



15. TOWN OF WATERLOO

This jurisdictional annex to the Seneca County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Waterloo with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of the Town of Waterloo, describes who participated in the planning process, assesses the Town of Waterloo’s risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

15.1 HAZARD MITIGATION PLANNING TEAM

The Town of Waterloo identified the hazard mitigation plan (HMP) primary and alternate points of contact and developed this plan over the course of several months with input from many Town departments, including the Highway Department. The Town Supervisor represented the community on the Seneca 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.

Table 15-1 summarizes Town officials who participated in the development of the annex and in what capacity. Additional documentation of the Town’s planning activities through Planning Partnership meetings is included in Volume I.

Table 15-1. Hazard Mitigation Planning Team

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Name/Title: Don Trout, Town Supervisor Address: 66 Virginia St., Waterloo NY 13165 Phone Number: (315) 539-9331 Email: dtroat@co.seneca.ny.us | Name/Title: Joe Mull, Highway Superintendent Address: 66 Virginia St., Waterloo NY 13165 Phone Number: 315-539-2010 Ext. 10 Email: jmull@co.seneca.ny.us |
| National Flood Insurance Program Floodplain Administrator | |
| Name/Title: Jim Cleere, Town Assessor/Code/Zoning Address: 66 Virginia St., Waterloo NY 13165 Phone Number: 315-539-0206 Ext. 3 Email: jcleere@townofwaterloo.org | |

15.2 COMMUNITY PROFILE

The Town of Waterloo is in the northwestern portion of Seneca County and is 23.2 square miles. The south Town line borders the Seneca Lake, the Town of Fayette, and Village of Waterloo, the east town line borders the Village of Waterloo and the Town of Seneca Falls, with the Town of Junius to the north and Ontario County to the west.

According to the U.S. Census, the 2020 population for the Town of Waterloo was 3,566. Data from the 2020 U.S. Census indicate that 3.6 percent of the population is 5 years of age or younger, 20.7 percent is 65 years of age or older, 0.1 percent is non-English speaking, 11.2 percent is below the poverty threshold, and 19.3 percent is considered disabled. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.



15.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

The Town of Waterloo performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for the Town of Waterloo to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

15.3.1 Planning and Regulatory Capability and Integration

Table 15-2 summarizes the planning and regulatory tools that are available to the Town of Waterloo.

Table 15-2. Planning and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Uniform Fire Prevention and Building Code, 2021 | State and County | NYS Division of Building Standards and Codes or Seneca County Building Codes Enforcement |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| Strong building codes for fire prevention, the widening use of smoke detectors and sprinklers and development of fire-resistant building materials represent fire mitigation actions that have made a huge impact on reducing private and public losses from fires. Strengthened building codes in floodplains, managing development in a way that recognizes flood risks and infrastructure improvements that prevent or resist flood damage are very cost-effective mitigation goals for any community. | | | | |
| Zoning/Land Use Code | Yes | Chapter 135 – Zoning Code of the Town of Waterloo | Local | Zoning and Code Enforcement Officer |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| <p>Encourage appropriate and orderly physical development; promote public health, safety, and general welfare; classify, designate and regulate the location and use of buildings and structures; and for said purposes may divide the jurisdiction into districts of such number, shape and area as may be deemed best suited to carry out these regulations.</p> <p>Establish comprehensive controls for the orderly development of land in the Town of Waterloo, based on the general plan for the Town and enacted in order to promote and protect health, safety, comfort, convenience and the general welfare of the people.</p> | | | | |
| Subdivision Code | Yes | Chapter 136 – Subdivision of Land | Local | Zoning and Code Enforcement Officer |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>The purpose of this chapter is to amend the Code of the Town of Waterloo to add a new provision governing the subdivision of land within the Town of Waterloo and to protect the public health, safety and general welfare while allowing for cost-saving efficiencies. The provisions of this chapter shall be administered to ensure orderly growth and development and shall supplement and facilitate the provisions of other documents, laws and regulations of the Town of Waterloo.</p> | | | | |
| Site Plan Code | Yes | Chapter 79 – Site Plan Review & Approval Law | Local | Planning Board |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>The intent of this chapter is to provide for Planning Board review and approval of site plans for certain uses in the Town of Waterloo for one or more of the following purposes:</p> <p>A. Ensure the proper arrangement and development of uses and site improvements to minimize negative impacts to the natural environment, neighboring properties and the community as a whole.</p> <p>B. Ensure new uses, developments and redevelopments are established in accordance with the objectives of the Town's adopted Plans and the stated intent of the respective zoning district.</p> <p>C. Require mitigation of impacts not already addressed through enforcement of:</p> <ol style="list-style-type: none"> (1) Other required permits. (2) The New York State Uniform Fire Prevention and Building Code (Uniform Code) and with the New York State Energy Conservation Construction Code (Energy Code). (3) New York State Environmental Quality Review (SEQR) (4) Zoning Law: Schedule II: Area, Frontage, Yard, Height and Coverage Requirements. (5) Ensure compliance with Town Code §136, Subdivision of Land (6) Applicable Town of Waterloo Code requirements. <p>D). Ensure compliance with the Town of Waterloo Site Design and Development Criteria and Town Code §136, Article V</p> | | | | |
| Stormwater Management Code | No | - | - | - |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>N/A</p> | | | | |
| Post-Disaster Recovery/ Reconstruction Code | No | - | - | - |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>N/A</p> | | | | |
| Real Estate Disclosure Requirements | Yes | Property Condition Disclosure Act, NY Code - Article 14 §460-467 | State | NYS Department of State, Real Estate Agent |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>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</p> | | | | |



| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
|--|---------------------------------|--|---|--|

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 | - | - | - |
|--------------------------|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

| | | | | |
|--|----|---|---|---|
| Environmental Protection Ordinance(s) | No | - | - | - |
|--|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

| | | | | |
|--|-----|--------------------------------------|-----------------------|-------------------------------------|
| Flood Damage Prevention Ordinance | Yes | Chapter 78 – Flood Damage Prevention | Federal, State, Local | Zoning and Code Enforcement Officer |
|--|-----|--------------------------------------|-----------------------|-------------------------------------|

How has or will this be integrated with the HMP and how does this reduce 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:
A. 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.
B. To require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
C. To control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
D. To control filling, grading, dredging and other development which may increase erosion or flood damages.
E. To regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
F. To qualify and maintain for participation in the National Flood Insurance Program.

| | | | | |
|----------------------------|----|---|---|---|
| Wellhead Protection | No | - | - | - |
|----------------------------|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

| | | | | |
|---------------------------------------|----|---|---|---|
| Emergency Management Ordinance | No | - | - | - |
|---------------------------------------|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

| | | | | |
|---------------------------------|----|---|---|---|
| Climate Change Ordinance | No | - | - | - |
|---------------------------------|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

| | | | | |
|--------------|----|---|---|---|
| Other | No | - | - | - |
|--------------|----|---|---|---|

How has or will this be integrated with the HMP and how does this reduce risk?
N/A

Planning Documents

| | | | | |
|-----------------------------------|-----|-----------------------|-------|--------------|
| General/Comprehensive Plan | Yes | Vision Waterloo, 2017 | Local | Town Council |
|-----------------------------------|-----|-----------------------|-------|--------------|

How has or will this be integrated with the HMP and how does this reduce risk?
The plan is intended to serve as a dynamic document that will serve as a litmus test for those who serve the community. The Comprehensive Plan is utilized for such decision-making, updated regularly with new data, and referred to with frequency, to be a guide for future build out and development within the Town.



| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Capital Improvement Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Open Space Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Transportation Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |



| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Tourism Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Other | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Response/Recovery Planning | | | | |
| Emergency Operations Plan | Yes | Seneca County Comprehensive Emergency Management Plan | County | Seneca County Emergency Management Office |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The Emergency Operations Plan aims to assess the Township's ability to respond to emergency and identifies recommendations to improve its capacity to prepare and respond to future events. The plan address both short- and long-term recovery. | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Substantial Damage Response Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Public Health Plan | Yes | Seneca County Pandemic Plan | County | Seneca County Emergency Management Office |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| The plan was developed based on best practices and guidance available largely as a result of the SARS-CoV-2 Pandemic. The plan is intended to provide ongoing guidance for the current pandemic as well as future guidance for any other infectious disease outbreaks requiring a state and/or county emergency declaration. | | | | |
| Other | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |

15.3.2 Development and Permitting Capability

Table 15-3 summarizes the capabilities of the Town of Waterloo to oversee and track development.

