOC ID: 25649 **RESOLUTION 2022-377** **ADOPTED**

Emergency Purchase Authorization - National Water Main CRS# 3271

The Engineering Department is requesting that the Town Board approve an emergency purchase made with National Water Main Cleaning for the rehabilitation of two (2) manholes at the Campbell Boulevard Sanitary Sewer collapse site. The manholes closest to the site were evaluated and the concrete within the manholes was found to be deteriorated, exposing rebar in multiple locations and compromising the integrity of the structures. The quote for this work is attached.

This request is pending successful completion of the contract review process.

The total amount quoted for this work is $18,000.00 and the funding source for this request is to-be-determined.

Thank you for considering this request.

4/11/2022
Consent

FINANCIAL IMPACT:

Account TBD; $18,000.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Town of Amherst
Emergency Purchase Documentation Form

This form is to be completed for all emergency purchases made that contravene the Town's Purchasing Policy. You must contact the Supervisor (or Deputy Supervisor in the Supervisors absence) to obtain his/her approval prior to making the purchase. This form must be completed and submitted to the Town Board at the first work session following the Emergency purchase. A copy should also be submitted to the Town Attorney and Contract Compliance & Administration Department.

An exception to the competitive bidding requirements exists for emergency situations (GML §103[4]). There are three basic statutory criteria to be met in order to fall within this exception. These are that (1) the situation arises out of an accident or other unforeseen occurrence or condition; (2) the circumstances affect public buildings, public property, or life, health, safety or property of the political subdivision's residents; and (3) the situation requires immediate action which cannot await competitive bidding.

Generally, there must be a present, immediate and existing condition which is creating an imminent threat or danger and which requires such immediate action that a further delay to comply with competitive bidding requirements is so detrimental to the public interest that it overcomes the strong public policy in favor of bidding. Further, because the emergency must arrive out of an accident or unforeseen occurrence, it is doubtful a local government may invoke the emergency exception in a situation which the result of inaction or dilatory behavior on the part of local officials and which, therefore, could have been foreseen in time to advertise for bids.

Even when a governing board passes a resolution that a public emergency exists, the public interest dictates that purchases are made at the lowest possible costs, seeking competition by informal solicitation of quotes or otherwise, to the extent practical under the circumstances.

1. Date of Emergency Purchase: _____

2. Date you received approval from the Supervisor: 4/6/2022

3. Date of Town Board work session where Board is notified: 4/11/2022

4. Amount of Emergency Purchase. Please provide a detailed listing of items purchased and the cost of each (attach additional detail if necessary): $9,000.00 each for two (2) manholes

5. Is there adequate funding in your current operating budget to cover this purchase? _____
   Identify budget Org/Object: TBD

6. Please describe the circumstances that resulted in the need to make an emergency purchase without following the Town's Purchasing Policy: Two manholes closest to the sanitary sewer collapse were evaluated. The concrete within the manholes is deteriorated exposing rebar in multiple locations compromising the structural integrity of the structures.

7. Please describe what steps were taken to ensure the lowest cost for the Emergency Purchase. If none, please explain why your department was prevented from doing so: National Water Main is already staged for the bypass pumping

8. Department Head Signature: _____ Date: _____

CC: Town Board, Town Attorney, Contract Compliance & Administration

For Contract Compliance & Administration Use Only
Date of Town Board Resolution: Emergency Purchase Tracking/Res #:

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

Dehn, Sharon

From: Andrew Flannagan <aflannagan@nwmcc-bos.com>
Sent: Tuesday, April 05, 2022 3:55 PM
To: Dehn, Sharon; Reberholt,Vaishali
Subject: Fwd:

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

See below:

---------- Forwarded message ---------
From: **Andrew Flannagan** <aflannagan@nwmcc-bos.com>
Date: Tue, Apr 5, 2022 at 3:48 PM
Subject: Re:
To: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Cc: James Fleming <jfleming@nwmcc-bos.com>, Gary Millington <gary.millington@nwmcc-bos.com>

Hi Vaishali,
You can use $9,000.00 each manhole for a 1/2" thick geopolymer liner

On Mon, Apr 4, 2022 at 12:37 PM Reberholt,Vaishali <VReberholt@amherst.ny.us> wrote:

> see attached
>
> Vaishali Reberholt, PE, CPESC
> Engineering Support Division
> 1100 North Forest Road
> Amherst, NY 14221
> Tel: (716) 631-7154 x7421
> Fax: (716) 631-7222

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

Addendum to Contract Major Exposure

1. Notwithstanding any other provision in this Agreement, the following clauses shall be controlling. Should any other provision of the Agreement conflict with the clauses in this Addendum then the provisions of this Addendum are to be enforceable and any conflicting provision shall be considered null and void.

2. No rules, requirements or customs of any society or association of professional Contractors or any similar association shall affect this Agreement in any way whatsoever or be binding upon the Town.

3. To the fullest extent permitted by law, Contractor shall indemnify and hold the Town, its officers, agents, and employees, harmless from any and all liability, demands, claims, or expenses, awards or judgments imposed upon the Town, its officers, agents, and/or employees, arising out of the work of the Contractor its officers, agents, subcontractors, and/or employees as well as the negligence, active or passive, of the Contractor, its officers, agents, subcontractors, and/or employees.

4. Contractor shall not commence work under this Agreement until it has obtained all insurance specified below, produced satisfactory proof of the same and such insurance has been approved by the Town.

(a) Workers' Compensation Insurance: Contractor shall take out and maintain during the life of this Agreement, Workers' Compensation Insurance (both Part A and Part B) for its employees to be assigned to the work hereto under.

(b) General Liability, Professional (if applicable) Liability and Property Damage Insurance: Contractor shall take out and maintain during the life of this Agreement, such general liability and property damage insurance as shall protect it and the Town of Amherst from claims for damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this Agreement. The amounts of such insurance shall be as follows in an amount not less than $1,000,000.00 per occurrence for bodily injury and property damage including wrongful death, and $2,000,000.00 aggregate. Umbrella coverage shall be in an amount of at least $5,000,000.00.

(c) Contractor shall furnish the above insurances, including subcontractors' insurances, to the Town and shall also assure that any policy procured by it shall name the Town as an additional insured on a primary and non-contributory basis.

(d) Contractor shall ensure all its subcontractors, if any, have obtained all the above insurances and shall also assure that any policy procured by any subcontractor or sub-subcontractor shall name the Town as an additional insured on a primary and non-contributory basis.

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

5. Any accident shall be reported to the Office of the Town Attorney as soon as possible and not later than twenty-four (24) hours from the time of such accident. A detailed written report must be submitted to the Town of Amherst as soon thereafter as possible as and no later than three (3) days after the date of such accident.

6. No Assignment: In accordance with the provisions of section 109 of the General Municipal Law, the Contractor is hereby prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of its right, title or interest in this agreement, or its power to execute this Agreement, to any other person or corporation without the previous consent in writing of the Town.

7. Required Provisions of Law: Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party this Agreement shall be physically amended forthwith to make such insertion. In particular, the Contractor shall, among other things, fully comply with:

(a) Article 8 of the NYS Labor Law for public work contracts and Article 9 of the Labor Law regarding prevailing wage for Building Service employees.
(b) Labor Law Section 220-e and Executive Law Sections 291-299 and the Civil Rights Law relating to prohibition against discrimination and equal opportunity.
(c) Affirmative action as required by the Labor Law.
(d) Prevention of dust hazard required by Labor Law Section 222-a.
(e) Preference in employment of persons required by Labor Law Section 222.
(f) Eight-hour workday as required by Labor Law Section 220(2).
(g) Chapter 32 of the Town of Amherst: Minority Women and Business Utilization Commitment.
(h) Chapter 163 of the Town of Amherst: Registration of Sex Offenders.

8. The Contractor, in accordance with its status as an independent Contractor, covenants and agrees that it will conduct itself consistent with such status. It will neither hold itself out as nor claim to be, an officer or employee of the Town by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the Town, including, but not limited to: workers' compensation coverage, unemployment insurance benefits, Social Security coverage, or retirement membership or credit.

Waiver: No waiver of any breach of any condition of the Agreement shall be binding unless in writing and signed by the party waiving said breach. No such waiver shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall include the same.

9. This Agreement shall be governed by, and interpreted according to the laws of the State of New York. If the contract between the parties refers to the laws, statutes, rules, regulations or ordinances for any state other than New York State, to the laws, statutes, rules, regulations or ordinances for any county other than Erie County, New York or to the laws, statutes, rules, regulations or ordinances for any municipality other than the Town of Amherst, then the laws, statutes, rules, regulations or ordinances for New York State, Erie county and/or the Town of Amherst shall apply as applicable. Any and all legal action necessary to enforce the Agreement will be venued in Supreme Court, Erie County, New York or in the United States District Court for the Western District of New York, Buffalo Division.

10. It is hereby acknowledged that performance of this Contract will be undertaken in accordance with the specifications and pricing on which the bid was submitted.

Authority for execution on behalf of Town: The Supervisor has executed this Agreement pursuant to a Resolution adopted by the Town Board of the Town, at a meeting thereof held on _____. Brian J. Kulpa, the Supervisor whose signature appears hereafter, is duly authorized and empowered to execute this instrument and enter into such an Agreement on behalf of the Town as a result of that Resolution. This instrument shall be executed in triplicate. At least one (1) copy shall be permanently filed, after execution thereof, in the office of the Town Clerk of Town.

Agreed to and Accepted by:

National Water Main Cleaning
Print Name of Company

By: _____
Signature

Andrew Flannagan
Printed name

Date: 3/17/2022

Agreed to and Accepted by:

Town of Amherst

By: _____
Brian J. Kulpa, Supervisor

Date: _____

Revised 12.30..19

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

IRAN DIVESTMENT ACT CERTIFICATION

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a provision was added to the State Finance Law (SFL), Section 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will develop a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). This list is posted on the OGS website.

By submitting a response to this solicitation, or by assuming the responsibility under a Contract/Lease awarded hereunder, Bidder/Contractor/Vendor (or any assignee) certifies that it will not utilize on such Contract/Lease any subcontractor that is identified on the prohibited entities list.

Additionally, Bidder/Contractor/Vendor is advised that any Bidder/ Contractor/Vendor seeking to renew or extend a Contract/Lease (or assume responsibility of a Contract/Lease awarded must certify at the time the Contract/Lease is renewed, extended or assigned that it is not included on the prohibited entities list.

During the term of the Contract/Lease, should the Town of Amherst (Town) receive information that a person is in violation of the above-referenced certification, the Town will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the Town shall take such action as appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor/Vendor in default.

The Town reserves the right to reject any Contract/Lease or request for assignment for an entity that appears on the prohibited entities list prior to the award of a Contract/Lease, and to pursue a responsibility review with respect to any entity that is awarded a Contract/Lease and appears on the prohibited entities list after Contract/Lease award.

Company Name: National Water Main Cleaning Co

Signature: [signature]

Print Name: HERCULES ANASTASIADIS

Title: V.P.

Date: 3/18/22

Sworn To Before Me This

18th Day of March, 2022

[signature]

Notary Public

Revised 4.2017

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 2/28/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J. Gallagher Risk Management Services, Inc.
2850 Golf Road
Rolling Meadows IL 60008

CONTACT NAME: Christina Cunningham, Client Service Mgr Sr.
PHONE (A/C, No, Ext): | **FAX (A/C, No):**
E-MAIL ADDRESS: christina_cunningham@ajg.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Zurich American Insurance Company	16535
INSURER B : American Zurich Insurance Company	40142
INSURER C : American Guarantee and Liability Ins Co	26247
INSURER D :	
INSURER E :	
INSURER F :	

INSURED CAROCOR-04
National Water Main Cleaning Company
25 Marshall Street
Canton, MA 02021-2479

COVERAGES **CERTIFICATE NUMBER:** 1260292779 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR X XCU INCLUDED GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT LOC OTHER:	Y	Y	GLO 9377201-18	10/31/2021	10/31/2022	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 2,000,000 $ 300,000 $ 0 $ 2,000,000 $ 4,000,000 $ 4,000,000 $
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY	Y	Y	BAP 9377199-18	10/31/2021	10/31/2022	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$ 5,000,000 $ $ $ $
C	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED X RETENTION $ 10,000			AUC 5916947-16	10/31/2021	10/31/2022	EACH OCCURRENCE AGGREGATE $	$ 5,000,000 $ 5,000,000 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC 9377202-18	10/31/2021	10/31/2022	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Town of Amherst is shown as an additional insureds solely with respect to General Liability on primary non-contributory basis and Auto Liability as evidenced herein as required by written contract with respect to work performed by the named insured. A Waiver of Subrogation applies in favor of additional insureds are included under the General Liability and Auto Liability coverages as evidenced herein as required by written contract.

CERTIFICATE HOLDER
Town of Amherst
5583 Main Street
Williamsville NY 14221

CANCELLATION
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name & Address of Insured (use street address only)

NATIONAL WATER MAIN CLEANING CO.
1806 NEWARK
TURNPIKE
KEARNY, NJ 07032

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured

973-483-3200

1c. Federal Employer Identification Number of Insured or Social Security Number

221753261

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

Town of Amherst
1100 North Forest Road
Amherst, NY 14221

3a Name of Insurance Carrier

HARTFORD LIFE AND ACCIDENT

3b Policy Number of Entity Listed in Box "1a"

LNY611608

3c Policy effective period

04-01-2021 to 03-31-2022

4. Policy provides the following benefits:

- [x] A. Both disability and paid family leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid family leave benefits only.

5. Policy covers:

- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 03-26-2021 *Elizabeth Tello*

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 553-8074 **Name and Title:** Elizabeth Tello – Assistant Director, Statutory Services

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed **By**

(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number **Name and Title**

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.

DB-120.1 (10-17)

DB-120.1 (10-17) IH

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) National Water Main Cleaning Co. 25 Marshall Street Canton, MA 02021 Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured 973-483-3200 1c. NYS Unemployment Insurance Employer Registration Number of Insured 22-210176 1d. Federal Employer Identification Number of Insured or Social Security Number 22-1753261
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) Town of Amherst 1100 North Forest Road Amherst, NY 14221	3a. Name of Insurance Carrier American Zurich Insurance Company 3b. Policy Number of Entity Listed in Box "1a" WC 9377202-18 3c. Policy effective period 10/31/2021 to 10/31/2022 3d. The Proprietor, Partners or Executive Officers are ☒ included. (Only check box if all partners/officers included) all ☐ excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Susan B. Kendziora
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Susan B. Kendziora 03/04/2022
(Signature) (Date)

Title: Vice President - Underwriting Services

Telephone Number of authorized representative or licensed agent of insurance carrier: 800-382-2150

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

C-105.2 (9-17) www.wcb.ny.gov

Attachment: National Water Main Emergency Purchase Authorization (RES-2022-377 : Emergency Purchase Authorization - National Water

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Engineering
Initiated by: **Jeffrey S. Burroughs**
Co-Sponsored by:

DOC ID: 25650 **RESOLUTION 2022-378** **ADOPTED**

Award of Bid Alternatives - Gateway Park 2022-2027 CIP Project YR-1B

On February 17, 2022, bids were received for the above referenced project. At the March 14, 2022 Town Board meeting, Nova Site Co., 6 Lena Court, West Seneca, NY 14224, was awarded the Base Bid and Alternate Bid Item No. 4. in the amount of $327,200.

At this time and after further review of the project budget, we would like to recommend awarding Alternative No. 1, 2, and 5 for the negotiated amount of $196,352.00. Alternates 1, 2, and 5 include the shade canopy, concrete benches, and a new fence respectively. The total contract award for this project will be $523,552.00.

Funding for this contract shall be from project account KP2104.4972.

Thank you for considering this request.

4/11/2022
Consent

FINANCIAL IMPACT:

$196,352.00; KP2104-4972

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Gateway Park

Bid Tabulation / February 17, 2022

T.O.A. Job No. 2020.031

No.	Bidder	Bid Bond (Y/N)	Base Bid	Alternate #1	Alternate #2	Alternate #3	Alternate #4	Alternate #5
1	Nova Site Co.	Y	**$318,700.00**	**$180,000.00**	**$5,600.00** ~~**$3,800.00**~~	**$14,700.00**	**$8,500.00**	**$10,752.00** ~~**$10,200.00**~~
2	American Paving and Excavation, Inc.	Y	**$351,239.00**	**$176,280.00**	**$38,000.00**	**$13,650.00**	**$4,750.00**	**$3,600.00**
3	Anastasi Trucking & Paving	Y	**$367,862.50**	**$161,000.00**	**$20,850.00**	**$16,800.00**	**$4,750.00**	**$3,000.00**
4	Millennium Construction, Inc.	Y	**$442,145.00**	**$185,000.00**	**$7,500.00**	**$19,250.00**	**$5,500.00**	**$4,200.00**
5	Louis Del Prince & Sons, Inc.	Y	**$449,590.00**	**$184,630.00**	**$8,090.00**	**$32,375.00**	**$4,480.00**	**$6,360.00**
6	4th Generation Construction, Inc.	Y	**$481,140.00**	**$171,500.00**	**$18,100.00**	**$56,000.00**	**$4,470.00**	**$3,600.00**
7	Pinto Construction Services, Inc.	Y	**$493,548.00**	**$192,756.00**	**$6,466.00**	**$44,450.00**	**$6,960.00**	**$11,880.00**
8	Scott Lawn Yard, Inc.	Y	**$504,645.00**	**$155,000.00**	**-$2,050.00**	**$13,860.00**	**$4,315.00**	**$3,840.00**

Note: Base Bid and Alternate #4 were awarded at 3-14-2022 Town Board Meeting

Alternate #1: Shade Canopy Structure

Alternate #2: Concrete Benches (replaces standard benches); Town added arm rests, negotiated alternative amount of $5,600

Alternate #3: Landscaping Plantings

Alternate #4: Additional Trees

Alternate #5: Repair & Stain ex. Fence; Alternative modified and existing fence will be removed and replaced per base bid unit price of $89.60/l.f; $10,752

Attachment: Gateway Park_Bid Tabulation_4-11-2022 TB (RES-2022-378 : Award of Bid Alternatives -

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Highway
Initiated by: **Stephen Bryan**
Co-Sponsored by:

DOC ID: 25606 **RESOLUTION 2022-379** **ADOPTED**

Award of 2022 - 2023 Purchasing Maintenance Materials Bids (Sections 1 - 7)

The Highway Department respectfully requests that the Purchasing Maintenance Materials Bids, Section 1 through 7 be awarded to the lowest bidders within specifications as follows:

SECTION 1: AGGREGATE MATERIAL, PLANT MIXED ASPHALT CONCRETE, PATCHING MATERIAL, HAULING AND LIQUID BITUMINOUS MATERIAL:

1-1 CRS # 3218 COUNTY LINE STONE COMPANY
1-2 CRS # 3219 LAFARGE NORTH AMERICA (LOCKPORT)
1-3 CRS # 3220 NEW ENTERPRISE STONE AND LIME COMPANY
1-4 CRS # 3221 CAMBRIA ASPHALT
1-5 CRS # 3222 SUIT KOTE CORPORATION

SECTION 2: PIPE, VARIOUS SIZES, INCLUDING CONCRETE, METAL, HDPE, PIPE LINER, FITTINGS, COUPLERS AND FLEXIBLE FERNCOS:

2-6 CRS # 3223 CHEMUNG SUPPLY COMPANY

SECTION 3: GEO-TEXTILE MATERIAL, SNOW FENCES AND ADA (DETECTABLE WARNING SURFACE TILE) AND GRASS PAVERS:

3-7 CRS # 3224 AIRTITE WINDOW AND DOOR COMPANY INC

SECTION 4: GRASS SEED, FERTILIZER (STARTER), TOPSOIL, SANDY LOAM, SOD, BALL DIAMOND MIXES AND FIELD MATERIALS, ENGINEERED WOOD FIBER (EWF) AND RUBBERIZED SAFETY MATERIALS (CHIPS) FOR PLAYGROUNDS:

4-8 CRS # 3225 LEO BRENON TOPSOIL
4-9 CRS # 3226 LAKESIDE SOD SUPPLY COMPANY
4-10 CRS # 3227 SITEONE LANDSCAPE SUPPLY LLC

SECTION 5: CONCRETE BUILDING MATERIALS:

NO BIDS AWARDED

SECTION 6: PRE-CAST CONCRETE MANHOLES, ROUND FRAMES/COVERS, PRE-CAST CATCH BASINS, RECTANGULAR FRAMES/GRATES AND MANHOLE RINGS (STEEL AND PLASTIC), FLAPGATES, PRE-CAST JERSEY BARRICADES:

6-11 CRS # 3228 KISTNER CONCRETE PRODUCTS INC
6-12 CRS # 3229 K & S CONTRACTORS SUPPLY INC
6-13 CRS # 3230 EJ USA INC

6-14 CRS # 3231 BIHR LANDSCAPE INC
6-15 CRS # 3232 NEW ENTERPRISE STONE AND LIME CO
6-16 CRS # 3233 F W WEBB COMPANY

SECTION 7: SIGN MATERIAL (ALUM, SHEETING), STOP SIGNS, SIGN POLES, 3M PRODUCTS, TRAFFIC CONTROL EQUIPMENT (ELECTRICAL SYSTEMS) AND TRAFFIC SAFETY SIGNS/CONE BARS:

7-17 CRS # 3234 EBERL IRON WORKS INC
7-18 CRS # 3235 VULCAN INC
7-19 CRS # 3236 NEWMAN SIGNS

Additional specifications and details are provided and attached per each section and bidder bid tab.