Table 15-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? | Yes | - |
| <ul style="list-style-type: none"> If you issue development permits, what department is responsible? | N/A | Zoning |
| <ul style="list-style-type: none"> If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain |
| Do you have a buildable land inventory? | No | - |
| <ul style="list-style-type: none"> If you have a buildable land inventory, please describe | N/A | - |
| Describe the level of build-out in your jurisdiction. | N/A | According to the 2017 Comprehensive Plan, there are 2,540.38 acres of land which could be used for future build out. This includes areas zoned as residential, rural, public utility, commercial, and industrial. |

15.3.3 Administrative and Technical Capability

Table 15-4 summarizes potential staff and personnel resources available to the Town of Waterloo and their current responsibilities that contribute to hazard mitigation.

Table 15-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | The Planning Board is a committee whose job it is to review decisions made by the Land Use Officer. They are to listen to applicants requiring Special Use Permits and Site Plan |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| | | Reviews prior to building. Decisions of the Planning Board are made on a case-by-case basis. |
| Zoning Board of Adjustment | Yes | The Board of Zoning Appeals has the exclusive power to permit use by special exception subject to standards and conditions in the zoning ordinance. |
| 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 maintains the Town's roadways and performs other responsibilities as needed, including vegetation maintenance. |
| Construction/Building/Code Enforcement Department | Yes | Zoning and Code Enforcement |
| Emergency Management/Public Safety Department | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Highway |
| Mutual aid agreements | Yes | With other municipalities |
| Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? | Yes | County |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Engineers |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | MRB |
| Planners or engineers with an understanding of natural hazards | Yes | MRB |
| Staff with expertise or training in benefit/cost analysis | Yes | MRB |
| Professionals trained in conducting damage assessments | Yes | MRB |
| Personnel skilled or trained in GIS and/or Hazus applications | Yes | Engineers |
| Staff that work with socially vulnerable populations or underserved communities | No | - |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Environmental scientist familiar with natural hazards | Yes | Engineers |
| Surveyor(s) | Yes | Mike Carlson |
| Emergency Manager | No | - |
| Grant writer(s) | Yes | MRB |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | MRB |

15.3.4 Fiscal Capability

summarizes financial resources available to the Town of Waterloo.

Table 15-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community Development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvement 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 | 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 |

15.3.5 Education and Outreach Capability

Table 15-6 summarizes the education and outreach resources available to the Town of Waterloo.

Table 15-6. 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 | Clerk |
| Hazard mitigation information available on your website | No | - |



| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Hyper-Reach system offered through Seneca County |
| Natural disaster/safety programs in place for schools | No | - |
| Organizations that conduct outreach to socially vulnerable populations and underserved populations | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? | No | - |
| If yes, please describe. | No | - |

15.3.6 Community Classifications

Table 15-7 summarizes classifications for community programs available to the Town of Waterloo.

Table 15-7. Community Classifications

| Program | Participating? (Yes/No) | Classification | Date Classified |
|---|-------------------------|-----------------------------|-----------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| NWS StormReady Certification | Yes | Seneca County is StormReady | N/A |
| Firewise Communities classification | No | - | - |
| NYSDEC Climate Smart Community | No | - | - |
| Other: Organizations with mitigation focus (advocacy group, non-government) | No | - | - |

N/A = Not applicable
 — = Unavailable

15.3.7 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 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 15-8 summarizes the adaptive capacity for each identified hazard of concern and the Town’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement



Table 15-8. Adaptive Capacity

| Hazard | Adaptive Capacity - Strong/Moderate/Weak |
|-----------------------|--|
| Dam Failure | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperature | Moderate |
| Flood | Moderate |
| Landslide | Moderate |
| Severe Weather | Moderate |
| Severe Winter Weather | Moderate |

15.4 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in is responsible for maintaining this information.

15.4.1 NFIP Statistics

Table 15-9 summarizes the NFIP policy and claim statistics for the Town of Waterloo.

Table 15-9. Town of Waterloo NFIP Summary of Policy and Claim Statistics

| | |
|--|---------|
| # Policies | 5 |
| # Claims (Losses) | 2 |
| Total Loss Payments | \$2,077 |
| # Repetitive Loss Properties (NFIP definition) | 0 |
| # Repetitive Loss Properties (FMA definition) | 0 |
| # Severe Repetitive Loss Properties | 0 |

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA’s Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA 2024

15.4.2 Flood Vulnerability Summary

Table 15-10 provides a summary of the NFIP program in the Town of Waterloo.



Table 15-10. NFIP Summary

| NFIP Topic | Comments |
|---|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Areas within the SFHA are prone to flooding in the Town. The Town does not maintain a list of properties that have been damage by flooding. |
| Do you maintain a list of property owners interested in flood mitigation? <ul style="list-style-type: none"> How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | The Town does not maintain a list of property owners interested in flood mitigation. Unknown, not recorded. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | Unknown |
| How do you make Substantial Damage determinations? <ul style="list-style-type: none"> How many were declared for recent flood events in your jurisdiction? | Assistance from Engineer |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigation properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, but FEMA is currently updating the maps. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Zoning and Code Enforcement Officer |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes – online resources from national, state, regional, and county resources. |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | Yes, general NFIP training |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, inspections |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | If it adds more than 50% of the original structure's value |
| What are the barriers to running an effective NFIP program in the community, if any? | Staffing, funding, training |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | CAV – Not applicable CAC – September 21, 2016 |



| NFIP Topic | Comments |
|--|--|
| What is the local law number or municipal code of your flood damage prevention ordinance? <ul style="list-style-type: none"> What is the date that your flood damage prevention ordinance was last amended? | Chapter 78 – Flood Damage Prevention March 31, 2011 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | The program meets the minimum requirements |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, the Town has a local law for site plan review. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

15.5 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 appreciating a jurisdiction’s overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 15-11 through Table 15-13.

Table 15-11. Number of Building Permits for New Construction Issued Since the Previous HMP

| | New Construction Permits Issued | | | |
|---------------------|---------------------------------|--------------|-------------------------------------|-------|
| | Single Family | Multi-Family | Other (commercial, mixed-use, etc.) | Total |
| 2018 | | | | |
| Total Permits | 2 | 0 | 71 | 73 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2019 | | | | |
| Total Permits | 10 | 0 | 55 | 65 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2020 | | | | |
| Total Permits | 16 | 0 | 45 | 61 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2021 | | | | |
| Total Permits | 5 | 0 | 97 | 102 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2022 | | | | |
| Total Permits | 22 | 0 | 59 | 81 |
| Permits within SFHA | 0 | 0 | 0 | 0 |

SFHA = Special Flood Hazard Area (1% flood event)



Table 15-12. Recent Major Development and Infrastructure from 2019 to Present

| Property or Development Name | Type of Development | # of Units / Structures | Location (address and/or block and lot) | Known Hazard Zones* | Description / Status of Development |
|------------------------------|---------------------|-------------------------|---|---------------------|-------------------------------------|
| KOA | Commercial | 50 Sites | 1278 Waterloo Geneva Rd 21-2-85.2 | No | Campground Expansion |
| Isle of Pines | Commercial | 25 PADS | 941 Waterloo Geneva Rd 21-3-29.12 | No | Mobile Home Park Expansion |

* Only location-specific hazard zones or vulnerabilities identified.