NOW THEREFORE BE IT RESOLVED, that the AMHERST TOWN BOARD authorizes the Amherst Town Supervisor to sign each contract listed above and approval of these contracts are contingent upon the successful completion of the contract routing system (CRS) and the Town Attorney approval.

4/11/2022
Consent

FINANCIAL IMPACT:

Town Wide

Various

TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Highway
Initiated by: **Stephen Bryan**
Co-Sponsored by:

DOC ID: 25609 **RESOLUTION 2022-380** **ADOPTED**

Award of 2022 - 2023 Construction Bids (Sections 8-15)

The Highway Department respectfully requests that the Construction Bids, Section 8 through Section 15, be awarded to the lowest bidders within specifications as follows:

SECTION 8: PLANE AND TEXTURIZE - SCARIFYING AND COLD MILLING EXISTING ROAD SURFACES:

8-1 CRS # 3241 HIGHWAY REHABILITATION CORPORATION
8-2 CRS # 3242 MUNICIPAL MILLING AND MAINTENANCE LLC
8-3 CRS # 3243 DONEGAL CONSTRUCTION

SECTION 9: CASUAL BLACK TOP REPAIR, NOVA CHIPS, MICRO-RESURFACING, CRACK FILL APPLIED, BLACKTOP SEALER APPLIED AND BITUMINOUS LIQUID MATERIAL APPLIED:

9-4 CRS # 3244 MIDLAND ASPHALT MATERIALS INC
9-5 CRS # 3245 SUIT KOTE CORPORATION
9-6 CRS # 3246 AMHERST SEALER INC

SECTION 10: ROAD RESURFACING:

10-7 CRS # 3247 MILHERST CONSTRUCTION INC

SECTION 11: BIKE PATH AND TRAILWAY REHABILITATION:

11-8 CRS # 3248 J & D'S SEAL TECH CORPORATION

SECTION 12: CATCH BASIN REPAIRS:

NO BIDS AWARDED

SECTION 13: CURBING, SIDEWALKS, DRIVEWAY APRONS, ADA HANDICAP RAMPS AND CONCRETE / CURB CUTTING:

13-9 CRS # 3249 CVF CONCRETE CONSTRUCTION COMPANY

SECTION 14: PLANT MIXED CONCRETE AND CONTROLLED LOW STRENGTH MATERIALS

14-10 CRS # 3250 LAFARGE NORTH AMERICA INC

SECTION 15: ROAD STRIPING, PAINT EPOXY APPLICATIONS:

15-11 CRS # 3251 ACCENT STRIPE INC

Additional specifications and details are provided and attached per each section and bidder bid tab.

NOW THEREFORE BE IT RESOLVED, that the AMHERST TOWN BOARD authorizes the Amherst Town Supervisor to sign each contract listed above and approval of these contracts are contingent upon the successful completion of the contract routing system (CRS) and the Town Attorney approval.

4/11/2022
Consent

FINANCIAL IMPACT:

TOWN WIDE

VARIOUS

TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Human Resources
Initiated by: **Robert McCarthy**
Co-Sponsored by:

DOC ID: 25608 **RESOLUTION 2022-381** **ADOPTED**

Recreation Attendant - PT/Youth & Recreation

Recreation Attendant - PT/Youth & Recreation, Effective April 12, 2022, Temporary, $15.50 ph, Step 1 for Trevor Tout.

Due to reduced availability of current part-time staff.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Human Resources
Initiated by: **Robert McCarthy**
Co-Sponsored by:

DOC ID: 25636 **RESOLUTION 2022-382** **ADOPTED**

Code Enforcement Officer/Building Department

Please appoint a Code Enforcement Officer to the Building Department. Permanent, from list, pending satisfactory completion of a probationary term as set forth in the Civil Service Rule XIII. Effective April 12, 2022 at an annual salary of $64,733, Grade 15, Step E for Sharon Napolski.

This is a promotion for an employee currently serving as Assistant Code Enforcement Officer.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Human Resources
Initiated by: **Robert McCarthy**
Co-Sponsored by:

DOC ID: 25652 **RESOLUTION 2022-383** **ADOPTED**

Detective/Police Department

Please appoint a Detective to the Police Department. Permanent, from list, pending satisfactory completion of a probationary term as set forth in the Civil Service Rule XIII. Effective April 12, 2022, at an annual salary of $95,467 for John McGarvey.

This is a promotion for an employee currently serving as Police Officer.
Replacing an employee who retired.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Human Resources
Initiated by: **Robert McCarthy**
Co-Sponsored by:

DOC ID: 25653 **RESOLUTION 2022-384** **ADOPTED**

Extended Sick Leave of Absence Without Pay/Highway Department

Please authorize an Extended Sick Leave of Absence Without Pay to Warren Wojtowicz, Heavy Motor Equipment Operator at the Highway Department. Effective May 1, 2022 through July 31, 2022.

4/11/2022
Consent

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Planning
Initiated by: **Dan Howard**
Co-Sponsored by:

DOC ID: 25511 **RESOLUTION 2022-301** **ADOPTED**

To Authorize a Substantial Amendment to the FY 2020 Annual Action Plan for Community Development to Establish the Northwest Amherst Community Center

WHEREAS, the Town has adopted the FY 2020 Annual Action Plan on behalf of the Towns of Amherst, Cheektowaga and Tonawanda (ACT) HOME Consortium which programs the expenditure of funds for the Community Development Block Grant (CDBG) and HOME Investment Partnership (HOME) Funding; and

WHEREAS, the Town is seeking to amend the FY 2020 Action Plan to reallocate $380,000 in Supplemental CDBG-COVID funds awarded by the CARES Act according to the following program/budget lines; and

Decrease/Remove:		
Senior Foundation Community Center	$	300,000
Medical Director Position	$	24,000
Small Business Assistance - Amherst Chamber	$	20,000
CDBG Community Vaccine Logistics	$	30,000
YWCA of WNY, Inc.	$	6,000
Create/Increase:		
Northwest Amherst Community Center	$	380,000

WHEREAS, this amendment provides funds for the establishment of the Northwest Amherst Community Center, which meets the use criteria of the Supplemental CDBG-COVID funds awarded by the CARES Act to "prevent, prepare for, and respond to COVID" by providing critical community space to serve the Creekwoods Neighborhood with social and other supportive programming; now therefore

BE IT RESOLVED, the Town of Amherst Town Board hereby authorizes the above Substantial Amendment to the FY 2020 Annual Action Plan.

3/14/2022
A motion to adjourn to the April 11th Town Board meeting was made by Supervisor Kulpa, seconded by Councilmember Bucki and unanimously approved 4-0.

4/11/2022
Consent

FINANCIAL IMPACT:

Adoption of the proposed resolution involves no local monetary consideration and will have no impact on the Town Budget or tax rate.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst

Town of Amherst Planning Department *Erie County, New York*

Brian J. Kulpa,
Supervisor
Daniel C. Howard, AICP
Planning Director
Daniel J. Ulatowski, AICP
Assistant Planning Director

April 6, 2022

Agenda of April 11, 2022

Honorable Town Board
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Subject: To Authorize a Substantial Amendment to the FY 2020 Annual Action Plan for Community Development to establish the Northwest Amherst Community Center.

Honorable Board Members:

Amherst Community Development is proposing a Substantial Amendment to the FY 2020 Annual Action Plan for Amherst's Community Development Block Grant (CDBG) Program to establish the new Northwest Amherst Community Center as part of the Town's CDBG-COVID funding.

The amendment seeks to reallocate $380,0000 of existing underutilized budget lines to a new budget line titled "Northwest Amherst Community Center" in order to create a community center to better serve the Creekwoods Neighborhood with social and other supportive programming. The reallocation will cover the full first year's rent as outlined under the Town of Amherst's lease with Zaepfel for the building located at 220 Northpointe Parkway, Amherst NY 14228.

A 30-day public comment period was initiated on this Substantial Amendment on March 9th, 2022, which will close on April 11, 2022. If public comments are received, the Community Development Director will present those comments to the Town Board upon consideration of the resolution.

A proposed resolution for adopting the Substantial Amendment to the Annual Action Plan is attached for your consideration. Thank you for your assistance with this matter.

Very truly yours,

Daniel C. Howard, AICP
Planning Director

Enc.
X:\Community Development\New Structure\ANNUAL PLAN\Data 2020\4th Amendments\Substantial Amendment - NW Community

Attachment: northwest-03082022110312 (RES-2022-301 : Substantial Amendment of the 2020 Annual Plan for the Northwest Community Center)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Planning
Initiated by: **Dan Howard**
Co-Sponsored by:

DOC ID: 25603 **RESOLUTION 2022-385** **ADOPTED**

Request to Schedule a Public Hearing

Please schedule a public hearing on the Proposed Local Law to Amend Chapter 5 of the Town of Amherst Code "The Design Advisory Board (DAB)" at the May 9, 2022 Town Board meeting.

4/11/2022
Consent

FINANCIAL IMPACT:

none

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25633 **RESOLUTION 2022-386** **ADOPTED**

Travel & Training Request National Police Bloodhound Association Spring Training Seminar

TOWN BOARD AGENDA ITEM : APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Travel & Training Request**
National Police Bloodhound Association Spring Training Seminar

Kindly adopt a Resolution authorizing one (1) officer to attend the annual training seminar with regard to the above matter. This seminar is being held in McHenry, Maryland from April 22, 2022 through April 29, 2022. The officer will utilize a police car to travel to the seminar. The cost for this course is approximately $1,904.45.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

A 3121 .4050: $1,137.45

A 3121 .4120: $767.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TRAVEL EXPENSE APPROVAL/REIMBURSEMENT FORM

☐ $250 or LESS and under 75 miles Department Head Approval ONLY Required *REVISED 01/01/2018*

☑ $250 + or greater than 75 miles Department Head AND Town Board Approval Required

NAME	Employee #	Department	Phone Number
		Police	716-689-1311

Destination and Purpose of Trip

Date of Departure	Date of Return	Destination	Purpose/Justification
4/22/2022	4/29/2022	McHenry, MD	National Police Bloodhound Association Spring Training Seminar

Expenses	Estimated	Budget A/C #	Actual
Transportation:			
Mileage @ $0.545	$250(gas for police car)	A3121.4050	
Tolls	$5.94	"	
Parking			
Local Transportation (bus/taxi)			
Plane/Rail/Bus			
Lodging:			
7 # nights @ $ 125.93	$881.51	A3121.4050	
Meals:			
IRS Per Diem Per Day: $			
1st & Last Day of Travel @ 75%			
2 # Breakfasts @ $ 13	$26	A3121.4120	
8 # Lunches @ $ 15	$120	"	
6 # Dinners @ $ 26	$156	"	
8 # Incidentals @ $ 5	$40	"	
Registration/Conference Fee	$425	A3121.4120	
Other			
Subtotal	$1904.45		N/A
Contingency - 10% of subtotal or $200	$190.45		N/A
TOTAL	$2094.90		

Request Approved By:

Department Head Signature

3/29/2022

Date

Town Board :

Town Board Resolution & Date

I hereby certify that I have expended the above itemized amounts for business purposes for the Town of Amherst. Required receipts are attached.

Employee Signature Date

Print Employee Name

Reimbursement Approved By:

Department Head Signature Date

Complete Shaded Area
For Expense Reimbursement

X:\Forms\Travel Expense Reimbursement Form 4.7.17

Attachment: RedactedTravelRequestBloodhoundSpringSeminar (RES-2022-386 : Travel & Training Request: National Police Bloodhound Ass.

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25634 **RESOLUTION 2022-387** **ADOPTED**

Travel & Training Request Advanced Crisis Negotiation Course: Pilot Delivery

TOWN BOARD AGENDA ITEM : APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Travel & Training Request**
Advanced Crisis Negotiation Course: Pilot Delivery

Kindly adopt a Resolution authorizing three (3) officers to attend the above entitled training course. This seminar was held in Oriskany, New York from April 4, 2022 through April 6, 2022. The officers utilized a police car to travel to the course. The cost for this course is approximately $484.82.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

A 3121 .4050: $115.82

A 3121 .4120: $369.00

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TRAVEL EXPENSE APPROVAL/REIMBURSEMENT FORM

☐ $250 or LESS and under 75 miles Department Head Approval ONLY Required *REVISED 01/01/2018*

☑ $250 + or greater than 75 miles Department Head AND Town Board Approval Required

NAME	Employee #	Department	Phone Number
[redacted]	[redacted]	Police	(716)689-1311

Destination and Purpose of Trip

Date of Departure	Date of Return	Destination	Purpose/Justification
April 4, 2022	April 6, 2022	Oriskany, NY	Advanced Crisis Negotiation Course: Pilot Delivery

Expenses	Estimated	Budget A/C #	Actual
Transportation:			
Mileage @ $0.545	$100 (gas for patrol car)	A3121.4050	
Tolls	$15.82	"	
Parking			
Local Transportation (bus/taxi)			
Plane/Rail/Bus			
Lodging:	$0		
# nights @ $			
Meals:			
IRS Per Diem Per Day: $			
1st & Last Day of Travel @ 75%			
# Breakfasts @ $	$0		
6 # Lunches @ $ 15	$90	A3121.4120	
9 # Dinners @ $ 26	$234	"	
9 # Incidentals @ $ 5	$45	"	
Registration/Conference Fee	$0		
Other			
Subtotal	$484.82		N/A
Contingency - 10% of subtotal or $200	$48.48		N/A
TOTAL	$533.30		

Request Approved By:

Department Head Signature

4/1/2022

Date

Town Board :

Town Board Resolution & Date

I hereby certify that I have expended the above itemized amounts for business purposes for the Town of Amherst. Required receipts are attached.

Employee Signature Date

Print Employee Name

Reimbursement Approved By:

Department Head Signature Date

Complete Shaded Area
For Expense Reimbursement

X:\Forms\Travel Expense Reimbursement Form 4.7.17

Attachment: RedactedTravelFormAdvanced Crisis Negotiation 4.11.2022 (RES-2022-387 : Training & Travel Request: Adv. Crisis Neg. Course)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25640 **RESOLUTION 2022-388** **ADOPTED**

Sweet Home Central School District (CRS#3239) School District Student Resource Officer Program

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Sweet Home Central School District (CRS#3239)**
School District Student Resource Officer Program

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached agreement between the Town of Amherst (Police) and Sweet Home Central School District with regard to the above-entitled matter. This agreement will run from July 1, 2022 through June 30, 2023. This agreement has successfully completed the Contract Routing process.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

A 3121 .02260: $52,403.10

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

AGREEMENT
BY AND BETWEEN
TOWN OF AMHERST, NEW YORK
AND
SWEET HOME CENTRAL SCHOOL DISTRICT
FOR SCHOOL DISTRICT RESOURCE OFFICER PROGRAM

THIS AGREEMENT made _____, 2022, by and between the TOWN OF AMHERST, NEW YORK, a municipal corporation organized and existing under the laws of the State of New York, having its offices located at 5583 Main Street, Williamsville, New York 14221 (hereinafter referred to as the "Town") and the SWEET HOME CENTRAL SCHOOL DISTRICT, an educational corporation organized and existing under the laws of the State of New York, having its principal offices located at 1901 Sweet Home Road, Amherst, New York 14228 (hereinafter referred to as the "School District").

WITNESSETH:

WHEREAS, the School District is desirous of obtaining the services of one (1) full-time School Resource Officer (hereinafter referred to as an "SRO") for the purposes and to provide the services set forth herein; and

WHEREAS, the Town, through its Police Department (hereinafter referred to as the "Police Department") is desirous of providing law enforcement and related services to the School District through providing to the School District an SRO under the terms and conditions set forth herein; and

WHEREAS, the School District and the Town recognize the potential outstanding benefits of providing an SRO to the School District to both the residents of the Town of Amherst, the School District and the students of the School District; and

WHEREAS, it is in the best interests of the School District and the Town to provide for the provision of an SRO by the Town, through its Police Department, to the School District.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements as set forth hereinbelow, it is hereby agreed between the Town, the Police Department, and the School District as follows:

1. General Purposes, Project Goals, Project Objectives and Performance Indicators.

It is the intent and provision of this Agreement to provide to the School District the services of an SRO from the Police Department to provide those services listed under the job description contained in Exhibit "A" annexed hereto (entitled the "SRO Placement Plan"), with the project goals and project objectives as set forth in Exhibit "A" which can be measured by the performance indicators set forth in Exhibit "A" and evaluated as set forth

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

in the evaluation plan as set forth in Exhibit "A", all as may also be otherwise set forth in the text of this Agreement.

2. Term of Agreement

The term of this Agreement shall be for the period commencing on July 1, 2022 and culminating on June 30, 2023.

3. Renewal of Agreement

Both parties shall notify the other party of their desire to renew the Agreement by written notice at least thirty (30) calendar days prior to the expiration of the term as set forth in Paragraph 2 above. Upon receipt and written acknowledgment of such notice this Agreement shall renew for successive terms of one (1) year until such time as the Agreement is not renewed by failure to notify in writing of desire to renew as stated above or by notice of termination of this Agreement as set forth in Paragraph 4 and Paragraph 5.b.iiii of this Agreement.

4. Termination of Agreement

This Agreement may be terminated by either party upon thirty (30) calendar days written notice to the other party.

5. Assignment of School Resource Officer

The Chief of Police of the Police Department may assign a regularly employed police officer as the SRO to the School District pursuant to this Agreement as follows:

a. The SRO shall be nominated by the Chief of Police of the Police Department to the School District and, upon the concurrence of the Superintendent of Schools (the "Superintendent") of the School District to that nomination, the SRO shall be assigned as the SRO for the School District.

b. The SRO assigned to the School District must meet the following requirements:

i. The SRO must be a volunteer for the position as SRO.

ii. The person nominated to be SRO must be a full-time certified and sworn police officer with a minimum of three (3) years of law enforcement experience.

iii. The person nominated to be SRO must have had or must acquire specialized training to work with youth at a school site. Such training may consist of university course work for potential SRO candidates, law enforcement course work addressing working with youth at a school site, professional training in such areas, or training and experience in connection with other recognized school/youth law enforcement programs (e.g. D.A.R.E). Sufficiency of such experience shall be based upon the joint concurrence of

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

the Chief of Police of the Police Department and the Superintendent. The SRO may be re-assigned by the Chief of Police of the Police Department (or his designee) during periods of police emergency, situations which may require augmentation of the police force, or situations which may arise which may require the SRO to act as an officer of the law which may or may not be within the School District. Other times of reassignment may include, but are not limited to, training as required by the Police Department or federal and/or state law, court appearances as required by law, or time off as permitted by the collective bargaining agreement. The SRO will give consideration to the school calendar and use discretion when taking his/her discretionary time off.

iv. In the event the Police Department cannot provide an SRO, or a suitable replacement, for thirty (30) continuous days, the District has the option to terminate this Agreement immediately.

6. Dismissal of School Resource Officer: Replacement

a. In the event the Superintendent determines, in the sole discretion of the Superintendent, that the SRO is not effectively performing his or her duties and responsibilities, the Superintendent shall advise the Chief of Police of the Police Department.

b. The Chief of Police of the Police Department may dismiss or re-assign the SRO based upon Police Department rules, regulations and/or general orders consistent with the collective bargaining agreement. In such an event, a new SRO may be designated in accordance with the procedure outlined as in Paragraph 5 above.

7. Duties of the School Resource Officer

a. The duties of the SRO will include but not be limited to those duties set forth in the SRO Placement Plan annexed hereto as Exhibit "A" as part of the job description or performance indicators.

b. Consistent with the New York State Education Law and the School District's Code of Conduct, school disciplinary functions, including but not limited to all decisions and determinations regarding student discipline, are delegated to School District administrators. SRO(s) shall engage in separate and distinct work functions such as investigatory and security-based tasks, with the primary objective of securing the safety and well being of School District personnel, students, families, and visitors. SRO(s) shall not take part in the determination, issuance, or implementation of student discipline.

8. Duties of the School District

The School District shall provide the following materials and facilities which are deemed necessary for the performance of the SRO's duties:

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

a. A properly lighted private office which shall contain a telephone and shall be appropriate for private conversations between juveniles and the SRO.

b. A location for files and records which should be properly locked and secured.

c. Access to a computer and/or secretarial assistance, and access to a fax machine.

9. Hours of Duty of SRO

a. The Chief of Police of the Police Department shall arrange for the SRO to work a full day (8.25 hours) on each day when school is in session in the School District, except for the provisions set forth in Section 5.b.iii.

b. Additionally, upon the concurrence of the Superintendent and the Police Department, the SRO may be requested to attend extracurricular events. In the event school is scheduled for only part of a school day, the SRO shall work as SRO for the portion of the work day when school is in session and may otherwise perform such other duties as may be assigned to him within the Police Department.

10. Payment by School District to Town for SRO's Services

a. For the services of the SRO, the School District shall pay the Town, the sum of $5,240.31 per month during the regular school year, September through June.

b. The Town Supervisor, or his/her designee, shall notify the School District in writing by March 1st of the preceding school year of any change in the rate charged by the Town to the School District for the services of the SRO for the following school year.

c. The funds paid by the School District to the Police Department shall remain within the budget of the Police Department to cover the overtime costs of the SRO attending extra-curricular activities which occur outside the regular school day.

d. Both the School District and the Police Department shall establish procedures to track the hours and/or full days for which the Police Department provides the services of the SRO to the School District.

e. The Town shall invoice the School District every month for the services of the SRO. Upon verification of such invoices, the School District shall pay the same within thirty (30) days receipt of each invoice.

f. The School District may require the SRO to conform to a means of verifying the SRO's hours of work in the capacity of SRO, including sign in/sign out sheet and/or time card or such other means as are deemed appropriate and effective.

11. Employment Status of SRO

The SRO shall remain at all times an employee of the Police Department and shall not be for any purpose an employee of the School District. The School District and the

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

Town acknowledge that the SRO shall remain responsive to the chain of command within the Police Department.

12. Grant Funding

The School District may receive local, state and/or federal grants to cover all or part of the costs to be paid to the Police Department for the services of the SRO. The parties agree that they will administer the SRO program at all times to be consistent with the requirements of any such grant. In the event of an inconsistency between this Agreement and the requirements of any such grant, the provisions of such grant shall control, provided that nothing in any such grant shall require an adjustment to the rate of pay by the School District to the Police Department for the services of the SRO, or violate any terms of the Police Department chain of command, rules, regulations, general orders consistent with the collective bargaining agreement.

13. Good Faith

The School District, the Town, their agents and employees agree to cooperate in good faith in fulfilling the terms of this Agreement. Unforeseen difficulties or questions will be resolved by discussion between the Superintendent and the Chief of Police of the Police Department or their designees.

14. Notices

Any and all notices or any other communication herein required or permitted shall be deemed to have been given when deposited in the United States Postal Service as regular mail, postage prepaid, or by express courier service and addressed as follows:

If to the School District:
Superintendent of Schools
Sweet Home Central School District
1901 Sweet Home Road
Amherst, New York 14228

If to the Police Department:
Chief of Police
Town of Amherst Police Department
500 John James Audubon Parkway
Amherst, New York 14228

If to the Town:
Town Supervisor
Amherst Town Hall
5583 Main Street
Williamsville, New York 14221

In addition, correspondence will also be sent via email to the particular receiving party as named above.

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

15. Modification

This Agreement constitutes the full understanding of the parties and not terms, conditions or understandings or agreements purporting to modify or vary the terms of this Agreement shall be binding unless made in writing and signed by the duly authorized representatives of the parties.

16. Non-Assignment

Neither the School District nor the Town or Police Department shall assign, transfer, sublet or otherwise dispose of this Agreement or its right, title or interest in this Agreement or its power to execute the same or to any other person or corporation without the previous consent in writing of the governing bodies of both the School District and the Town. Any assignment of this Agreement not complying with the foregoing shall be null and void and of no force and effect whatsoever.

17. Severability

In the event any provision of this Agreement shall be or become invalid under any provision of federal, state, or local law, such invalidity shall not affect the validity or enforceability of any other provision hereof.

18. Agreement Interest

No officer or employee of the Town, who is authorized in such capacity on behalf of the Town to negotiate, make, accept or approve or to take part in negotiating, making, accepting or approving this Agreement, shall be, directly or indirectly, interested personally in this Agreement, or in any part hereof. No officer or employee of the Town who is authorized in such capacity on behalf of the Town to exercise any supervisory or administrative function in connection with this Agreement, shall become directly or indirectly interested personally in this Agreement or in any part hereof.

19. Hold Harmless

To the fullest extent provided by law, the parties agree to indemnify, hold harmless and defend one another, their agents, employees or any other persons authorized to act for them hereunder against loss or expense, including attorney's fees, by reason a a liability imposed by law upon a party, for damages because of or to persons or to property arising out of or in consequence of the performance of this Agreement resulting from that party's negligence, error, omission, or conduct.

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized officers the day and year first written above.

TOWN OF AMHERST, NEW YORK

By: _____ _____
Brian J. Kulpa, Supervisor Date

TOWN OF AMHERST, NEW YORK,
POLICE DEPARTMENT

By: _____ _____
Scott P. Chamberlin, Chief of Police Date

SWEET HOME CENTRAL SCHOOL DISTRICT

By: _____ 3/18/22
Michael V. Ginestre, Superintendent Date

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

EXHIBIT "A"

SCHOOL RESOURCE OFFICER PLACEMENT PLAN

Amherst Police Department &
Sweet Home Central School District

Introduction

With more attention being paid to the safety of students while they are at school, many communities are considering strategies which are intended to make schools safer environments. Although statistics on school crime and violence convey that such crime and violence are not necessarily occurring in greater numbers, there is, at a minimum, anecdotal evidence which suggests that the types of incidents which are taking place on school property may be more severe in nature and may be having marked negative impact on the educational processes for which schools are responsible. Additionally, media coverage of tragic school shootings and other violence which occurred during the past decade has motivated many communities to act.

One of the ways communities are taking action is by making decisions that law enforcement officers need to be assigned to provide coverage to schools so that safety, security, and order can be maintained. The underlying rationale which is being employed by communities is that a given school's crime and violence problems are not exclusively that school's problems, but are reflective of community problems. Such a rationale leads to consideration of community approaches. Hence, in many communities the "School Resource Officer" (SRO) approach is being considered.

The U.S. Departments of Education, Health and Human Services, and Justice provide a definition for "School Resource Officer":

> *A career law enforcement officer, with sworn authority, deployed in community oriented policing, and assigned by the employing police department or agency to work in collaboration with schools and community-based organizations to: (a) address crime and disorder problems, gangs, and drug activities affecting or occurring in or around an elementary or secondary school; (b) develop or expand crime prevention efforts for students; (c) education likely school-age victims in crime prevention and safety; (d) develop or expand community justice initiatives for students; (e) train students in conflict resolution, restorative justice, and crime awareness; (f) assist in the identification of physical changes in the environment that may reduce crime in or around the school; and (g) assist in developing school policy that addresses crime and recommend procedural changes (Safe Schools/Healthy Students Initiative).*

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

The National Association of School Resource Officers (NASRO) defines "School Resource Officer" as:

> *Officers (who) promote a better understanding of our laws, why they were enacted and their benefits. They provide a visible and positive image for law enforcement. They serve as a confidential source of counseling to students concerning the problems they face. They bring expertise into schools that will help young people make more positive choices in their lives. They also work to protect the school environment and to maintain an atmosphere where teachers feel safe to teach and students feel safe enough to learn (NASRO website).*

Regardless of definition, School Resource Officers have three main functions: *law enforcement officer, law-related teacher, and law-related counselor.* First, as a law enforcement officer, the SRO maintains a safe and secure environment on the school campus that will be conducive to an educationally stimulating atmosphere and serve as a means of preventing criminal activities and disturbances. Second, as a teacher, the SRO promotes positive attitudes regarding the police role in society and informs the students of their rights and responsibilities as lawful citizens. Third, as a counselor, the SRO establishes a more complete liaison with school personnel and students in an effort to prevent juvenile delinquency. According to the National Assessment of School Resource Officer Programs (National Institute of Justice, 2005), SRO's spend on average about 60-65 percent of their time on law enforcement, 25-30 percent counseling, and 5-10 percent teaching.

The most effective way an SRO can accomplish these goals is to be a positive role model; students learn from every interaction they have with an SRO. It is essential for an SRO to endorse high moral standards, use good judgment and discretion, be consistent and fair, respect all students, and display a sincere concern for the school community. School Resource Officers must maintain a professional appearance; be visible, accessible and willing to talk to the students; attend and participate in school activities both during the school year and the summer months; interact positively with the students and the community while taking their concerns seriously; maintain a relationship with the students' parents by attending PTA meetings and parent conferences; and maintain a relationship with the faculty and school administrators.

The SRO interacts with the school administrators and faculty, the student body, and the outside community. Although working in the school, the SRO is still an employee of the law enforcement agency and is responsible for identifying and resolving school safety problems. However, the SRO is not the disciplinarian or chaperone for the school –which job remains with the principal and faculty. As a resource for school administrators, the SRO serves as a means of establishing order and safety so learning can take place. The SRO shares information with faculty on gang activity and truants, provides expertise on crime prevention and responds to and investigates criminal activity in the school. The SRO is also a teacher who provides law-related education to students. As a resource for the student body, the SRO's office with the school serves as a resource center and makes available to students information on topics ranging from date rape to drug abuse. The SRO also assists the school guidance department by counseling students; giving them the opportunity to

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

talk about their problems and helping them find positive solutions. When necessary, the SRO refers students and family members to appropriate social agencies for additional assistance. Additionally, the SRO responds to requests from parents and the community regarding truants, drug activity, domestic problems, burglaries, thefts, and other school safety issues.

The SRO Program works to prevent juvenile delinquency and create a favorable student/police officer relationship. The Town of Amherst, the Amherst Town Court, school administrators, teachers, parents, and students are all beneficiaries of the SRO Program and, as stakeholders in the search for safer schools, must support and work with the SRO to reduce criminal conduct both on and off campus.

Job Description

- Provide law enforcement and police services to the school, school grounds and areas adjacent to the school. Investigate allegations of criminal incidents per police department policies and procedures. Enforce state and local laws and ordinances. Make appropriate referrals to juvenile authorities or other governmental agencies
- Work to prevent juvenile delinquency through close contact and positive relationships with students. In addition the SRO shall develop crime prevention programs and conduct security inspections to deter criminal or delinquent activities. The SRO should monitor crime statistics and work with other police personnel, school administration and faculty, and students to design crime prevention strategies.
- Establish and maintain a close partnership with school administrators in order to provide for a safe school environment. Assist school officials with their efforts to enforce School District policies and procedures, Assist school administration in emergency response planning and building security matters. Provide a course of training for school personnel in handling crisis situations, which may arise at the school.
- Be visible within the school community. Attend and participate in school functions. Build working relationships with the school's staff as well as with student and parent groups.
- Develop, implement and instruct classes in law related topics to support the educational efforts of the faculty. Work closely with teachers in designing and presenting law-related topics and the role of police in our society.
- Work with school counselors and other student support staff to assist students and to provide services to students involved in situations where referral to service agencies are necessary. Assist in conflict resolution efforts.
- Initiate interaction with students in the classroom and general areas of the school building; participate in individual and small group meetings and conferences with students. Promote the profession of police officer and be a positive role model. Increase the accessibility of police to the school community.

Juvenile Crime

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

Contemporary theories on juvenile delinquency suggest that the proliferation of negative influences in children's lives relate directly to juvenile crime rates. Some of these negative elements are poverty, discrimination, peer pressure, an unstable home life (broken or single parent homes), and unstable school life, psychological instability, changing morals of society, ineffectiveness of the juvenile justice system, direct influences of the mass media, and ignorance to the law and criminal justice system.

Recent statistics indicate that although the overall juvenile violent crime rate within the nation has been on the decline after decades of escalation, juvenile crime rates for other offenses have remained relatively static. Crime in schools has also seen a steady rise during the same periods. According to the National Crime Safety Center, juveniles commit more than 3 million crimes in schools each year. Although part of these changes may be attributable to greater public awareness of crime in schools and increasing pressure on education officials to report school crime incidents, there is no question that violence and crime are on the rise in our schools and affecting our children's ability to learn.

Project Goals

- To maintain a safe and secure environment on the school campus which will be conducive to an educationally stimulating atmosphere and serve as a means of preventing criminal activities and disturbances.
- To promote positive attitudes regarding the police role in society and to inform the students of their rights and responsibilities as lawful citizens.
- To establish a more complete liaison with school personnel and students in a cooperative effort to prevent juvenile delinquency.
- To bridge the gap between police officers and adolescents in order to increase positive attitudes toward law enforcement and to reduce juvenile crime through counseling, teaching about the criminal justice system, and taking a personal interest in the students.

Project Objectives

- Promote student understanding of the law and the criminal justice system.
- Decrease the number of student conduct/criminal violations occurring during the school day and during extracurricular school functions.
- Decrease gang activity and involvement in gangs by students.
- Improve students' attitudes and relationships with law enforcement personnel.
- Increase access of students, parents, and families to community agencies which offer assistance to youths and their families for problems that require professional help.
- Conduct crime prevention programs and improve school officials' response to criminal activity and violence.

Performance Indicators

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

- Present law-related education to classes during the school year. The SRO will keep a record of all law-related courses that are taught including drug prevention presentations and other programs deemed necessary and appropriate by school administrators and police management.
- The number of student conduct/criminal violations for the school year will be compared to the number from previous school years to determine any increase or decrease.
- The SRO will keep a record of all gang activity on or near campus, attempt to identify the individuals involved, and relate this information to the police department. This information will be compared to records from previous years to determine changes in gang activity. If necessary, the SRO will present gang awareness and prevention training to the student body, faculty, and parent organizations.
- The SRO will assess the students' attitudes toward law enforcement by interacting with them during the school day and during extracurricular activities and through the use of student surveys at the beginning and end of each school year. The relationship between the SRO and the student body will also be assessed through surveys completed by parents, faculty members, and administrators to gauge the effectiveness of the SRO program.
- The SRO will research and document all municipal, county, and state agencies available to provide services to students and their families. A directory of such agencies including points of contact will be developed or maintained. The SRO will hold conferences with students, parents, and school faculty when appropriate and keep a log of this activity. The SRO will also maintain a record of all referral services rendered and follow-up the referrals to determine if they were helpful or if other services are necessary.
- The SRO will maintain a record of all crime prevention lectures or seminars given to the student body or public. The SRO will assist school administrators in surveying school facilities for areas that provide opportunities for commission of a crime and develop a plan to correct the problem. The SRO will also assist school violence prevention teams in developing strategic responses to incidents of violence within the school.
- The commanding officer will be responsible to collect and analyze data, prepare progress reports and write the annual evaluation report.
- Data will be gathered on law enforcement related incidents, law enforcement related course grades, parent and teacher survey results, and outcomes of conferences with students, parents and faculty members, as well as any other information that is explicitly mentioned in the projects' performance indicators.

Attachment: Sweet Home SRO Contract for Approval (RES-2022-388 : 2022-2023 SRO Contract: Sweet Home Central School District (CRS#

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25643 **RESOLUTION 2022-389** **ADOPTED**

Amherst Central School District (CRS#3217) School District Student Resource Officer Program

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Amherst Central School District (CRS#3217)**
School District Student Resource Officer Program

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached agreement between the Town of Amherst (Police) and Amherst Central School District with regard to the above-entitled matter. This agreement will run from July 1, 2022 through June 30, 2023. This agreement has successfully completed the Contract Routing process.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

A 3121 .02260: $52,403.10

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

AGREEMENT
BY AND BETWEEN
TOWN OF AMHERST, NEW YORK
AND
AMHERST CENTRAL SCHOOL DISTRICT
FOR SCHOOL DISTRICT RESOURCE OFFICER PROGRAM

THIS AGREEMENT made _____, 2022, by and between the TOWN OF AMHERST, NEW YORK, a municipal corporation organized and existing under the laws of the State of New York, having its offices located at 5583 Main Street, Williamsville, New York 14221 (hereinafter referred to as the "Town") and the AMHERST CENTRAL SCHOOL DISTRICT, an educational corporation organized and existing under the laws of the State of New York, having its principal offices located at 55 Kings Highway, Amherst, New York 14226 (hereinafter referred to as the "School District").

WITNESSETH:

WHEREAS, the School District is desirous of obtaining the services of one (1) full-time School Resource Officer (hereinafter referred to as an "SRO") for the purposes and to provide the services set forth herein; and

WHEREAS, the Town, through its Police Department (hereinafter referred to as the "Police Department") is desirous of providing law enforcement and related services to the School District through providing to the School District an SRO under the terms and conditions set forth herein; and

WHEREAS, the School District and the Town recognize the potential outstanding benefits of providing an SRO to the School District to both the residents of the Town of Amherst, the School District and the students of the School District; and

WHEREAS, it is in the best interests of the School District and the Town to provide for the provision of an SRO by the Town, through its Police Department, to the School District.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements as set forth hereinbelow, it is hereby agreed between the Town, the Police Department, and the School District as follows:

1. General Purposes, Project Goals, Project Objectives and Performance Indicators.

It is the intent and provision of this Agreement to provide to the School District the services of an SRO from the Police Department to provide those services listed under the job description contained in Exhibit "A" annexed hereto (entitled the "SRO Placement Plan"), with the project goals and project objectives as set forth in Exhibit "A" which can be measured by the performance indicators set forth in Exhibit "A" and evaluated as set forth

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

in the evaluation plan as set forth in Exhibit "A", all as may also be otherwise set forth in the text of this Agreement.

2. Term of Agreement

The term of this Agreement shall be for the period commencing on July 1, 2022 and culminating on June 30, 2023.

3. Renewal of Agreement

Both parties shall notify the other party of their desire to renew the Agreement by written notice at least thirty (30) calendar days prior to the expiration of the term as set forth in Paragraph 2 above. Upon receipt and written acknowledgment of such notice this Agreement shall renew for successive terms of one (1) year until such time as the Agreement is not renewed by failure to notify in writing of desire to renew as stated above or by notice of termination of this Agreement as set forth in Paragraph 4 and Paragraph 5b.iiii of this Agreement.

4. Termination of Agreement

This Agreement may be terminated by either party upon thirty (30) calendar days written notice to the other party.

5. Assignment of School Resource Officer

The Chief of Police of the Police Department may assign a regularly employed police officer as the SRO to the School District pursuant to this Agreement as follows:

a. The SRO shall be nominated by the Chief of Police of the Police Department to the School District and, upon the concurrence of the Superintendent of Schools (the "Superintendent") of the School District to that nomination, the SRO shall be assigned as the SRO for the School District.

b. The SRO assigned to the School District must meet the following requirements:

i. The SRO must be a volunteer for the position as SRO.

ii. The person nominated to be SRO must be a full-time certified and sworn police officer with a minimum of three (3) years of law enforcement experience.

iii. The person nominated to be SRO must have had or must acquire specialized training to work with youth at a school site. Such training may consist of university course work for potential SRO candidates, law enforcement course work addressing working with youth at a school site, professional training in such areas, or training and experience in connection with other recognized school/youth law enforcement programs (e.g. D.A.R.E). Sufficiency of such experience shall be based upon the joint concurrence of

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

the Chief of Police of the Police Department and the Superintendent. The SRO may be re-assigned by the Chief of Police of the Police Department (or his designee) during periods of police emergency, situations which may require augmentation of the police force, or situations which may arise which may require the SRO to act as an officer of the law which may or may not be within the School District. Other times of reassignment may include, but are not limited to, training as required by the Police Department or federal and/or state law, court appearances as required by law, or time off as permitted by the collective bargaining agreement. The SRO will give consideration to the school calendar and use discretion when taking his/her discretionary time off.

iv. In the event the Police Department cannot provide an SRO, or a suitable replacement, for thirty (30) continuous days, the District has the option to terminate this Agreement immediately.