Table 15-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

| Property or Development Name | Type of Development | # of Units / Structures | Location (address and/or block and lot) | Known Hazard Zones* | Description / Status of Development |
|------------------------------|---------------------|-------------------------|---|---------------------|-------------------------------------|
| None Identified | | | | | |

15.6 JURISDICTIONAL RISK ASSESSMENT

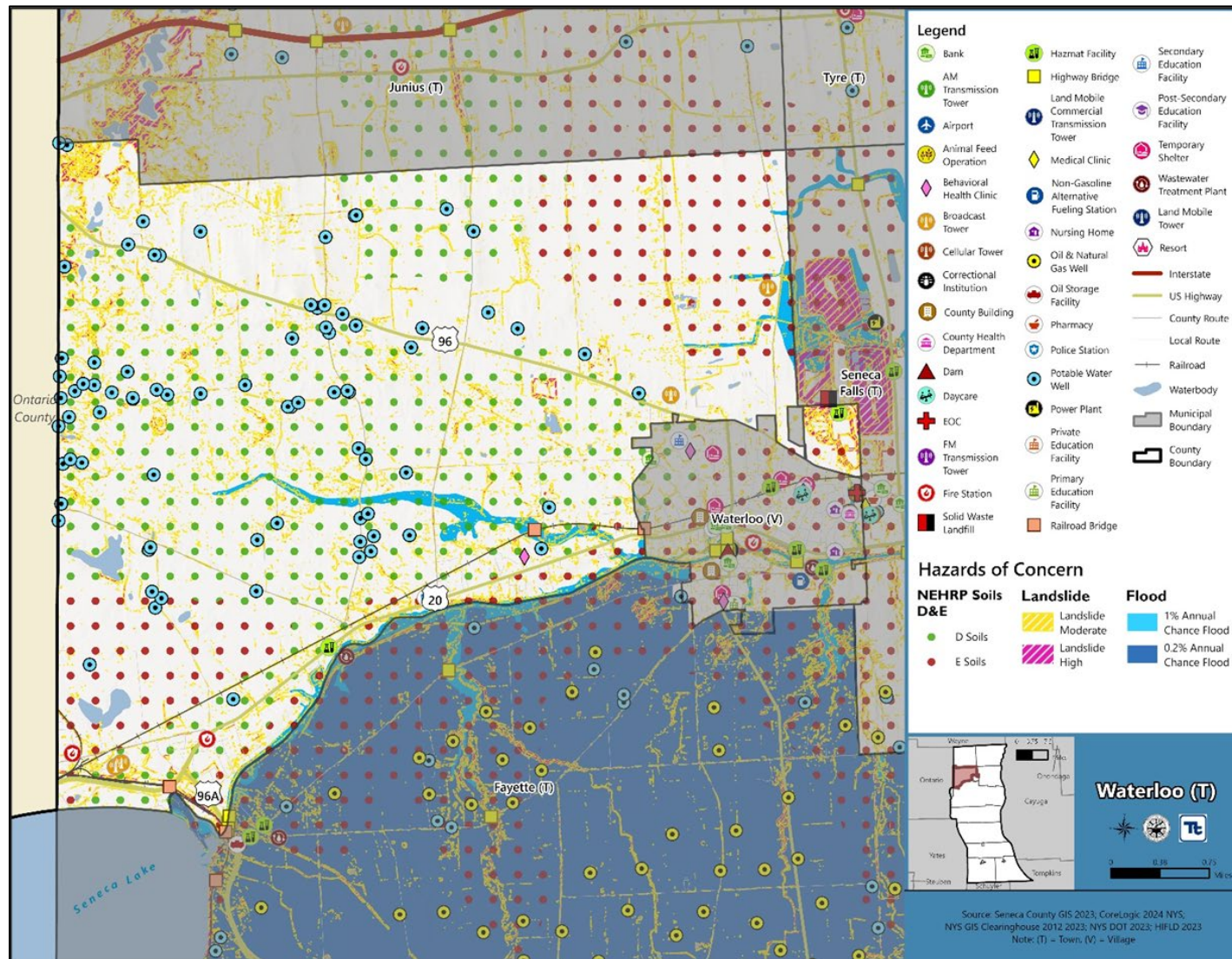
The hazard profiles in Volume I provide detailed information regarding each planning partner’s vulnerability to the identified hazards, including summaries of the Town of Waterloo’s risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

15.6.1 Hazard Area

Hazard area extent and location maps provided below illustrate the probable areas impacted within the Town based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. A map for the hazards that have impacted the Town of Waterloo is included below.



Figure 15-1. Town of Waterloo Hazard Area Extent and Location Map



Note: The shown flood hazard area is limited to the FEMA-defined flood hazard areas. Areas of localized flooding are not reflected in the above Figure.



15.6.2 Hazard Event History

The history of natural and non-natural hazard events in the Town of Waterloo is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 15-14 provides details on loss and damage in the Town of Waterloo during hazard events since the last hazard mitigation plan update.

Table 15-14. Hazard Event History in the Town of Waterloo

| Dates of Event | Event Type (Disaster Declaration) | County Designated? | Summary of Event | Summary of Damage and Losses in the Town of Waterloo |
|---------------------------------|-----------------------------------|--------------------|---|---|
| August 13 - 15, 2018 | Flood (DR- 4397) | Yes | A slow-moving storm tracked north from New Jersey to northern New York. This system triggered several rounds of heavy rain producing thunderstorms which caused severe flash flooding and major damages in several locations. | Portions of the Town along the Seneca River and its tributaries had roadway flooding. |
| January 20, 2020 - May 11, 2023 | Pandemic (DR-4480, EM-3434) | Yes | The coronavirus pandemic resulted in roughly 8,000 cases and 100 attributed deaths as of summer 2023. | The Town followed and implemented masking and social distancing mandates. |

EM = Emergency Declaration (FEMA)
 FEMA = Federal Emergency Management Agency
 DR = Major Disaster Declaration (FEMA)
 N/A = Not applicable

15.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner’s vulnerability to the identified hazards. The following presents key risk assessment results for the Town of Waterloo.

Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. The Town of Waterloo reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Town indicated the following:

- The Dam Failure hazard risk should be increased from Low to Medium due to the Town’s proximity to the Waterloo Dam, located in the Village of Waterloo.

Table 15-15 shows the Town of Waterloo’s final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.



Table 15-15. Hazard Ranking Input

| Hazard | Rank |
|-----------------------|--------|
| Dam Failure | Medium |
| Drought | Low |
| Earthquake | Medium |
| Extreme Temperature | Medium |
| Flood | Medium |
| Landslide | Low |
| Severe Weather | High |
| Severe Winter Weather | High |

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

Critical Facilities

Table 15-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 15-16. Critical Facilities Flood Exposure

| Name | Type | Exposure | | Addressed by Proposed Action | Already Protected to 0.2% Flood Level (describe protections) |
|--------------------------------|-----------------|----------|------------|------------------------------|--|
| | | 1% Event | 0.2% Event | | |
| Railroad Bridge - W1957_NY5353 | Railroad Bridge | X | X | 2025-WaterlooT-01 | - |

Source: Seneca County GIS 2023, NYS GIS Clearinghouse 2023, NYSDOH 2023, NYSDOT 2023, HIFLD 2023

In addition to critical facilities that are exposed to flooding, the following high hazard dam could impact the Town of Waterloo:

- Waterloo Dam

15.6.4 Identified Issues

After review of the Town of Waterloo’s hazard event history, hazard rankings, hazard location, and current capabilities, the Town of Waterloo identified the following vulnerabilities within the community:

- The Railroad Bridge - W1957_NY5353 is an identified critical facility that is municipally owned and located in the special flood hazard area. Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery.
- The County issues the municipality’s building permits. The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.