6. Dismissal of School Resource Officer: Replacement

a. In the event the Superintendent determines, in the sole discretion of the Superintendent, that the SRO is not effectively performing his or her duties and responsibilities, the Superintendent shall advise the Chief of Police of the Police Department.

b. The Chief of Police of the Police Department may dismiss or re-assign the SRO based upon Police Department rules, regulations and/or general orders consistent with the collective bargaining agreement. In such an event, a new SRO may be designated in accordance with the procedure outlined as in Paragraph 5 above.

7. Duties of the School Resource Officer

a. The duties of the SRO will include but not be limited to those duties set forth in the SRO Placement Plan annexed hereto as Exhibit "A" as part of the job description or performance indicators.

b. Consistent with the New York State Education Law and the School District's Code of Conduct, school disciplinary functions, including but not limited to all decisions and determinations regarding student discipline, are delegated to School District administrators. SRO(s) shall engage in separate and distinct work functions such as investigatory and security-based tasks, with the primary objective of securing the safety and well being of School District personnel, students, families, and visitors. SRO(s) shall not take part in the determination, issuance, or implementation of student discipline.

8. Duties of the School District

The School District shall provide the following materials and facilities which are deemed necessary for the performance of the SRO's duties:

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

a. A properly lighted private office which shall contain a telephone and shall be appropriate for private conversations between juveniles and the SRO.

b. A location for files and records which should be properly locked and secured.

c. Access to a computer and/or secretarial assistance, and access to a fax machine.

9. Hours of Duty of SRO

a. The Chief of Police of the Police Department shall arrange for the SRO to work a full day (8.25 hours) on each day when school is in session in the School District, except for the provisions set forth in Section 5.b.iii.

b. Additionally, upon the concurrence of the Superintendent and the Police Department, the SRO may be requested to attend extracurricular events. In the event school is scheduled for only part of a school day, the SRO shall work as SRO for the portion of the work day when school is in session and may otherwise perform such other duties as may be assigned to him within the Police Department.

10. Payment by School District to Town for SRO's Services

a. For the services of the SRO, the School District shall pay the Town, the sum of $5,240.31 per month during the regular school year, September through June.

b. The Town Supervisor, or his/her designee, shall notify the School District in writing by March 1st of the preceding school year of any change in the rate charged by the Town to the School District for the services of the SRO for the following school year.

c. The funds paid by the School District to the Police Department shall remain within the budget of the Police Department to cover the overtime costs of the SRO attending extra-curricular activities which occur outside the regular school day.

d. Both the School District and the Police Department shall establish procedures to track the hours and/or full days for which the Police Department provides the services of the SRO to the School District.

e. The Town shall invoice the School District every month for the services of the SRO. Upon verification of such invoices, the School District shall pay the same within thirty (30) days receipt of each invoice.

f. The School District may require the SRO to conform to a means of verifying the SRO's hours of work in the capacity of SRO, including sign in/sign out sheet and/or time card or such other means as are deemed appropriate and effective.

11. Employment Status of SRO

The SRO shall remain at all times an employee of the Police Department and shall not be for any purpose an employee of the School District. The School District and the

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

Town acknowledge that the SRO shall remain responsive to the chain of command within the Police Department.

12. Grant Funding

The School District may receive local, state and/or federal grants to cover all or part of the costs to be paid to the Police Department for the services of the SRO. The parties agree that they will administer the SRO program at all times to be consistent with the requirements of any such grant. In the event of an inconsistency between this Agreement and the requirements of any such grant, the provisions of such grant shall control, provided that nothing in any such grant shall require an adjustment to the rate of pay by the School District to the Police Department for the services of the SRO, or violate any terms of the Police Department chain of command, rules, regulations, general orders consistent with the collective bargaining agreement.

13. Good Faith

The School District, the Town, their agents and employees agree to cooperate in good faith in fulfilling the terms of this Agreement. Unforeseen difficulties or questions will be resolved by discussion between the Superintendent and the Chief of Police of the Police Department or their designees.

14. Notices

Any and all notices or any other communication herein required or permitted shall be deemed to have been given when deposited in the United States Postal Service as regular mail, postage prepaid, or by express courier service and addressed as follows:

If to the School District:
Superintendent of Schools
Amherst Central School District
55 Kings Highway
Amherst, New York 14226

If to the Police Department:
Chief of Police
Town of Amherst Police Department
500 John James Audubon Parkway
Amherst, New York 14228

If to the Town:
Town Supervisor
Amherst Town Hall
5583 Main Street
Williamsville, New York 14221

In addition, correspondence will also be sent via email to the particular receiving party as named above.

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

15. Modification

This Agreement constitutes the full understanding of the parties and not terms, conditions or understandings or agreements purporting to modify or vary the terms of this Agreement shall be binding unless made in writing and signed by the duly authorized representatives of the parties.

16. Non-Assignment

Neither the School District nor the Town or Police Department shall assign, transfer, sublet or otherwise dispose of this Agreement or its right, title or interest in this Agreement or its power to execute the same or to any other person or corporation without the previous consent in writing of the governing bodies of both the School District and the Town. Any assignment of this Agreement not complying with the foregoing shall be null and void and of no force and effect whatsoever.

17. Severability

In the event any provision of this Agreement shall be or become invalid under any provision of federal, state, or local law, such invalidity shall not affect the validity or enforceability of any other provision hereof.

18. Agreement Interest

No officer or employee of the Town, who is authorized in such capacity on behalf of the Town to negotiate, make, accept or approve or to take part in negotiating, making, accepting or approving this Agreement, shall be, directly or indirectly, interested personally in this Agreement, or in any part hereof. No officer or employee of the Town who is authorized in such capacity on behalf of the Town to exercise any supervisory or administrative function in connection with this Agreement, shall become directly or indirectly interested personally in this Agreement or in any part hereof.

19. Hold Harmless

To the fullest extent provided by law, the parties agree to indemnify, hold harmless and defend one another, their agents, employees or any other persons authorized to act for them hereunder against loss or expense, including attorney's fees, by reason a a liability imposed by law upon a party, for damages because of or to persons or to property arising out of or in consequence of the performance of this Agreement resulting from that party's negligence, error, omission, or conduct.

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized officers the day and year first written above.

TOWN OF AMHERST, NEW YORK

By: _____ _____
Brian J. Kulpa, Supervisor Date

TOWN OF AMHERST, NEW YORK, POLICE DEPARTMENT

By: _____ _____
Scott P. Chamberlin, Chief of Police Date

AMHERST CENTRAL SCHOOL DISTRICT

By: _____ 3/16/22
Anthony Panella, Superintendent Date

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

EXHIBIT "A"

SCHOOL RESOURCE OFFICER PLACEMENT PLAN

Amherst Police Department &
Amherst Central School District

Introduction

With more attention being paid to the safety of students while they are at school, many communities are considering strategies which are intended to make schools safer environments. Although statistics on school crime and violence convey that such crime and violence are not necessarily occurring in greater numbers, there is, at a minimum, anecdotal evidence which suggests that the types of incidents which are taking place on school property may be more severe in nature and may be having marked negative impact on the educational processes for which schools are responsible. Additionally, media coverage of tragic school shootings and other violence which occurred during the past decade has motivated many communities to act.

One of the ways communities are taking action is by making decisions that law enforcement officers need to be assigned to provide coverage to schools so that safety, security, and order can be maintained. The underlying rationale which is being employed by communities is that a given school's crime and violence problems are not exclusively that school's problems, but are reflective of community problems. Such a rationale leads to consideration of community approaches. Hence, in many communities the "School Resource Officer" (SRO) approach is being considered.

The U.S. Departments of Education, Health and Human Services, and Justice provide a definition for "School Resource Officer":

> *A career law enforcement officer, with sworn authority, deployed in community oriented policing, and assigned by the employing police department or agency to work in collaboration with schools and community-based organizations to: (a) address crime and disorder problems, gangs, and drug activities affecting or occurring in or around an elementary or secondary school; (b) develop or expand crime prevention efforts for students; (c) education likely school-age victims in crime prevention and safety; (d) develop or expand community justice initiatives for students; (e) train students in conflict resolution, restorative justice, and crime awareness; (f) assist in the identification of physical changes in the environment that may reduce crime in or around the school; and (g) assist in developing school policy that addresses crime and recommend procedural changes (Safe Schools/Healthy Students Initiative).*

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

The National Association of School Resource Officers (NASRO) defines "School Resource Officer" as:

> *Officers (who) promote a better understanding of our laws, why they were enacted and their benefits. They provide a visible and positive image for law enforcement. They serve as a confidential source of counseling to students concerning the problems they face. They bring expertise into schools that will help young people make more positive choices in their lives. They also work to protect the school environment and to maintain an atmosphere where teachers feel safe to teach and students feel safe enough to learn (NASRO website).*

Regardless of definition, School Resource Officers have three main functions: *law enforcement officer, law-related teacher, and law-related counselor.* First, as a law enforcement officer, the SRO maintains a safe and secure environment on the school campus that will be conducive to an educationally stimulating atmosphere and serve as a means of preventing criminal activities and disturbances. Second, as a teacher, the SRO promotes positive attitudes regarding the police role in society and informs the students of their rights and responsibilities as lawful citizens. Third, as a counselor, the SRO establishes a more complete liaison with school personnel and students in an effort to prevent juvenile delinquency. According to the National Assessment of School Resource Officer Programs (National Institute of Justice, 2005), SRO's spend on average about 60-65 percent of their time on law enforcement, 25-30 percent counseling, and 5-10 percent teaching.

The most effective way an SRO can accomplish these goals is to be a positive role model; students learn from every interaction they have with an SRO. It is essential for an SRO to endorse high moral standards, use good judgment and discretion, be consistent and fair, respect all students, and display a sincere concern for the school community. School Resource Officers must maintain a professional appearance; be visible, accessible and willing to talk to the students; attend and participate in school activities both during the school year and the summer months; interact positively with the students and the community while taking their concerns seriously; maintain a relationship with the students' parents by attending PTA meetings and parent conferences; and maintain a relationship with the faculty and school administrators.

The SRO interacts with the school administrators and faculty, the student body, and the outside community. Although working in the school, the SRO is still an employee of the law enforcement agency and is responsible for identifying and resolving school safety problems. However, the SRO is not the disciplinarian or chaperone for the school –which job remains with the principal and faculty. As a resource for school administrators, the SRO serves as a means of establishing order and safety so learning can take place. The SRO shares information with faculty on gang activity and truants, provides expertise on crime prevention and responds to and investigates criminal activity in the school. The SRO is also a teacher who provides law-related education to students. As a resource for the student body, the SRO's office with the school serves as a resource center and makes available to students information on topics ranging from date rape to drug abuse. The SRO

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

also assists the school guidance department by counseling students; giving them the opportunity to talk about their problems and helping them find positive solutions. When necessary, the SRO refers students and family members to appropriate social agencies for additional assistance. Additionally, the SRO responds to requests from parents and the community regarding truants, drug activity, domestic problems, burglaries, thefts, and other school safety issues.

The SRO Program works to prevent juvenile delinquency and create a favorable student/police officer relationship. The Town of Amherst, the Amherst Town Court, school administrators, teachers, parents, and students are all beneficiaries of the SRO Program and, as stakeholders in the search for safer schools, must support and work with the SRO to reduce criminal conduct both on and off campus.

Job Description

- Provide law enforcement and police services to the school, school grounds and areas adjacent to the school. Investigate allegations of criminal incidents per police department policies and procedures. Enforce state and local laws and ordinances. Make appropriate referrals to juvenile authorities or other governmental agencies
- Work to prevent juvenile delinquency through close contact and positive relationships with students. In addition the SRO shall develop crime prevention programs and conduct security inspections to deter criminal or delinquent activities. The SRO should monitor crime statistics and work with other police personnel, school administration and faculty, and students to design crime prevention strategies.
- Establish and maintain a close partnership with school administrators in order to provide for a safe school environment. Assist school officials with their efforts to enforce School District policies and procedures, Assist school administration in emergency response planning and building security matters. Provide a course of training for school personnel in handling crisis situations, which may arise at the school.
- Be visible within the school community. Attend and participate in school functions. Build working relationships with the school's staff as well as with student and parent groups.
- Develop, implement and instruct classes in law related topics to support the educational efforts of the faculty. Work closely with teachers in designing and presenting law-related topics and the role of police in our society.
- Work with school counselors and other student support staff to assist students and to provide services to students involved in situations where referral to service agencies are necessary. Assist in conflict resolution efforts.
- Initiate interaction with students in the classroom and general areas of the school building; participate in individual and small group meetings and conferences with students. Promote the profession of police officer and be a positive role model. Increase the accessibility of police to the school community.

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

Juvenile Crime

Contemporary theories on juvenile delinquency suggest that the proliferation of negative influences in children's lives relate directly to juvenile crime rates. Some of these negative elements are poverty, discrimination, peer pressure, an unstable home life (broken or single parent homes), and unstable school life, psychological instability, changing morals of society, ineffectiveness of the juvenile justice system, direct influences of the mass media, and ignorance to the law and criminal justice system.

Recent statistics indicate that although the overall juvenile violent crime rate within the nation has been on the decline after decades of escalation, juvenile crime rates for other offenses have remained relatively static. Crime in schools has also seen a steady rise during the same periods. According to the National Crime Safety Center, juveniles commit more than 3 million crimes in schools each year. Although part of these changes may be attributable to greater public awareness of crime in schools and increasing pressure on education officials to report school crime incidents, there is no question that violence and crime are on the rise in our schools and affecting our children's ability to learn.

Project Goals

- To maintain a safe and secure environment on the school campus which will be conducive to an educationally stimulating atmosphere and serve as a means of preventing criminal activities and disturbances.
- To promote positive attitudes regarding the police role in society and to inform the students of their rights and responsibilities as lawful citizens.
- To establish a more complete liaison with school personnel and students in a cooperative effort to prevent juvenile delinquency.
- To bridge the gap between police officers and adolescents in order to increase positive attitudes toward law enforcement and to reduce juvenile crime through counseling, teaching about the criminal justice system, and taking a personal interest in the students.

Project Objectives

- Promote student understanding of the law and the criminal justice system.
- Decrease the number of student conduct/criminal violations occurring during the school day and during extracurricular school functions.
- Decrease gang activity and involvement in gangs by students.
- Improve students' attitudes and relationships with law enforcement personnel.
- Increase access of students, parents, and families to community agencies which offer assistance to youths and their families for problems that require professional help.
- Conduct crime prevention programs and improve school officials' response to criminal activity and violence.

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

Performance Indicators

- Present law-related education to classes during the school year. The SRO will keep a record of all law-related courses that are taught including drug prevention presentations and other programs deemed necessary and appropriate by school administrators and police management.
- The number of student conduct/criminal violations for the school year will be compared to the number from previous school years to determine any increase or decrease.
- The SRO will keep a record of all gang activity on or near campus, attempt to identify the individuals involved, and relate this information to the police department. This information will be compared to records from previous years to determine changes in gang activity. If necessary, the SRO will present gang awareness and prevention training to the student body, faculty, and parent organizations.
- The SRO will assess the students' attitudes toward law enforcement by interacting with them during the school day and during extracurricular activities and through the use of student surveys at the beginning and end of each school year. The relationship between the SRO and the student body will also be assessed through surveys completed by parents, faculty members, and administrators to gauge the effectiveness of the SRO program.
- The SRO will research and document all municipal, county, and state agencies available to provide services to students and their families. A directory of such agencies including points of contact will be developed or maintained. The SRO will hold conferences with students, parents, and school faculty when appropriate and keep a log of this activity. The SRO will also maintain a record of all referral services rendered and follow-up the referrals to determine if they were helpful or if other services are necessary.
- The SRO will maintain a record of all crime prevention lectures or seminars given to the student body or public. The SRO will assist school administrators in surveying school facilities for areas that provide opportunities for commission of a crime and develop a plan to correct the problem. The SRO will also assist school violence prevention teams in developing strategic responses to incidents of violence within the school.
- The commanding officer will be responsible to collect and analyze data, prepare progress reports and write the annual evaluation report.
- Data will be gathered on law enforcement related incidents, law enforcement related course grades, parent and teacher survey results, and outcomes of conferences with students, parents and faculty members, as well as any other information that is explicitly mentioned in the projects' performance indicators.

Attachment: Amherst SRO Contract for Routing (RES-2022-389 : 2022-2023 SRO Contract: Amherst Central School District (CRS#3217))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25644 **RESOLUTION 2022-390** **ADOPTED**

Memorandum of Understanding Use of Amherst Police Department Community Policing and Training Facility Buffalo Armory, LLC (CRS#3261)

TOWN BOARD AGENDA ITEM: APRIL 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Memorandum of Understanding**
Use of Amherst Police Department Community Policing and Training Facility
Buffalo Armory, LLC (CRS#3261)

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached Memorandum of Understanding between the Town of Amherst (Police) and Buffalo Armory, LLC, with regard to the above-entitled matter. Approval of this MOU is contingent upon the successful completion the Contract Routing System.

Thank you.

SPC: msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

A 3122 .02410: Revenue TBD

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

TEMPORARY ACCESS AGREEMENT

This Temporary Access Agreement ("Agreement") is entered as of the 1 day of April, 2022 by and between Buffalo Armory, LLC, 1050 Military Road, Buffalo, New York 14217 ("Buffalo Armory") and the Town of Amherst, 5583 Main Street, Williamsville, New York and the Town of Amherst Police Department, 500 John James Audubon Parkway, Buffalo, New York 14228 (collectively "Town").

1) To assist the Buffalo Armory with on location filming at 4220 Bailey Avenue, Amherst, New York, bearing SBL #67.65-1-6 ("Bailey Range"), Buffalo Armory needs access to this site for purposes of conducting its video production for marketing.

2) The TOWN, for valuable consideration the sufficiency and receipt of which is hereby acknowledged, hereby grants Buffalo Armory, the right to enter upon the Bailey Range Property for purposes described.

3) Buffalo Armory assumes all risks of, and agrees to indemnify, protect and save harmless the Town and its successors and assigns from all loss, damage, or injury to persons (including, without limitation, personal injuries resulting in death) or property and from all claims, demands, suits, liabilities, obligations and expenses arising therefrom, including reasonable legal fees and expenses, caused by or in any way connected with the exercise of the rights granted hereunder, except to the extent the same shall be caused by the sole negligent or sole intentional acts or omissions of any employee, officer, agent, invitee or representatives of the TOWN. In the event that any judgment, lien or other encumbrance is placed upon or levied against the Bailey Range Property in any suit or other proceedings due to Buffalo Armory's activities, Buffalo Armory will immediately cause the same to be discharged by the posting of a bond or otherwise.

4) Buffalo Armory shall maintain at all times during the term of this Agreement Commercial General Liability insurance in the amount of $1,000,000 per occurrence for personal injury and advertising injury, $2,000,000 aggregate, and $2,000,000 in excess with the TOWN added as an additional insured on a primary and non-contributory basis to protect the TOWN from against any and all claims, demands and cause of actions, arising by reason of any work performed by Buffalo Armory and said work will not commence under this Agreement until an appropriate certificate of insurance has been provided to the TOWN.

5) Tt the fullest extent permitted by law, Buffalo Armory will indemnify and hold the Town, its officers, agents, and employees, harmless from any and all liability, demands, claims, expenses (including legal fees and court costs), awards or judgments imposed upon the Town, its officers, agents, and/or employees, arising from the negligence, active or passive, of Buffalo Armory, its officers, agents, subcontractors, and/or employees in carrying out filming or other related activities on the Bailey Range Property.

6) No waiver of any breach of any condition of the Agreement shall be binding unless in writing and signed by the party waiving said breach. No such waiver shall in any

Attachment: MOU for Routing (RES-2022-390 : MOU: Bailey Training Facility Use: Buffalo Armory, LLC (CRS#3261))

way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall expressly include the same.

7) This Agreement shall be governed by, and interpreted according to the laws of the State of New York. Any and all legal action necessary to enforce the agreement will be held in Erie County, New York.

8) Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party, this contract shall be physically amended forthwith and executed by the parties to make such insertion.

8.) The Town of Amherst Town will approve this Agreement via the adoption of Resolution during its meeting on April 11, 2022.

9) This Agreement shall be effective as of the date first set forth above and this Agreement shall terminate on April 31, 2022.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the date set forth above.