- The Town does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations relating to the identified hazards of concern. Identifying, communicating, and educating vulnerable populations can increase the resiliency of the Town through the reduction of long-risk risks associated with each hazard of concern. Furthermore, emergency responders will be able to prioritize assistance, when feasible, in an emergency to help those who need it most.
- The Waterloo Dam located in the Village of Waterloo, a critical infrastructure and High Hazard Potential Dam, is located near the Town. This structure has the potential to impact the residents of the Town, as well as the structures, environment, and infrastructure in the inundation area. Heavy rains associated with severe storms may influence a dam failure event, as the water load may be too much for the dam's structure. A dam failure could result in destructive flooding.

15.7 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

15.7.1 Past Mitigation Action Status

Table 15-17 indicates progress on the Town's mitigation strategy identified in the 2019 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.



Table 15-17. Status of Previous Mitigation Actions

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|--|---------------------|---|---|--|--|
| 1 | Maney, Hecker and Steele Roads | Flood | Highway Superintendent, Town Board | <p>Problem: Flooding and damages occurs to roads and private and public structures and infrastructure due to debris.</p> <p>Solution: Require ditching, regular maintenance and debris clearance to prevent flooding and damages to roads and private property.</p> | <p>1. Ongoing Capability 2. Routine maintenance of mowing and trench digging</p> | <p>1. Discontinue 2. Not applicable 3. Routine maintenance of mowing and trench digging</p> |
| 2 | Border City / 5&20 / HEP Area (also in Seneca County Projects) | Flood | County Supervisors and Department leaders, State Legislators and Agency leaders, Congressional Representative, Supervisor, Highway Superintendent, Town Board, Corporate Executives, SWCD | <p>Problem: Flooding associated with complex multi-jurisdictional issues has been a long-standing problem on the west side of the Town of Waterloo in the Border City/HEP Plaza areas.</p> <p>Solution: Site 1 – Border City / 5&20 – This includes sites around S. Preemption Rd., Ayers Place, Border City Rd., Sessler Rd., Serven Rd., and the bowling alley. A review and analysis of the complex nature of the maintenance responsibilities, support to encourage better maintenance and improvements to drainage infrastructure, technical, engineering and hydrologic analysis to support a comprehensive system-wide approach, management of future development, and acquisition or retrofits to flood prone structures would support resolving the flooding issue. Site 2 – HEP Plaza / East Ave. – On the east side of Route 96A, south of Route 5&20, commercial expansion, residential development, and inadequate</p> | <p>1. Ongoing Capability 2. Routine maintenance of pipe clearing</p> | <p>1. Discontinue 2. Not applicable 3. Routine maintenance of pipe clearing</p> |



| | | | | | | |
|---|---|-------|------------------------------------|---|---|--|
| | | | | drainage prevent storm water from reaching the Seneca Canal resulting in flooding. An analysis, design, and update to the existing drainage system would reduce flooding. | | |
| 3 | Reed Road Bridge at Kings Row Development | Flood | Highway Superintendent, Town Board | Problem: Bridge has maintenance issues and requires replacement. Solution: Replace bridge. | 1. Completed 2. Bridge replacement was a success | 1. Discontinue 2. Not applicable 3. Project is completed |



15.7.2 Additional Mitigation Efforts

In addition to the mitigation initiatives completed in Table 15-17, the Town of Waterloo identified the following mitigation efforts completed since the last HMP:

- Hecker Road Bridge

15.7.3 Proposed Hazard Mitigation Actions for the HMP Update

The Town of Waterloo participated in a mitigation action workshop in September 2024 and was provided the following FEMA publications to use as a resource as part of its comprehensive review of all possible activities and mitigation measures to address hazards of concern:

- FEMA 551 “Selecting Appropriate Mitigation Measures for Floodprone Structures” (March 2007)
- FEMA “Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards” (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that the Town of Waterloo would like to pursue in the future to reduce the effects of hazards. The actions 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 Town priorities.