BRIAN J. KULPA, SUPERVISOR
TOWN OF AMHERST

By: _____

Name: _____

Title: _____

BUFFFALO ARMORY GROUP, LLC

By: _____

Name: JOHN BATISTE

Title: PARTNER

Attachment: MOU for Routing (RES-2022-390 : MOU: Bailey Training Facility Use: Buffalo Armory, LLC (CRS#3261))

Client#: 1674426 BUFFAARM

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/17/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
USI Insurance Services, LLC
300 Meridian Centre Blvd., Suite 100
Rochester, NY 14618

CONTACT NAME: Jamie Moreau
PHONE (A/C, No, Ext): 585 238-4132 **FAX (A/C, No):**
E-MAIL ADDRESS: clrochester@usi.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Great Northern Insurance Company	20303
INSURER B : Federal Insurance Company	20281
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Buffalo Armory LLC
1050 Military Road
Buffalo, NY 14217

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE / X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY / PRO-JECT / LOC OTHER:	X		36062944	01/01/2022	01/01/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$1,000,000 $1,000,000 $10,000 $1,000,000 $2,000,000 $2,000,000 $
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY			73612919	01/01/2022	01/01/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$1,000,000 $ $ $ $
B	X UMBRELLA LIAB / X OCCUR EXCESS LIAB / CLAIMS-MADE DED / X RETENTION $10,000			78184988	01/01/2022	01/01/2023	EACH OCCURRENCE AGGREGATE 	$2,000,000 $2,000,000 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		71757712	01/01/2022	01/01/2023	PER STATUTE / X OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Town of Amherst Police Department
500 John James Audubon Pkwy
Buffalo, NY 14228

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

Attachment: MOU for Routing (RES-2022-390 : MOU: Bailey Training Facility Use: Buffalo Armory, LLC (CRS#3261))

This page has been left blank intentionally.

Attachment: MOU for Routing (RES-2022-390 : MOU: Bailey Training Facility Use: Buffalo Armory, LLC (CRS#3261))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25645 **RESOLUTION 2022-391** **ADOPTED**

Digital Surveillance Solutions (DSS) (CRS#3190) NTC Cameral Installation Security Upgrades

Town Board Agenda Item: April 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Digital Surveillance Solutions (DSS) (CRS#3190)**
NTC Cameral Installation Security Upgrades

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached contract between the Town of Amherst (Police) and Digital Surveillance Solutions, Inc. (DSS), 485 Cayuga Road, Buffalo New York, 14225 with regard to the above-entitled matter. This contract has successfully completed the Contract Routing System.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

KP 2110 .2150: $ 22,574.90

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

digital surveillance solutions

Tom Barillari
Tech Services
Amherst Police Department
500 John James Audubon Pkwy
Amherst, NY 14228

11/8/2021

Dear Tom Barillari,

Digital Surveillance Solutions, Inc. (DSS) is pleased to present this proposal for supplying, installing, and configuring IP video additions. Please find the following scope of work.

Scope of work:

-Project to be completed at Northtown Center at Amherst, Buffalo, 14221.

-Provide and Install 13 cameras:
(8) on Lower Level
(5) on Upper Level

-Add to Exacq server. Configuration of cameras, setup views and assign rights accordingly.

-Rack switch. Connect to network.

-DSS to cable from second floor closet to each camera location. DSS will provide patch cables for the camera end and the switch end.

Exclusions/Out of Scope:

-The Town of Amherst (Northtown Center) is responsible for providing a lift, if needed, for use during the installation.
-Network connectivity.
-Northtown Center to provide adequate rack space for patch panel and switch.
-120V power in closet.
-Paths to network rack.

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

digital surveillance solutions

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

Assumptions:

1. All conduit pathways, cable pathways and critical points of access must be provided and accessible at time of work.
2. All work shall be performed Monday-Friday during normal business hours (7:00am to 5:00pm).
3. Parking on site shall be provided by client at no cost.
4. Amherst Police Department will provide free and clear access to all working areas.
5. A point of contact (POC) and site access to necessary areas must be provided prior to arrival to the jobsite. This includes all areas to be under surveillance, data center(s), wiring closets and mechanical rooms and any other areas that could impact the deployment of the Video Surveillance System. The POC will be the person to whom all DSS communication will be addressed and who has the authority to act for Amherst Police Department in all aspects of the project. POC responsibilities includes:

    a. Serve as the interface between Digital Surveillance Solutions, Inc. and Amherst Police Department
    b. Identify, schedule and confirm availability of support staff and management for onsite meetings (if necessary) and training.
    c. Schedule meeting/training rooms as necessary.
    d. Work with Digital Surveillance Solutions to administer any project change orders.
    e. Obtain and provide information, data, decisions and approvals, within 1 working day of Digital Surveillance Solutions' request, unless both parties agree to an extended response time.
    f. Resolve deviations from project plans that may be caused by Amherst Police Department
    g. Help resolve project issues, and escalate issues within Amherst Police Department.

6. Any down time resulting from the lack of access or if customer scope of work not completed will not be the responsibility of Digital Surveillance Solutions and is billable at current hourly labor & travel rates.
7. Any hardware not included in DSS scope of work is to be functional and complete. If any hardware is non-functional or not complete, a change order will be required to add additional hardware of this scope. If change order is not provided to DSS in a timely manner, additional hours will be billed at current hourly labor & travel rates.
8. Installation will conform to all State, County and local codes.

digital surveillance solutions

9. All electrical supply to be provided by Amherst Police Department.
10. Environmental conditions required by hardware manufacturers will be maintained by Amherst Police Department for the term of the system warranty. If environmental conditions required by manufacture are not maintained, repairing damage to equipment will be at the expense of the Amherst Police Department.
11. Amherst Police Department to collaborate with DSS on the creation of the business rules that govern the utilization of the video surveillance system.

Terms:

1. Amherst Police Department to provide an adequate path for loading equipment and materials into the facility. This includes, but not limited to, a loading dock, ramp, freight elevator, etc. Additionally, a secure location will be provided by Amherst Police Department or General Contractor to store material and equipment on site during the installation process.
2. Upon delivery to customer site, Amherst Police Department assumes responsibility for the safeguard and condition of all delivered materials.
3. Any damage or loss to Digital Surveillance Solutions installation by others will be billed to client. DSS will not make any corrections to damage until written approval has been provided to DSS by Amherst Police Department with signature of authorized party. If authorization is not given to DSS in a timely manner, DSS will not be held responsible for any delays.
4. Amherst Police Department is responsible for removal of old product, which may include but not limited to, cameras, cabling, recording equipment i.e. DVRs, servers, etc.

Warranty:

1. Digital Surveillance Solutions provides a sixty (60) day warranty on labor.
2. Warranty will begin upon completion of DSS scope items. Warranty will not be delayed due to system dependencies not in scope for DSS. Multi phased projects will have warranties that commence at completion of each phase.
3. Equipment warranty is established by the manufacturers unless specified otherwise in the scope of work.
4. Should any defects develop during the warranty period due to workmanship or equipment failure, Digital Surveillance Solutions shall repair to original working order at no expense to client.

Warranty exclusions:

1. Customer furnished equipment, cables, or connectors.
2. Modification of system by others without the written consent and approval by Digital Surveillance Solutions. Modification(s) of the system by any vendor

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

digital surveillance solutions

without written consent of Digital Surveillance Solutions will render the warranty null and void. Repairs and replacements will be subject to Time & Materials at Digital Surveillance Solutions current labor rates at the time of repairs.

3. System abuse or misuse.
4. Floods, fires, earthquakes, lightning strikes, or other events beyond the control of Digital Surveillance Solutions.
5. Environmental conditions required by hardware manufacturers will be maintained by Amherst Police Department for the term of the system warranty. If environmental conditions required by manufacture are not maintained, repairing damage to equipment will be at the expense of the Amherst Police Department.

I appreciate the opportunity to submit this proposal. If you have any questions, comments, or require further details, feel free to contact me.

Best Regards,

Jessica Pitarresi
Digital Surveillance Solutions
485 Cayuga Road
Buffalo, NY 14225

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

digital surveillance solutions

Northtown Center

Prepared For:

Tom Barillari
Amherst Police Department
500 John James Audubon Pkwy
Amherst, NY 14228
United States
tbarillari@apdny.org

Prepared By:

Jessica Pitarresi
Digital Surveillance Solutions, Inc.
485 Cayuga Road
Buffalo, NY 14225
jessicap@dssvideo.com
716-597-0369

Quote #	Sales Rep	State Contract
DSSQ2957	Jessica Pitarresi	PT68787

Item Number	Description		QTY	Unit Price	Total Price
Lower Level					
01178-001	Axis	AXIS M3058-PLVE	3	$798.06	$2,394.18
01595-001	Axis	AXIS P3247-LV	3	$732.26	$2,196.78
01592-001	Axis	AXIS P3245-LV	1	$544.26	$544.26
01707-001	Axis	AXIS M3065-V	1	$252.86	$252.86
Upper Level					
0936-001	Axis	AXIS F44 DUAL AUDIO INPUT	1	$516.06	$516.06
0775-001	Axis	AXIS F4005-E DOME SENSOR UNIT	4	$271.66	$1,086.64
01597-001	Axis	AXIS P3248-LV	1	$920.26	$920.26
01177-001	Axis	AXIS M3057-PLVE	1	$610.06	$610.06
01178-001	Axis	AXIS M3058-PLVE	2	$798.06	$1,596.12
Network Switch & Licensing					
US-48-500W	Ubiquiti	UNIFISWITCH 48PORT 500W	1	$834.50	$834.50
EVIP-01	Exacq	PROFESSIONAL IP Camera license, per camera. Includes 1 year of software updates, or 3 years when purchased with an exacqVision server.	13	$159.60	$2,074.80
Cabling Equipment					
5025-281	Axis	AXIS T8129 PoE EXTENDER	1	$187.06	$187.06
9P234C65B1	Paige Cabling	23/4PR SOLID CATEGORY 6 550 MHZ BLUE	5,000	$0.29	$1,450.00

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

Item Number	Description		QTY	Unit Price	Total Price
AX103114	Belden	KeyConnect Patch Panel,24-port,1U,Black(	1	$45.94	$45.94
AX101324	Belden/CDT	1-PORT MOD JACK 8W8P UTP T568A/B CAT6 IP5 KEYCONNECT TIA606 YELLOW	26	$8.32	$216.32
71065403WH	Paige Cabling	CATEGORY 6 PATCH CABLE WHITE 3 FOOT NON PLENUM	26	$2.15	$55.90
AX102651	Belden	KSTONE SIDE ENTRY BOX 1-PORT	13	$3.32	$43.16
Labor					
CCTV/Surveillance Camera System	DSS Labor	Interior Installation - Single Lens Cameras. Prevailing wage.	15	$130.00	$1,950.00
CCTV/Surveillance Camera System	DSS Labor	Interior Installation - Quad Lens Cameras. Prevailing wage.	3	$130.00	$390.00
CCTV/Surveillance Camera System	DSS Labor	Rack switch. Connect to network. Prevailing wage.	1	$130.00	$130.00
Offsite Integration/Maintenance	DSS Labor	Camera Configuration/Addressing. Adding to Exacq server.	4	$100.00	$400.00
Project/Program Manager	DSS Labor	Project Management. Oversees all onsite work.	4	$130.00	$520.00
Electrical Installer Onsite	DSS Labor	Cable Runs and terminations.	32	$130.00	$4,160.00

SUBTOTAL	$22,574.9
SALES TAX	$0.0
Optional Item Total	$0.0
TOTAL	$22,574.9

Taxes, shipping, handling and other fees may apply. DSS reserves the right to cancel orders arising from pricing or other erro

By signing below, I hereby acknowledge and accept all terms set forth by this scope of work and proposal:

Signature _____ Date _____

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

Digital Surveillance Solutions

Jessica Pitarresi

Nov 08, 2021

Northtowns Center

Amherst,NY,

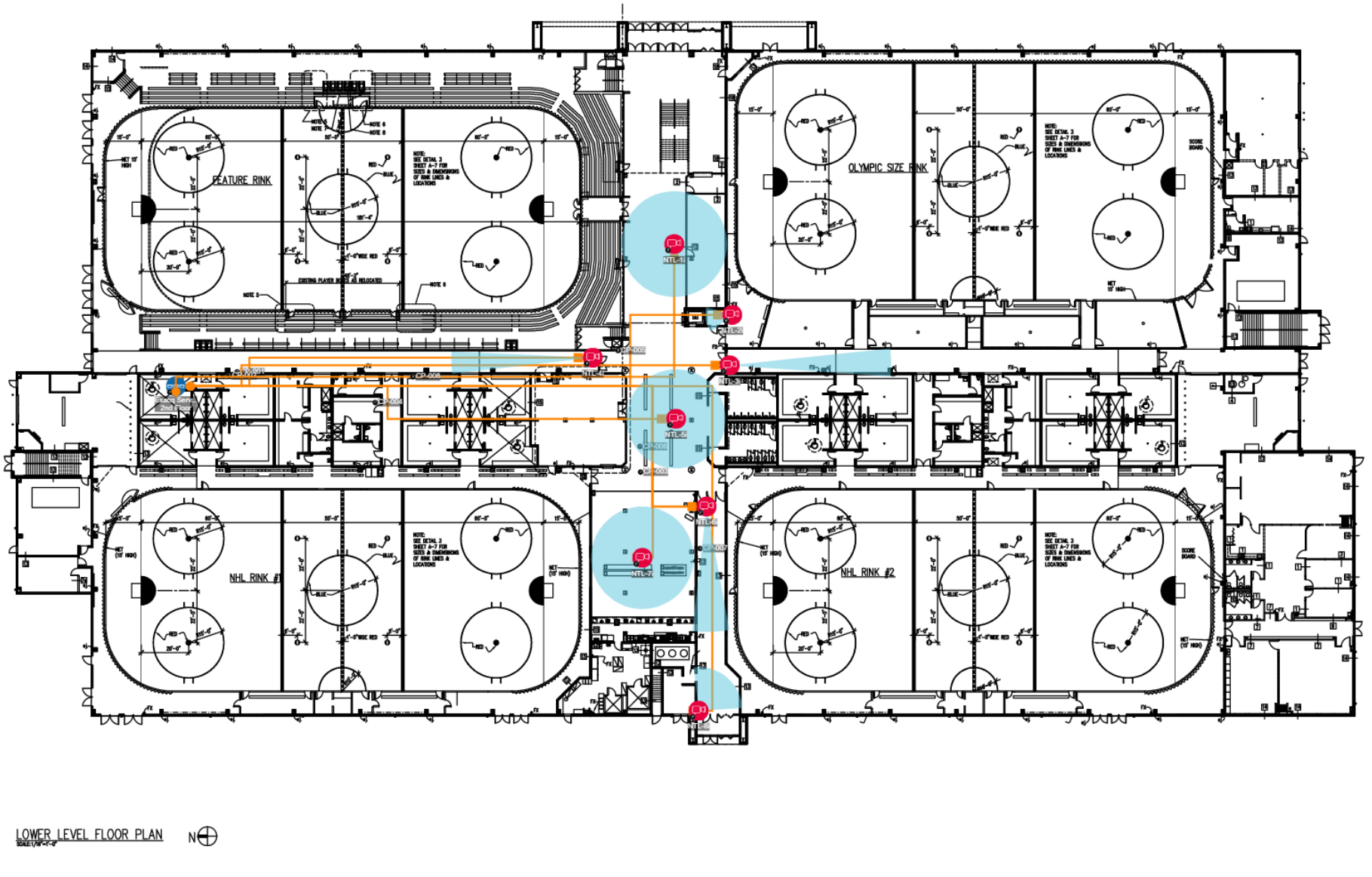
Included Surveys

Lower Floor

Upper Level

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera Installation (CRS#3190))

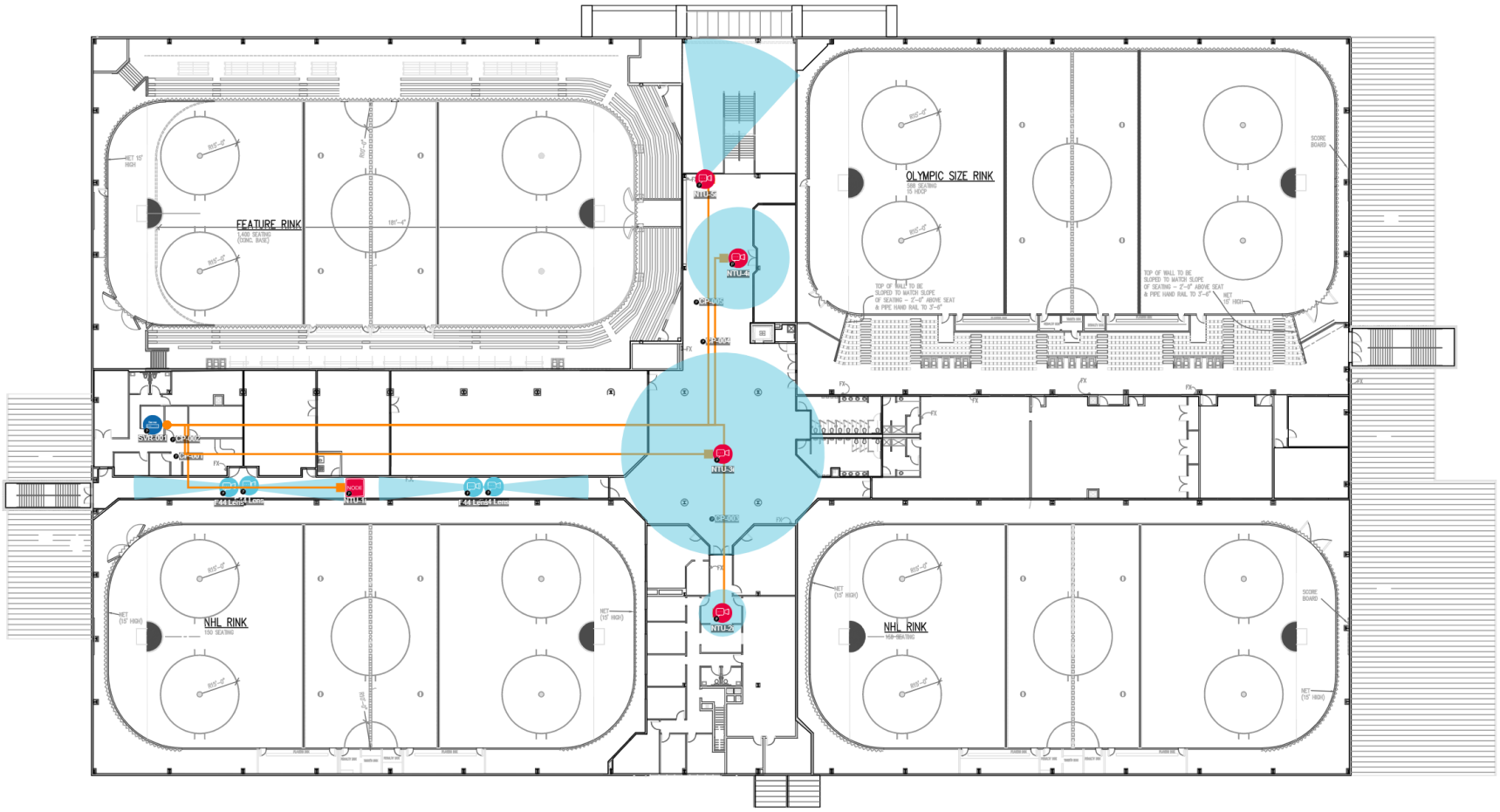
Lower Floor



Survey Layout

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera

Upper Level



[Survey Layout]

Attachment: DSS NTC Contract for CRS Routing 3.2.2022 (RES-2022-391 : DSS : NTC Camera

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Police
Initiated by: **Scott Chamberlin**
Co-Sponsored by:

DOC ID: 25646 **RESOLUTION 2022-392** **ADOPTED**

Digital Surveillance Solutions (DSS) (CRS#3211) Security Upgrades to APD Lab & Interview Room

Town Board Agenda Item: April 11, 2022

TO: **Town Board**

FROM: **Scott P. Chamberlin, Chief of Police**

RE: **Digital Surveillance Solutions (DSS) (CRS#3211) Security Upgrades to APD Lab & Interview Room**

Kindly adopt a resolution authorizing the Supervisor to adopt and execute the attached contract between the Town of Amherst (Police) and Digital Surveillance Solutions, Inc. (DSS), 485 Cayuga Road, Buffalo New York, 14225 with regard to the above-entitled matter. This contract has successfully completed the Contract Routing System.

Thank you.

SPC:msl
Attachment
C: Tim Koller, Deputy Town Clerk **(Agenda Item: April 11, 2022)**

4/11/2022
Consent

FINANCIAL IMPACT:

KP 2110 2150: $16,795.60

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

digital surveillance solutions

Tom Barillari
Tech Services
Amherst Police Department
500 John James Audubon Pkwy
Amherst, NY 14228

3/4/2022

Dear Tom Barillari,

Digital Surveillance Solutions, Inc. (DSS) is pleased to present this proposal for supplying, installing, and configuring access control additions. Please find the following scope of work.

Scope of work:

-Provide and install at
Tech services office: Strike, keypad reader and door contact.
Interview room #1 - Strike, door contact and Bluetooth reader inside room.
Crime Lab - Strike, door contact and Bluetooth reader.
Lab - Strike, door contact and reader on each side of door.

-Provide and install S2 node.
-Provide and install power supply.
-Provide and install battery backup for power supply.
-Access control cabling to each door.

Exclusions/Out of Scope:

-Network connectivity.
-Amherst PD to provide access to IT closets, ceilings, and/or any building location necessary to perform work.
-Amherst PD to provide adequate space for S2 node and power supply.
-120V power.
-Amherst PD responsible for reoccurring annual fee for mobile credentials.
-Amherst PD to provide excel spreadsheet of all mobile users to be added to system.

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

digital surveillance solutions

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Assumptions:

1. All conduit pathways, cable pathways and critical points of access must be provided and accessible at time of work.
2. All work shall be performed Monday-Friday during normal business hours (7:00am to 5:00pm).
3. Parking on site shall be provided by client at no cost.
4. Amherst Police Department will provide free and clear access to all working areas.
5. A point of contact (POC) and site access to necessary areas must be provided prior to arrival to the jobsite. This includes all areas to be under surveillance, data center(s), wiring closets and mechanical rooms and any other areas that could impact the deployment of the Video Surveillance System. The POC will be the person to whom all DSS communication will be addressed and who has the authority to act for Amherst Police Department in all aspects of the project. POC responsibilities includes:

    a. Serve as the interface between Digital Surveillance Solutions, Inc. and Amherst Police Department
    b. Identify, schedule and confirm availability of support staff and management for onsite meetings (if necessary) and training.
    c. Schedule meeting/training rooms as necessary.
    d. Work with Digital Surveillance Solutions to administer any project change orders.
    e. Obtain and provide information, data, decisions and approvals, within 1 working day of Digital Surveillance Solutions' request, unless both parties agree to an extended response time.
    f. Resolve deviations from project plans that may be caused by Amherst Police Department
    g. Help resolve project issues, and escalate issues within Amherst Police Department.

6. Any down time resulting from the lack of access or if customer scope of work not completed will not be the responsibility of Digital Surveillance Solutions and is billable at current hourly labor & travel rates.
7. Any hardware not included in DSS scope of work is to be functional and complete. If any hardware is non-functional or not complete, a change order will be required to add additional hardware of this scope. If change order is not provided to DSS in a timely manner, additional hours will be billed at current hourly labor & travel rates.
8. Installation will conform to all State, County and local codes.
9. All electrical supply to be provided by Amherst Police Department.

digital surveillance solutions

10. Environmental conditions required by hardware manufacturers will be maintained by Amherst Police Department for the term of the system warranty. If environmental conditions required by manufacture are not maintained, repairing damage to equipment will be at the expense of the Amherst Police Department.
11. Amherst Police Department to collaborate with DSS on the creation of the business rules that govern the utilization of the video surveillance system.

Terms:

1. Amherst Police Department to provide an adequate path for loading equipment and materials into the facility. This includes, but not limited to, a loading dock, ramp, freight elevator, etc. Additionally, a secure location will be provided by Amherst Police Department or General Contractor to store material and equipment on site during the installation process.
2. Upon delivery to customer site, Amherst Police Department assumes responsibility for the safeguard and condition of all delivered materials.
3. Any damage or loss to Digital Surveillance Solutions installation by others will be billed to client. DSS will not make any corrections to damage until written approval has been provided to DSS by Amherst Police Department with signature of authorized party. If authorization is not given to DSS in a timely manner, DSS will not be held responsible for any delays.
4. Amherst Police Department is responsible for removal of old product, which may include but not limited to, cameras, cabling, recording equipment i.e. DVRs, servers, etc.

Warranty:

1. Digital Surveillance Solutions provides a sixty (60) day warranty on labor.
2. Warranty will begin upon completion of DSS scope items. Warranty will not be delayed due to system dependencies not in scope for DSS. Multi phased projects will have warranties that commence at completion of each phase.
3. Equipment warranty is established by the manufacturers unless specified otherwise in the scope of work.
4. Should any defects develop during the warranty period due to workmanship or equipment failure, Digital Surveillance Solutions shall repair to original working order at no expense to client.

Warranty exclusions:

1. Customer furnished equipment, cables, or connectors.
2. Modification of system by others without the written consent and approval by Digital Surveillance Solutions. Modification(s) of the system by any vendor without written consent of Digital Surveillance Solutions will render the warranty

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

digital surveillance solutions

null and void. Repairs and replacements will be subject to Time & Materials at Digital Surveillance Solutions current labor rates at the time of repairs.

3. System abuse or misuse.
4. Floods, fires, earthquakes, lightning strikes, or other events beyond the control of Digital Surveillance Solutions.
5. Environmental conditions required by hardware manufacturers will be maintained by Amherst Police Department for the term of the system warranty. If environmental conditions required by manufacture are not maintained, repairing damage to equipment will be at the expense of the Amherst Police Department.

I appreciate the opportunity to submit this proposal. If you have any questions, comments, or require further details, feel free to contact me.

Best Regards,

Jessica Pitarresi
Digital Surveillance Solutions
485 Cayuga Road
Buffalo, NY 14225

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

digital surveillance solutions

Amherst PD - Phase 1

Prepared For:

Tom Barillari
Amherst Police Department
500 John James Audubon Pkwy
Amherst, NY 14228
United States
tbarillari@apdny.org

Prepared By:

Jessica Pitarresi
Digital Surveillance Solutions, Inc.
485 Cayuga Road
Buffalo, NY 14225
jessicap@dssvideo.com
716-597-0369

Quote #	Sales Rep	State Contract
DSSQ4215	Jessica Pitarresi	PT68787

Item Number	Description		QTY	Unit Price	Total Price
S2 Equipment					
S2-NN-E2R-WM	S2	NETWORK NODE IN WALL MOUNT ENCLOSURE WITH 1 S2 ACM BLADE (SUPPORTS UP TO 7 S2 APPLICATION BLADES) Wall mount enclosure with (1) S2 ACM blade and 6 available expansion slots.	1	$2,124.75	$2,124.75
S2-ACM	S2	LENELS2 ACCESS CONTROL APPLICATION BLADE Access control application extension blade with support for 2 OSDP or Wiegand readers, 4 inputs and 4 outputs. OSDP support requires NetBox Software Version 5.1 or later and OSDP-enabled readers.	6	$714.00	$4,284.00
AL600ULACM	Altronix	6A 12/24 VDC UL SPLY W/ACM8	1	$474.14	$474.14
BT1212	Altronix	12V/12AH BATTERY	1	$85.15	$85.15
BT124	Altronix	12V/4AH BATTERY	1	$30.16	$30.16
71065425BL	Paige Cabling	CATEGORY 6 PATCH CABLE BLUE 25 FOOT NON PLENUM	1	$8.70	$8.70
MID-SUB-T100	HID	1-YEAR USER LICENSE, HID ORIGO MOBILE IDENTITIES	50	$4.60	$230.00
Doors					
DPS-M-GY	Securitron	Door Position Switch for Metal Doors - Grey	4	$23.80	$95.20
1600-CLB-630	HES	1600-CLB-630 Complete Pac Electric Strike Kit For Latchbolt Locks with (4) Faceplates, Satin Stainless Steel	4	$472.00	$1,888.00

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Item Number	Description		QTY	Unit Price	Total Price
20NKS-00-000000	HID	SIGNO 20,BLK/SLVR,PIG,CRD PFL STD,MA RDY,FMT:ASP10022,WIEG,32-B MSB,EM:32-B,LED:RED,FLSH:GRN, BZR,SRF:ON,IPM:OFF,VEL:OFF,TA P	4	$264.00	$1,056.00
40KNKS-00-000000	HID	SIGNO 40K,BLK/SLVR,PIG,CRD PFL STD,MA RDY,FMT:ASP10022,WIEG,32-B MSB,EACH,4-B MSG,NOPAR,LEN:13,FC:0,EM:32-B, LED:RED,FLSH:GRN,BZR,KBD:RED ,BZR,VIS:ON,SRF:ON,IPM:OFF,VEL: OFF,TAP	1	$448.00	$448.00
Physical AC SystemTech	DSS Labor	Install strikes, readers and DCs. Configuration of new portals in S2. Prevailing wage.	16	$125.00	$2,000.00
Physical AC SystemTech	DSS Labor	Install node. Add to S2. Install power supply and battery backup. Prevailing wage.	4	$125.00	$500.00
Physical AC SystemTech	DSS Labor	Terminate to S2 Node and wire devices. Prevailing wage.	6	$125.00	$750.00
Offsite Integration/Maintenance	DSS Labor	Offsite configuration and testing.	4	$125.00	$500.00
Offsite Integration/Maintenance	DSS Labor	Set up Mobile card format, add users, and assign cards through excel import.	2	$125.00	$250.00
Project/Program Manager	DSS Labor	Oversees all onsite work.	2	$125.00	$250.00
Cabling					
4467030-S	Windy City Wire	4 Element Composite Cable PLNM	300	$2.53	$759.00
Physical AC SystemTech	DSS Labor	Access control cable runs and terminations. Run cabling from door to devices. Run conduit as needed. Prevailing wage.	8.5	$125.00	$1,062.50

SUBTOTAL	$16,795.6
SALES TAX	$0.0
Optional Item Total	$0.0
TOTAL	$16,795.6

Taxes, shipping, handling and other fees may apply. DSS reserves the right to cancel orders arising from pricing or other erro

By signing below, I hereby acknowledge and accept all terms set forth by this scope of work and proposal:

Signature _____ Date _____

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Digital Surveillance Solutions

Jessica Pitarresi

Mar 04, 2022

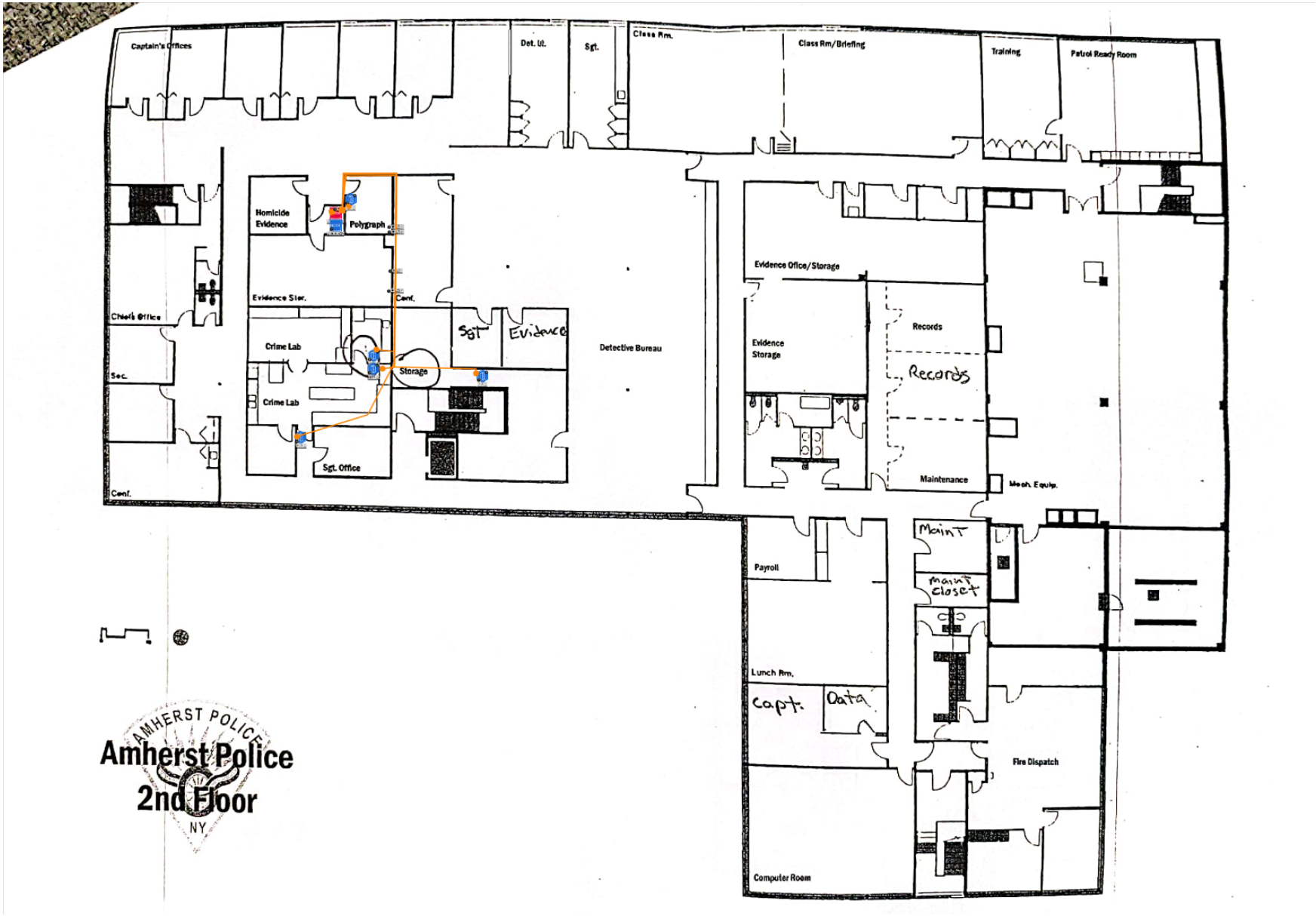
Site: Amherst PD Interior

JJ Audobon Amherst,NY,

Survey: 2nd Floor

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Survey Overview



Survey Layout

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Addendum to Contract Major Exposure

1. Notwithstanding any other provision in this Agreement, the following clauses shall be controlling. Should any other provision of the Agreement conflict with the clauses in this Addendum then the provisions of this Addendum are to be enforceable and any conflicting provision shall be considered null and void.

2. No rules, requirements or customs of any society or association of professional Contractors or any similar association shall affect this Agreement in any way whatsoever or be binding upon the Town.

3. To the fullest extent permitted by law, Contractor shall indemnify and hold the Town, its officers, agents, and employees, harmless from any and all liability, demands, claims, or expenses, awards or judgments imposed upon the Town, its officers, agents, and/or employees, arising out of the work of the Contractor its officers, agents, subcontractors, and/or employees as well as the negligence, active or passive, of the Contractor, its officers, agents, subcontractors, and/or employees.

4. Contractor shall not commence work under this Agreement until it has obtained all insurance specified below, produced satisfactory proof of the same and such insurance has been approved by the Town.

(a) Workers' Compensation Insurance: Contractor shall take out and maintain during the life of this Agreement, Workers' Compensation Insurance (both Part A and Part B) for its employees to be assigned to the work hereto under.

(b) General Liability, Professional (if applicable) Liability and Property Damage Insurance: Contractor shall take out and maintain during the life of this Agreement, such general liability and property damage insurance as shall protect it and the Town of Amherst from claims for damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this Agreement. The amounts of such insurance shall be as follows in an amount not less than $1,000,000.00 per occurrence for bodily injury and property damage including wrongful death, and $2,000,000.00 aggregate. Umbrella coverage shall be in an amount of at least $5,000,000.00.

(c) Contractor shall furnish the above insurances, including subcontractors' insurances, to the Town and shall also assure that any policy procured by it shall name the Town as an additional insured on a primary and non-contributory basis.

(d) Contractor shall ensure all its subcontractors, if any, have obtained all the above insurances and shall also assure that any policy procured by any subcontractor or sub-subcontractor shall name the Town as an additional insured on a primary and non-contributory basis.

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

5. Any accident shall be reported to the Office of the Town Attorney as soon as possible and not later than twenty-four (24) hours from the time of such accident. A detailed written report must be submitted to the Town of Amherst as soon thereafter as possible as and no later than three (3) days after the date of such accident.

6. No Assignment: In accordance with the provisions of section 109 of the General Municipal Law, the Contractor is hereby prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of its right, title or interest in this agreement, or its power to execute this Agreement, to any other person or corporation without the previous consent in writing of the Town.

7. Required Provisions of Law: Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party this Agreement shall be physically amended forthwith to make such insertion. In particular, the Contractor shall, among other things, fully comply with:

(a) Article 8 of the NYS Labor Law for public work contracts and Article 9 of the Labor Law regarding prevailing wage for Building Service employees.
(b) Labor Law Section 220-e and Executive Law Sections 291-299 and the Civil Rights Law relating to prohibition against discrimination and equal opportunity.
(c) Affirmative action as required by the Labor Law.
(d) Prevention of dust hazard required by Labor Law Section 222-a.
(e) Preference in employment of persons required by Labor Law Section 222.
(f) Eight-hour workday as required by Labor Law Section 220(2).
(g) Chapter 32 of the Town of Amherst: Minority Women and Business Utilization Commitment.
(h) Chapter 163 of the Town of Amherst: Registration of Sex Offenders.

8. The Contractor, in accordance with its status as an independent Contractor, covenants and agrees that it will conduct itself consistent with such status. It will neither hold itself out as nor claim to be, an officer or employee of the Town by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the Town, including, but not limited to: workers' compensation coverage, unemployment insurance benefits, Social Security coverage, or retirement membership or credit.

Waiver: No waiver of any breach of any condition of the Agreement shall be binding unless in writing and signed by the party waiving said breach. No such waiver shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall include the same.

9. This Agreement shall be governed by, and interpreted according to the laws of the State of New York. If the contract between the parties refers to the laws, statutes, rules, regulations or ordinances for any state other than New York State, to the laws, statutes, rules, regulations or ordinances for any county other than Erie County, New York or to the laws, statutes, rules, regulations or ordinances for any municipality other than the Town of Amherst, then the laws, statutes, rules, regulations or ordinances for New York State, Erie county and/or the Town of Amherst shall apply as applicable. Any and all legal action necessary to enforce the Agreement will be venued in Supreme Court, Erie County, New York or in the United States District Court for the Western District of New York, Buffalo Division.

10. It is hereby acknowledged that performance of this Contract will be undertaken in accordance with the specifications and pricing on which the bid was submitted.

Authority for execution on behalf of Town: The Supervisor has executed this Agreement pursuant to a Resolution adopted by the Town Board of the Town, at a meeting thereof held on _____. Brian J. Kulpa, the Supervisor whose signature appears hereafter, is duly authorized and empowered to execute this instrument and enter into such an Agreement on behalf of the Town as a result of that Resolution. This instrument shall be executed in triplicate. At least one (1) copy shall be permanently filed, after execution thereof, in the office of the Town Clerk of Town.

Agreed to and Accepted by:

Digital Surveillance Solutions
Print Name of Company

By: _____
Signature

Susan Haaf
Printed name

Date: 3-7-2022

Agreed to and Accepted by:

Town of Amherst

By: _____
Brian J. Kulpa, Supervisor

Date: _____

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

IRAN DIVESTMENT ACT CERTIFICATION

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a provision was added to the State Finance Law (SFL), Section 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will develop a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). This list is posted on the OGS website.

By submitting a response to this solicitation, or by assuming the responsibility under a Contract/Lease awarded hereunder, Bidder/Contractor/Vendor (or any assignee) certifies that it will not utilize on such Contract/Lease any subcontractor that is identified on the prohibited entities list.

Additionally, Bidder/Contractor/Vendor is advised that any Bidder/ Contractor/Vendor seeking to renew or extend a Contract/Lease (or assume responsibility of a Contract/Lease awarded must certify at the time the Contract/Lease is renewed, extended or assigned that it is not included on the prohibited entities list.

During the term of the Contract/Lease, should the Town of Amherst (Town) receive information that a person is in violation of the above-referenced certification, the Town will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the Town shall take such action as appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor/Vendor in default.

The Town reserves the right to reject any Contract/Lease or request for assignment for an entity that appears on the prohibited entities list prior to the award of a Contract/Lease, and to pursue a responsibility review with respect to any entity that is awarded a Contract/Lease and appears on the prohibited entities list after Contract/Lease award.

Company Name: Digital Surveillance Solutions

Signature: Susan Haaf

Print Name: Susan Haaf

Title: Sales Administrator

Date: 3-7-2022

RAEANN J. JAKUBOWSKI
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01JA6309956
Qualified in Erie County
Commission Expires 08/18/20 22

Sworn To Before Me This

7th Day of March 2022

Notary Public

Revised 4.2017

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

DIGIT-1

13.Q.7.a

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 02/18/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Gugino Insurance Agency, Inc. 5707 Main Street Williamsville, NY 14221 Alayne M. Donner 716-633-1313	CONTACT NAME: Alayne M. Donner PHONE (A/C, No, Ext): 716-633-1313 FAX (A/C, No): 716-631-5770 E-MAIL ADDRESS: adonner@guginoagency.com
INSURED Digital Surveillance Solutions Inc. 485 Cayuga Road Buffalo, NY 14225	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Philadelphia Indemnity Ins Co — 18058 INSURER B : Merchants Mutual Ins. Co. — 23329 INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC OTHER:	X		PHPK2381344	03/01/2022	03/01/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,00 $ 100,00 $ 10,00 $ 1,000,00 $ 3,000,00 $ 3,000,00
B	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY X SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY			CAP9269147	03/01/2022	03/01/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,00 $ $ $
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10000			PHUB803802	03/01/2022	03/01/2023	EACH OCCURRENCE AGGREGATE	$ 5,000,00 $ 5,000,00
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A					PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $
A	Professional			PHSD1622602	06/01/2021	06/01/2022	Per Claim Aggregate	2,000,00 2,000,00

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate holder is named as ad additional insured on a Primary and Non-contributory basis under the General Liability section per written contract.
Umbrella follows form, General Liability CG000010413 and PI-GLD-SGNY.

CERTIFICATE HOLDER

Town of Amherst
5583 Main Street
Williamsville, NY 14221

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Alayne M. Donner

© 1988-2015 ACORD CORPORATION. All rights reserved.
The ACORD name and logo are registered marks of ACORD

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

NYSIF
New York State Insurance Fund

225 OAK STREET, BUFFALO, NEW YORK 14203-1685
| nysif.com

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

^ ^ ^ ^ ^ ^ 200886315

KEEVILY SPERO-WHITELAW INC
500 MAMARONECK AVENUE
HARRISON NY 10528

SCAN TO VALIDATE
AND SUBSCRIBE

POLICYHOLDER	CERTIFICATE HOLDER
DIGITAL SURVEILLANCE SOLUTIONS, INC. 485 CAYUGA RD BUFFALO NY 14225	TOWN OF AMHERST 5583 MAIN STREET WILLIAMSVILLE NY 14221

POLICY NUMBER	CERTIFICATE NUMBER	POLICY PERIOD	DATE
B 2354 271-5	888059	11/01/2021 TO 11/01/2022	10/15/2021

THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 2354 271-5, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS' COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

IF YOU WISH TO RECEIVE NOTIFICATIONS REGARDING SAID POLICY, INCLUDING ANY NOTIFICATION OF CANCELLATIONS, OR TO VALIDATE THIS CERTIFICATE, VISIT OUR WEBSITE AT HTTPS://WWW.NYSIF.COM/CERT/CERTVAL.ASP. THE NEW YORK STATE INSURANCE FUND IS NOT LIABLE IN THE EVENT OF FAILURE TO GIVE SUCH NOTIFICATIONS.

THE POLICY INCLUDES A WAIVER OF SUBROGATION ENDORSEMENT UNDER WHICH NYSIF AGREES TO WAIVE ITS RIGHT OF SUBROGATION TO BRING AN ACTION AGAINST THE CERTIFICATE HOLDER TO RECOVER AMOUNTS WE PAID IN WORKERS' COMPENSATION AND/OR MEDICAL BENEFITS TO OR ON BEHALF OF AN EMPLOYEE OF OUR INSURED IN THE EVENT THAT, PRIOR TO THE DATE OF THE ACCIDENT, THE CERTIFICATE HOLDER HAS ENTERED INTO A WRITTEN CONTRACT WITH OUR INSURED THAT REQUIRES THAT SUCH RIGHT OF SUBROGATION BE WAIVED.

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS NOR INSURANCE COVERAGE UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICY.

NEW YORK STATE INSURANCE FUNI

DIRECTOR, INSURANCE FUND UNDERWRITING

VALIDATION NUMBER: 1475296

00000000000097715451

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

NEW YORK STATE Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE
DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name & Address of Insured (use street address only)
DIGITAL SURVEILLANCE SOLUTIONS, INC.
485 CAYUGA RD
BUFFALO, NY 14225

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured
716-597-0369

1c. Federal Employer Identification Number of Insured or Social Security Number
20-0886315

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)
Town of Amherst
5583 Main Street
Williamsville, NY 14221

3a. Name of Insurance Carrier
Standard Security Life Insurance Company of New York

3b. Policy Number of Entity Listed in Box "1a"
34078-01

3c. Policy effective period
5/1/2008 to 9/23/2022

4. Policy provides the following benefits:
- [x] A. Both disability and paid family leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid family leave benefits only.

5. Policy covers:
- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 9/24/2021 By _____
(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number (212) 355-4141 Name and Title SUPERVISOR-DBL/POLICY SERVICES

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed _____ By _____
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: *Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1.* ***Insurance brokers are NOT authorized to issue this form.***

DB-120.1 (10-17)

DB-120.1 (10-17)

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in box "1a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices my be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Paid Family Leave Benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.

Attachment: DSS Lab Security Upgrades for Routing (RES-2022-392 : DSS: Security Upgrades: APD Lab & Interview Room (CRS# 3211))

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Youth & Recreation
Initiated by: **Mary Diana Pouli**
Co-Sponsored by:

DOC ID: 25638 **RESOLUTION 2022-393** **ADOPTED**

User Agreement - Fitness in the Parks CRS#3257

Authorize the Supervisor to sign an agreement between the Town of Amherst (Youth & Recreation Department) and the YMCA Buffalo Niagara to offer free fitness classes at Bassett Park for the summer of 2022.

4/11/2022
Consent

FINANCIAL IMPACT:

None

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

USER AGREEMENT

This Agreement, by and between the Town of Amherst (TOWN) and YMCA Buffalo Niagara, is as follows:

The TOWN hereby grants permission for YMCA Buffalo Niagara to offer free fitness classes at Bassett Park as part of its Fitness in the Parks program with Independent Health:

Dates: Tuesdays and Fridays, June 1-September 30, 2022
Time: 6:00-7:00pm

YMCA Buffalo Niagara hereby agrees to indemnify and hold the TOWN harmless from any and all bodily injury or property damage claims or incidents that are a direct result of YMCA Buffalo Niagara's use of the TOWN property.

YMCA Buffalo Niagara is required to sign and adhere to the terms and conditions of the addendum to contract attached hereto and made a part hereof.

Town of Amherst

By: _____
Brian J. Kulpa
Supervisor

Date: _____

YMCA Buffalo Niagara

By: John T Ehrba
Signature

JOHN T. EHRBAR
Printed Name

PRESIDENT / CEO
Title

Date: 3/21/22

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Addendum to Contract VENDOR ON SITE Minor

1. Notwithstanding any other provision in this Agreement, the following clauses shall be controlling. Should any other provision of the Agreement conflict with the clauses in this Addendum then the provisions of this Addendum are to be enforceable and any conflicting provision shall be considered null and void.

2. No rules, requirements or customs of any society or association of professional Vendors or any similar association shall affect this Agreement in any way whatsoever or be binding upon the Town.

3. To the fullest extent permitted by law, Vendor shall indemnify and hold the Town, its officers, agents, and employees, harmless from any and all liability, demands, claims, or expenses, awards or judgments imposed upon the Town, its officers, agents, and/or employees, arising out of the work of the Vendor its officers, agents, sub-Vendors, and/or employees as well as the negligence, active or passive, of the Vendor, its officers, agents, sub-Vendors, and/or employees.

4. Vendor shall not commence work under this Agreement until it has obtained all insurance specified below, produced satisfactory proof of the same and such insurance has been approved by the Town.

(a) Workers' Compensation Insurance: Vendor shall take out and maintain during the life of this Agreement, Workers' Compensation Insurance (both Part A and Part B) for its employees to be assigned to the work hereto under.

(b) General Liability, Professional (if applicable) Liability and Property Damage Insurance: Vendor shall take out and maintain during the life of this Agreement, such general liability and property damage insurance as shall protect it and the Town of Amherst from claims for damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this Agreement. The amounts of such insurance shall be as follows in an amount not less than $1,000,000.00 per occurrence for bodily injury and property damage including wrongful death, and $2,000,000.00 aggregate.

(c) Vendor shall furnish the above insurances, including sub-Vendors' insurances, to the Town and shall also assure that any policy procured by it shall name the Town as an additional insured on a primary and non-contributory basis.

(d) Vendor shall ensure all its sub-Vendors, if any, have obtained all the above insurances and shall also assure that any policy procured by any sub-Vendor or sub-sub-Vendor shall name the Town as an additional insured on a primary and non-contributory basis.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

5. Any accident shall be reported to the Office of the Town Attorney as soon as possible and not later than twenty-four (24) hours from the time of such accident. A detailed written report must be submitted to the Town of Amherst as soon thereafter as possible as and no later than three (3) days after the date of such accident.

6. No Assignment: In accordance with the provisions of Section 109 of the General Municipal Law, the Vendor is hereby prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of its right, title or interest in this agreement, or its power to execute this Agreement, to any other person or corporation without the previous consent in writing of the Town.

7. Required Provisions of Law: Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party this Agreement shall be physically amended forthwith to make such insertion. In particular, the Vendor shall, among other things, fully comply with:

(a) Article 8 of the NYS Labor Law for public work contracts and Article 9 of the Labor Law regarding prevailing wage for Building Service employees.
(b) Labor Law Section 220-e and Executive Law Sections 291-299 and the Civil Rights Law relating to prohibition against discrimination and equal opportunity.
(c) Affirmative action as required by the Labor Law.
(d) Prevention of dust hazard required by Labor Law Section 222-a.
(e) Preference in employment of persons required by Labor Law Section 222.
(f) Eight-hour workday as required by Labor Law Section 220(2).
(g) Chapter 32 of the Town of Amherst: Minority Women and Business Utilization Commitment.
(h) Chapter 163 of the Town of Amherst: Registration of Sex Offenders.

8. The Vendor, in accordance with its status as an independent Vendor, covenants and agrees that it will conduct itself consistent with such status. It will neither hold itself out as nor claim to be, an officer or employee of the Town by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the Town, including, but not limited to: workers' compensation coverage, unemployment insurance benefits, Social Security coverage, or retirement membership or credit.

Waiver: No waiver of any breach of any condition of the Agreement shall be binding unless in writing and signed by the party waiving said breach. No such waiver shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall include the same.

9. This Agreement shall be governed by, and interpreted according to the laws of the State of New York. If the contract between the parties refers to the laws, statutes, rules,

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

regulations or ordinances for any state other than New York State, to the laws, statutes, rules, regulations or ordinances for any county other than Erie County, New York or to the laws, statutes, rules, regulations or ordinances for any municipality other than the Town of Amherst, then the laws, statutes, rules, regulations or ordinances for New York State, Erie county and/or the Town of Amherst shall apply as applicable. Any and all legal action necessary to enforce the Agreement will be venued in Supreme Court, Erie County, New York or in the United States District Court for the Western District of New York, Buffalo Division.

10. It is hereby acknowledged that performance of this Contract will be undertaken in accordance with the specifications and pricing on which the bid was submitted.

Authority for execution on behalf of Town: The Supervisor has executed this Agreement pursuant to a Resolution adopted by the Town Board of the Town, at a meeting thereof held on _____. Brian J. Kulpa, the Supervisor whose signature appears hereafter, is duly authorized and empowered to execute this instrument and enter into such an Agreement on behalf of the Town as a result of that Resolution. This instrument shall be executed in triplicate. At least one (1) copy shall be permanently filed, after execution thereof, in the office of the Town Clerk of Town.

Agreed to and Accepted by:

YMCA Buffalo Niagara
Print Name of Company

By: John T Ehrbar
Signature

John T. Ehrbar
Printed name

Date: 3/21/22

Agreed to and Accepted by:

Town of Amherst

By: _____
Brian J. Kulpa, Supervisor

Date: _____

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

YMCABUF-01

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/7/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Walsh Duffield Companies, Inc.
801 Main St.
Buffalo, NY 14203

CONTACT NAME: Leslie A. Konter, CIC
PHONE (A/C, No, Ext): (716) 362-7309 FAX (A/C, No): (716) 847-1360
E-MAIL ADDRESS: lkonter@walshduffield.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Philadelphia Indemnity Ins Co	18058
INSURER B : Security National Insurance Co	19879
INSURER C : Guardian	64246
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Young Men's Christian Association Buffalo Niagara
dba YMCA Buffalo Niagara
301 Cayuga Road, Suite 100
Buffalo, NY 14225

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR	X		PHPK2353747	12/1/2021	12/1/2022	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
	X Abuse $1M/$3M						MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 3,000,000
	POLICY PRO-JECT X LOC						PRODUCTS - COMP/OP AGG	$ 3,000,000
	OTHER:						Professional	$ 1,000,000
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO			PHPK2353747	12/1/2021	12/1/2022	BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$ 5,000,000
	EXCESS LIAB CLAIMS-MADE			PHUB794557	12/1/2021	12/1/2022	AGGREGATE	$ 5,000,000
	DED X RETENTION $ 10,000							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) N / N/A			SWC1370298	12/1/2021	12/1/2022	E.L. EACH ACCIDENT	$ 500,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 500,000
							E.L. DISEASE - POLICY LIMIT	$ 500,000
C	NYS Disability			974131-001	1/1/2022	12/31/2022	Statutory	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Town of Amherst is additional insured under General Liability, on a primary and non-contributory basis, per blanket additional insured PI-GLD-HS NY 10/11 and PI-GL-005 07/12, to the extent provided therein, if required by signed written contract, with respect to "Fitness in the Parks" held at Bassett Park, 359 Klein Road, Amherst, NY (group exercise classes) from 5/31/22-9/2/22.

CERTIFICATE HOLDER
Town of Amherst
5583 Main Street
Amherst, NY 14221

CANCELLATION
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Edward F. Walsh Jr.

© 1988-2015 ACORD CORPORATION
The ACORD name and logo are registered marks of ACORD

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

GENERAL LIABILITY DELUXE ENDORSEMENT: HUMAN SERVICES

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE

The following is a summary of the Limits of Insurance and additional coverage provided by this endorsement. For complete details on specific coverages, consult the policy contract wording.

It is our stated intention that the various endorsements, coverage parts or policy issued to you by us, or any company affiliated with us, do not provide any duplication or overlap of coverage for the same claim or "suit." If this endorsement and any other coverage part or policy issued to you by us, or any company affiliated with us, apply to the same claim, "suit," or medical expenses, we shall not be liable under this endorsement for a greater proportion of the total loss for that claim than this endorsement's applicable Limit of Insurance bears to the total applicable Limits of Insurance under all such endorsements, coverage parts or policies.

This condition does not apply to any excess or umbrella policy issued by us specifically to apply as excess insurance over the underlying Commercial General Liability policy.

Coverage Applicable	Limit of Insurance	Page #
Extended Property Damage	included	2
Limited Rental Lease Agreement Contractual Liability	$50,000 limit	2
Non-Owned Watercraft	Less than 58 feet	2
Damage to Property You Own, Rent, or Occupy	$30,000 limit	3
Damage to Premises Rented to You	$1,000,000	3
HIPAA	Clarification	4
Medical Payments	$20,000	5
Medical Payments – Extended Reporting Period	3 years	5
Athletic Activities	Amended	5
Supplementary Payments – Bail Bonds	$5,000	5
Supplementary Payment – Loss of Earnings	$1,000 per day	5
Key and Lock Replacement – Janitorial Services Client Coverage	$10,000 limit	5
Additional Insured – Newly Acquired Time Period	Amended	6
Additional Insured – Medical Directors and Administrators	Included	7
Additional Insured – Managers and Supervisors (with Fellow Employee Coverage)	Included	7
Additional Insured – Broadened Named Insured	Included	7
Additional Insured – Funding Source	Included	7
Additional Insured – Home Care Providers	Included	7
Additional Insured – Managers, Landlords, or Lessors of Premises	Included	7
Additional Insured – Lessor of Leased Equipment	Included	7

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Additional Insured – Grantor of Permits	Included	8
Additional Insured – Vendor	Included	8
Additional Insured – Franchisor	Included	9
Additional Insured – When Required by Contract	Included	9
Additional Insured – Owners, Lessees, or Contractors	Included	9
Additional Insured – State or Political Subdivisions	Included	9
Duties in the Event of Occurrence, Claim or Suit	Included	10
Unintentional Failure to Disclose Hazards	Included	10
Transfer of Rights of Recovery Against Others To Us	Clarification	10
Liberalization	Included	11
Personal and Advertising Injury – includes Abuse of Process, Discrimination	Included	11

A. Extended Property Damage

SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, Subsection **2. Exclusions**, Paragraph **a.** is deleted in its entirety and replaced by the following:

a. Expected or Intended Injury

"Bodily injury" or property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

B. Limited Rental Lease Agreement Contractual Liability

SECTION I – COVERAGES, COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY, Subsection **2. Exclusions**, Paragraph **b. Contractual Liability** is amended to include the following:

(3) Based on the named insured's request at the time of claim, we agree to indemnify the named insured for their liability assumed in a contract or agreement regarding the rental or lease of a premises on behalf of their client, up to $50,000. This coverage extension only applies to rental lease agreements. This coverage is excess over any renter's liability insurance of the client.

C. Non-Owned Watercraft

SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, Subsection **2. Exclusions,** Paragraph **g. (2)** is deleted in its entirety and replaced by the following:

(2) A watercraft you do not own that is:

(a) Less than 58 feet long; and

(b) Not being used to carry persons or property for a charge;

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

This provision applies to any person, who with your consent, either uses or is responsible for the use of a watercraft. This insurance is excess over any other valid and collectible insurance available to the insured whether primary, excess or contingent.

D. Damage to Property You Own, Rent or Occupy

SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY, Subsection **2. Exclusions**, Paragraph **j. Damage to Property**, Item **(1)** is deleted in its entirety and replaced with the following:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property, unless the damage to property is caused by your client, up to a $30,000 limit. A client is defined as a person under your direct care and supervision.

E. Damage to Premises Rented to You

1. If damage by fire to premises rented to you is not otherwise excluded from this Coverage Part, the word "fire" is changed to "fire, lightning, explosion, smoke, or leakage from automatic fire protective systems" where it appears in:

   a. The last paragraph of **SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**, Subsection **2. Exclusions**; is deleted in its entirety and replaced by the following:

      Exclusions **c.** through **n.** do not apply to damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in **SECTION III – LIMITS OF INSURANCE**.

   b. **SECTION III – LIMITS OF INSURANCE**, Paragraph 6. is deleted in its entirety and replaced by the following:

      Subject to Paragraph 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems while rented to you or temporarily occupied by you with permission of the owner.

   c. **SECTION V – DEFINITIONS**, Paragraph 9.a., is deleted in its entirety and replaced by the following:

      A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion, smoke, or leakage from automatic fire protective systems to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";

2. **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Subsection **4. Other Insurance**, Paragraph **b. Excess Insurance**, **(1) (a) (ii)** is deleted in its entirety and replaced by the following:

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

That is insurance for fire, lightning, explosion, smoke, or leakage from automatic fire protective systems for premises rented to you or temporarily occupied by you with permission of the owner;

3. The Damage To Premises Rented To You Limit section of the Declarations is amended to the greater of:

   a. $1,000,000; or

   b. The amount shown in the Declarations as the Damage to Premises Rented to You Limit.

   This is the most we will pay for all damage proximately caused by the same event, whether such damage results from fire, lightning, explosion, smoke, or leaks from automatic fire protective systems or any combination thereof.

F. HIPAA

SECTION I – COVERAGES, COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY, is amended as follows:

1. Paragraph **1. Insuring Agreement** is amended to include the following:

   We will pay those sums that the insured becomes legally obligated to pay as damages because of a "violation(s)" of the Health Insurance Portability and Accountability Act (HIPAA). We have the right and the duty to defend the insured against any "suit," "investigation," or "civil proceeding" seeking these damages. However, we will have no duty to defend the insured against any "suit" seeking damages, "investigation," or "civil proceeding" to which this insurance does not apply.

2. Paragraph **2. Exclusions** is amended to include the following additional exclusions:

   This insurance does not apply to:

   a. **Intentional, Willful, or Deliberate Violations**

      Any willful, intentional, or deliberate "violation(s)" by any insured.

   b. **Criminal Acts**

      Any "violation" which results in any criminal penalties under the HIPAA.

   c. **Other Remedies**

      Any remedy other than monetary damages for penalties assessed.

   d. **Compliance Reviews or Audits**

      Any compliance reviews by the Department of Health and Human Services.

3. **SECTION V – DEFINITIONS** is amended to include the following additional definitions:

   a. "Civil proceeding" means an action by the Department of Health and Human Services (HHS) arising out of "violations."

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

b. "Investigation" means an examination of an actual or alleged "violation(s)" by HHS. However, "investigation" does not include a Compliance Review.

c. "Violation" means the actual or alleged failure to comply with the regulations included in the HIPAA.

G. Medical Payments – Limit Increased to $20,000, Extended Reporting Period

If **COVERAGE C MEDICAL PAYMENTS** is not otherwise excluded from this Coverage Part:

1. The Medical Expense Limit is changed subject to all of the terms of **SECTION III - LIMITS OF INSURANCE** to the greater of:

   a. $20,000; or
   b. The Medical Expense Limit shown in the Declarations of this Coverage Part.

2. **SECTION I – COVERAGE**, **COVERAGE C MEDICAL PAYMENTS**, Subsection **1. Insuring Agreement**, a. (3) (b) is deleted in its entirety and replaced by the following:

   (b) The expenses are incurred and reported to us within three years of the date of the accident.

H. Athletic Activities

SECTION I – COVERAGES, **COVERAGE C MEDICAL PAYMENTS**, Subsection **2. Exclusions**, Paragraph **e. Athletic Activities** is deleted in its entirety and replaced with the following:

e. Athletic Activities

To a person injured while taking part in athletics.

I. Supplementary Payments

SECTION I – COVERAGES, SUPPLEMENTARY PAYMENTS - COVERAGE A AND B are amended as follows:

1. b. is deleted in its entirety and replaced by the following:

1. **b.** Up to $5000 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these.

1.d. is deleted in its entirety and replaced by the following:

1. **d.** All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $1,000 a day because of time off from work.

J. Key and Lock Replacement – Janitorial Services Client Coverage

SECTION I – COVERAGES, SUPPLEMENTARY PAYMENTS – COVERAGES A AND B is amended to include the following:

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

We will pay for the cost to replace keys and locks at the "clients" premises due to theft or other loss to keys entrusted to you by your "client," up to a $10,000 limit per occurrence and $10,000 policy aggregate.

We will not pay for loss or damage resulting from theft or any other dishonest or criminal act that you or any of your partners, members, officers, "employees", "managers", directors, trustees, authorized representatives or any one to whom you entrust the keys of a "client" for any purpose commit, whether acting alone or in collusion with other persons.

The following, when used on this coverage, are defined as follows:

a. "Client" means an individual, company or organization with whom you have a written contract or work order for your services for a described premises and have billed for your services.

b. "Employee" means:

(1) Any natural person:

(a) While in your service or for 30 days after termination of service;

(b) Who you compensate directly by salary, wages or commissions; and

(c) Who you have the right to direct and control while performing services for you; or

(2) Any natural person who is furnished temporarily to you:

(a) To substitute for a permanent "employee" as defined in Paragraph **(1)** above, who is on leave; or

(b) To meet seasonal or short-term workload conditions;

while that person is subject to your direction and control and performing services for you.

(3) "Employee" does not mean:

(a) Any agent, broker, person leased to you by a labor leasing firm, factor, commission merchant, consignee, independent contractor or representative of the same general character; or

(b) Any "manager," director or trustee except while performing acts coming within the scope of the usual duties of an "employee."

c. "Manager" means a person serving in a directorial capacity for a limited liability company.

K. Additional Insureds

SECTION II – WHO IS AN INSURED is amended as follows:

1. If coverage for newly acquired or formed organizations is not otherwise excluded from this Coverage Part, Paragraph **3.a.** is deleted in its entirely and replaced by the following:

a. Coverage under this provision is afforded until the end of the policy period.

2. Each of the following is also an insured:

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

a. **Medical Directors and Administrators –** Your medical directors and administrators, but only while acting within the scope of and during the course of their duties as such. Such duties do not include the furnishing or failure to furnish professional services of any physician or psychiatrist in the treatment of a patient.

b. **Managers and Supervisors** – Your managers and supervisors are also insureds, but only with respect to their duties as your managers and supervisors. Managers and supervisors who are your "employees" are also insureds for "bodily injury" to a co-"employee" while in the course of his or her employment by you or performing duties related to the conduct of your business.

This provision does not change Item 2.a.(1)(a) as it applies to managers of a limited liability company.

c. **Broadened Named Insured –** Any organization and subsidiary thereof which you control and actively manage on the effective date of this Coverage Part. However, coverage does not apply to any organization or subsidiary not named in the Declarations as Named Insured, if they are also insured under another similar policy, but for its termination or the exhaustion of its limits of insurance.

d. **Funding Source** – Any person or organization with respect to their liability arising out of:

(1) Their financial control of you; or

(2) Premises they own, maintain or control while you lease or occupy these premises.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or for that person or organization.

e. **Home Care Providers –** At the first Named Insured's option, any person or organization under your direct supervision and control while providing for you private home respite or foster home care for the developmentally disabled.

f. **Managers, Landlords, or Lessors of Premises** – Any person or organization with respect to their liability arising out of the ownership, maintenance or use of that part of the premises leased or rented to you subject to the following additional exclusions:

This insurance does not apply to:

(1) Any "occurrence" which takes place after you cease to be a tenant in that premises; or

(2) Structural alterations, new construction or demolition operations performed by or on behalf of that person or organization.

g. **Lessor of Leased Equipment – Automatic Status When Required in Lease Agreement With You –** Any person or organization from whom you lease equipment when you and such person or organization have agreed in writing in a contract or agreement that such person or organization is to be added as an additional insured on your policy. Such person or organization is an insured only with respect to liability for "bodily injury," "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person or organization.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

A person's or organization's status as an additional insured under this endorsement ends when their contract or agreement with you for such leased equipment ends.

With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

h. Grantors of Permits – Any state or political subdivision granting you a permit in connection with your premises subject to the following additional provision:

(1) This insurance applies only with respect to the following hazards for which the state or political subdivision has issued a permit in connection with the premises you own, rent or control and to which this insurance applies:

(a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners or decorations and similar exposures;

(b) The construction, erection, or removal of elevators; or

(c) The ownership, maintenance, or use of any elevators covered by this insurance.

i. Vendors – Only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business, subject to the following additional exclusions:

(1) The insurance afforded the vendor does not apply to:

(a) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;

(b) Any express warranty unauthorized by you;

(c) Any physical or chemical change in the product made intentionally by the vendor;

(d) Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

(e) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;

(f) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;

(g) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

(h) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

(i) The exceptions contained in Sub-paragraphs **(d)** or **(f)**; or

(ii) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

(2) This insurance does not apply to any insured person or organization, from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing.

j. Franchisor – Any person or organization with respect to their liability as the grantor of a franchise to you.

k. As Required by Contract – Any person or organization where required by a written contract executed prior to the occurrence of a loss. Such person or organization is an additional insured for "bodily injury," "property damage" or "personal and advertising injury" but only for liability arising out of the negligence of the named insured. The limits of insurance applicable to these additional insureds are the lesser of the policy limits or those limits specified in a contract or agreement. These limits are included within and not in addition to the limits of insurance shown in the Declarations

l. Owners, Lessees or Contractors – Any person or organization, but only with respect to liability for "bodily injury," "property damage" or "personal and advertising injury" caused, in whole or in part, by:

(1) Your acts or omissions; or

(2) The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured when required by a contract.

With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

(a) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

(b) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

m. State or Political Subdivisions – Any state or political subdivision as required, subject to the following provisions:

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

(1) This insurance applies only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit, and is required by contract.

(2) This insurance does not apply to:

(a) "Bodily injury," "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality; or

(b) "Bodily injury" or "property damage" included within the "products-completed operations hazard."

L. Duties in the Event of Occurrence, Claim or Suit

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, Paragraph **2.** is amended as follows:

a. is amended to include:

This condition applies only when the "occurrence" or offense is known to:

(1) You, if you are an individual;

(2) A partner, if you are a partnership; or

(3) An executive officer or insurance manager, if you are a corporation.

b. is amended to include:

This condition will not be considered breached unless the breach occurs after such claim or "suit" is known to:

(1) You, if you are an individual;

(2) A partner, if you are a partnership; or

(3) An executive officer or insurance manager, if you are a corporation.

M. Unintentional Failure To Disclose Hazards

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, 6. Representations is amended to include the following:

It is agreed that, based on our reliance on your representations as to existing hazards, if you should unintentionally fail to disclose all such hazards prior to the beginning of the policy period of this Coverage Part, we shall not deny coverage under this Coverage Part because of such failure.

N. Transfer of Rights of Recovery Against Others To Us

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, 8. Transfer of Rights of Recovery Against Others To Us is deleted in its entirety and replaced by the following:

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

Therefore, the insured can waive the insurer's rights of recovery prior to the occurrence of a loss, provided the waiver is made in a written contract.

O. Liberalization

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, is amended to include the following:

If we revise this endorsement to provide more coverage without additional premium charge, we will automatically provide the additional coverage to all endorsement holders as of the day the revision is effective in your state.

P. Personal and Advertising Injury – Abuse of Process, Discrimination

If **COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY COVERAGE** is not otherwise excluded from this Coverage Part, the definition of "personal and advertising injury" is amended as follows:

1. **SECTION V – DEFINITIONS**, Paragraph 14.b. is deleted in its entirety and replaced by the following:

   b. Malicious prosecution or abuse of process;

2. **SECTION V – DEFINITIONS**, Paragraph 14. is amended by adding the following:

   Discrimination based on race, color, religion, sex, age or national origin, for damages resulting from injury for which the insured is liable solely due to either disparate impact or vicarious liability. Personal and advertising injury does not mean discrimination:

   a. Done intentionally by or at the direction of, or with the knowledge or consent of:

   (1) Any insured; or

   (2) Any executive officer, director, stockholder, partner or member of the insured;

   b. Directly or indirectly related to the employment, former or prospective employment, termination of employment, or application for employment of any person or persons by an insured;

   c. Directly or indirectly related to the sale, rental, lease or sublease or prospective sales, rental, lease or sub-lease of any room, dwelling or premises by or at the direction of any insured; or

   d. Insurance for such discrimination is prohibited by or held in violation of law, public policy, legislation, court decision or administrative ruling.

   The above does not apply to fines or penalties imposed because of discrimination.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Includes copyrighted material of Insurance Services Office, Inc., with its permission.
© 2011 Philadelphia Indemnity Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED
PRIMARY AND NON-CONTRIBUTORY INSURANCE

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Effective Date: 11/01/2017

Name of Person or Organization (Additional Insured):

Any person or organization where required by a written contract executed prior to the occurrence of a loss.

SECTION II – WHO IS AN INSURED is amended to include as an additional insured the person(s) or organization(s) shown in the endorsement Schedule, but only with respect to liability for "bodily injury," "property damage" or "personal and advertising injury" arising out of or relating to your negligence in the performance of "your work" for such person(s) or organization(s) that occurs on or after the effective date shown in the endorsement Schedule.

This insurance is primary to and non-contributory with any other insurance maintained by the person or organization (Additional Insured), except for loss resulting from the sole negligence of that person or organization.

This condition applies even if other valid and collectible insurance is available to the Additional Insured for a loss or "occurrence" we cover for this Additional Insured.

The Additional Insured's limits of insurance do not increase our limits of insurance, as described in **SECTION III – LIMITS OF INSURANCE**.

All other terms, conditions, and exclusions under the policy are applicable to this endorsement and remain unchanged.

Includes copyrighted material of Insurance Services Office, Inc., with its permission.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE
NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by NYS disability and Paid Family Leave benefits carrier or licensed insurance agent of that carrier

1a. Legal Name & Address of Insured (use street address only)

Young Men's Christian Association Buffalo Niagara
DBA YMCA Buffalo Niagara
301 Cayuga Road Suite 100
Buffalo NY 14225

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured

716 565 6000

1c. Federal Employer Identification Number of Insured or Social Security Number

160743231

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

Town of Amherst
5583 Main Street
Amherst NY 14221

3a. Name of Insurance Carrier

The Guardian Life Insurance Company of America

3b. Policy Number of Entity Listed in Box 1a

00974131 - 0000

3c. Policy Effective Period

01/01/2022 to 01/01/2023

4. Policy provides the following benefits:

- [x] A. Both disability and Paid Family Leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid Family Leave benefits only.

5. Policy covers:

- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS disability and/or Paid Family Leave benefits insurance coverage as described above.

Date Signed 03/28/2022 By _____
(Signature of insurance carrier's authorized representative or NYS licensed insurance agent of that insurance carrier)

Telephone Number 1-888-278-4542 Name and Title Michael Prestileo, Head of Group Benefits Strategy, Product & Underwriting

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be emailed to PAU@wcb.ny.gov or it can be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4B, 4C or 5B have been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law(Article 9 of the Workers' Compensation Law) with respect to all of their employees.

Date Signed _____ By _____
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: *Only insurance carriers licensed to write NYS disability and Paid Family Leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1.* ***Insurance brokers are NOT authorized to issue this form.***

DB-120.1 (12-21)

DB-120.1 (12-21)

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in Box 1a for disability and/or Paid Family Leave benefits under the NYS Disability and Paid Family Leave Benefits Law. The insurance carrier or its licensed agent will send this Certificate of Insurance Coverage (Certificate) to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This Certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This Certificate may be used as evidence of a NYS disability and/or Paid Family Leave benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or Paid Family Leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Insurance Coverage for NYS disability and/ or Paid Family Leave Benefits or other authorized proof that the business is complying with the mandatory coverage requirements of the NYS Disability and Paid Family Leave Benefits Law.

NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) **Young Men's Christian Association Buffalo Niagara** **dba YMCA Buffalo Niagara** **301 Cayuga Road, Suite 100** **Buffalo, NY 14225** Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured **(716) 565-6000** 1c. NYS Unemployment Insurance Employer Registration Number of Insured 1d. Federal Employer Identification Number of Insured or Social Security Number 16-0743231
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) **Town of Amherst** **5583 Main Street** **Amherst, NY 14221**	3a. Name of Insurance Carrier **Security National Insurance Co** 3b. Policy Number of Entity Listed in Box "1a" **SWC1370298** 3c. Policy effective period 12/1/2021 to 12/1/2022 3d. The Proprietor, Partners or Executive Officers are ☒ included. (Only check box if all partners/officers included) ☐ all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? ☐YES ☐NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Edward F. Walsh, Jr.
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Edward F Walsh Jr. 4/1/2022
(Signature) (Date)

Title: President

Telephone Number of authorized representative or licensed agent of insurance carrier: 716-853-3820

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

C-105.2 (9-15) www.wcb.ny.gov

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

Attachment: YMCA Fitness in the Parks (RES-2022-393 : User Agreement - Fitness in the Parks CRS#3257)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
DOC ID: 25604

COMMUNICATION 2022-31 **APPROVED**

Request for Public Hearing - 7078 Transit Road

Request from Jeffery Palumbo, Esq. for a public hearing with respect to Relief of Conditions of Zoning Approval for 7078 Transit Road.

This hearing has been scheduled for May 9.

4/11/2022
Consent

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

BARCLAY DAMON LLP

Jeffery D. Palumbo
Partner

March 29, 2022

Via Email – tkoller@amherst.ny.us
and First Class Mail
Timothy Koller
Deputy Town Clerk
Town of Amherst
5583 Main Street
Williamsville, NY 14221

Re: Request for Relief of Conditions of Zoning Approval (Z-1997-12A)
Property: 7078 Transit Road
Petitioner: Alix Holdings 7078 LLC

Dear Tim:

Please be advised that our office represents the Petitioner in connection with the above-referenced matter. I would respectfully request that the Town Board, at its meeting of April 11, 2022, schedule a public hearing on this Petition for April 25, 2022.

I thank you in advance for your anticipated cooperation.

Very truly yours,

Jeffery D. Palumbo

JDP:cck
Cc: Supervisor Brian Kulpa (bkulpa@amherst.ny.us)
Jacqualine G. Berger (jberger@amherst.ny.us)
Deborah Bruch Bucki RN, PhD (dbucki@amherst.ny.us)
Shawn A. Lavin (slavin@amherst.ny.us)
Michael Szukala (mszukala@amherst.ny.us)
Alix Holdings 7078 LLC (art.alix@roadrunner.com)

24299081.1

9276 Main Street -- Suite 3 -- Clarence, New York 14031-1913 barclaydamon.com
jpalumbo@barclaydamon.com Direct: 716.858.3728 Fax: 716-759-9131

Attachment: Letter Request for Public Hearing_2022_03_29_1517 (COM-2022-31 : Request for Public Hearing - 7078 Transit Road)

Amherst Town Board
5583 Main Street
Williamsville, NY 14221
www.amherst.ny.us

Francina J. Spoth
Town Clerk

Meeting: 04/11/22 07:00 PM
Department: Town Clerk
DOC ID: 25601

COMMUNICATION 2022-32 **REFERRED**

Notice of Claim: Renee D. Sims Vs. Town of Amherst Et Al.

4/11/2022
Referred to Town Attorney.

RESULT:	**REFERRED [UNANIMOUS]**
MOVER:	Brian J. Kulpa, Supervisor
SECONDER:	Deborah Bruch Bucki, Councilmember
AYES:	Kulpa, Berger, Bucki, Lavin, Szukala

STATE OF NEW YORK
SUPREME COURT : COUNTY OF ERIE

RENEE D. SIMS
[redacted]

Claimant,

v.

SNYDER FIRE DEPARTMENT
4531 Main St.
Amherst, NY 14226

TOWN OF AMHERST
5583 Main St.
Amherst, NY 14221

JOHN V. FILDES
[redacted]

Respondents.

NOTICE OF CLAIM

Index No.:

RENEE D. SIMS does hereby make her Notice of Claim against the SNYDER FIRE DEPARTMENT, TOWN OF AMHERST and JOHN V. FILDES:

1. The name and address of the claimant is RENEE D. SIMS, [redacted]

2. The name and address of the claimant's attorney is KRISTEN ELMORE-GARCIA, ESQ., 2969 MAIN STREET, SUITE 200, BUFFALO, NY 14214.

3. The nature of the claim is one of negligence and recklessness, including but not limited to negligently causing a motor vehicle collision at the intersection of Burroughs Drive and Main Street in the Village of Snyder, Town of Amherst on January 21, 2022, at approximately 11:12 a.m.

4. The collision occurred when a SNYDER FIRE DEPARTMENT fire truck, being operated by JOHN V. FILDES without activated lights or sirens, attempted to make a left turn from Main Street onto Burroughs Drive. Complainant RENEE D. SIMS was operating a 2007 Chevy Cobalt, and was stopped at a red light at Burroughs Drive. The firetruck struck the front

Attachment: DOC032522-03252022144814 (COM-2022-32 : Notice of Claim: Renee D. Sims Vs. Town of Amherst Et Al.)

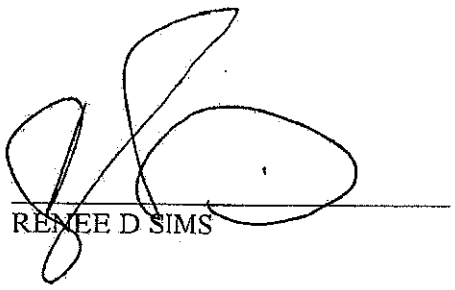
driver's side of the vehicle that RENEE D. SIMS was in as it attempted to make its left turn.

5. Claimant RENEE D. SIMS suffered serious injuries as defined by § 5102(d) of the New York State Insurance Law as a result of this crash, including but not limited to injuries to her dominant right hand.

6. By virtue of the negligence of the SNYDER FIRE DEPARTMENT, TOWN OF AMHERST, and JOHN V. FILDES, and their agents, employees and/or servants, Claimant RENEE D. SIMS makes a claim for lost wages, medical expenses and pain and suffering, the amount of which is undetermined to date.

The undersigned therefore presents this claim for adjustment and payment, and notifies you that unless same is adjusted, compromised and/or paid within the time provided by law from the date of its presentation to you, it is the intention of the undersigned to commence an action thereon.

DATED: March 21, 2022



RENEE D SIMS

Attachment: DOC032522-03252022144814 (COM-2022-32 : Notice of Claim: Renee D. Sims Vs. Town of Amherst Et Al.)