Table 15-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 15-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 15-18. Analysis of Mitigation Actions by Hazard and Category

| Hazard | Actions That Address the Hazard, by Action Category | | | | | | | | | |
|----------------------|---|-----|-----|-----|-----|----|----|----|----|----|
| | FEMA | | | | CRS | | | | | |
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam Failure | X | - | - | X | X | - | X | - | - | X |
| Drought | | - | - | X | - | - | X | - | - | - |
| Earthquake | X | - | - | X | X | - | X | - | - | X |
| Extreme Temperatures | | - | - | X | - | - | X | - | - | - |
| Flood | X | X | - | X | X | X | X | - | - | X |
| Landslide | X | - | - | X | X | - | X | - | - | X |
| Severe Storm | X | - | - | X | X | - | X | - | - | X |
| Severe Winter Storm | X | - | - | X | X | - | X | - | - | X |

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 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

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



Table 15-19. Summary of Prioritization of Actions

| Project Number | Project Name | Scores for Evaluation Criteria | | | | | | | | | | | | | | High / Medium / Low | |
|-------------------|--|--------------------------------|---------------------|--------------------|-----------|-------|--------|---------------|----------------------|----------------|--------------------|----------------|----------|---------------------|------------------------|---------------------|-------|
| | | Life Safety | Property Protection | Cost-Effectiveness | Political | Legal | Fiscal | Environmental | Social Vulnerability | Administrative | Hazards of Concern | Climate Change | Timeline | Community Lifelines | Other Local Objectives | | Total |
| 2025-WaterlooT-01 | Critical Facilities in the Floodplain | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2025-WaterlooT-02 | Substantial Damage Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2025-WaterlooT-03 | Socially Vulnerable Populations Outreach | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 11 | High |
| 2025-WaterlooT-04 | High Hazard Dam Outreach | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 12 | High |

Note: Volume I, Section 16 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).



Action 2025-WaterlooT-01. Critical Facilities in the Floodplain

| | | | |
|--|---|---|---|
| Lead Agency: | Planning Board | | |
| Supporting Agencies: | Facility Managers | | |
| Hazard(s) of Concern: | <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm | |
| Description of the Problem: | The Railroad Bridge - W1957_NY5353 is an identified critical facility that is municipally owned and located in the special flood hazard area. Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery. | | |
| Description of the Solution: | <p>The Town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> • Elevation of facility • Floodproofing of facility • Mobile flood barriers • Bridge feasibility study • Replacement or retrofit of bridges <p>Once the most cost-effective option is identified, the Town will carry out the option.</p> | | |
| Estimated Cost: | TBD based on floodproofing measure | | |
| Potential Funding Sources: | FEMA HMGP and PDM, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget | | |
| Implementation Timeline: | Within 5 Years | | |
| Goals Met: | 1, 4, 5, 6 | | |
| Benefits: | Ensures continuity of operations of the critical facilities. | | |
| Impact on Socially Vulnerable Populations: | Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on. | | |
| Impact on Future Development: | The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area. | | |
| Impact on Critical Facilities/Lifelines: | This action will protect the dam and bridges which are critical facilities, maintaining the critical services that it provides. | | |
| Impact on Capabilities: | This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities. | | |
| Climate Change Considerations: | This action addresses anticipated increases in flooding frequency and severity through protection to the 500-year (0.2-percent annual chance) flood level. | | |
| Mitigation Category | <input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category | <input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES) | |
| Priority | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current problem continues |
| | Relocate facility | | Relocation is expensive and results in loss or delay of critical services in the immediate area |



Establish plans to enter into MOU with neighboring critical facilities to provide service during flood events

Reduction in response times and delay of critical services in the immediate area.



Action 2025-WaterlooT-02. Substantial Damage Management Plan

| | | | |
|--|---|---|------------------------------|
| Lead Agency: | Planning Board | | |
| Supporting Agencies: | Seneca County Code Enforcement | | |
| Hazard(s) of Concern: | <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm | |
| Description of the Problem: | <p>Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event including dam failure, earthquake, flood, landslide, severe storm, and severe storm, they must:</p> <ul style="list-style-type: none"> Determine where the damage occurred within the community and if the damaged structures are in an SFHA. Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value. Require permits for floodplain development. <p>The County issues the municipality’s building permits. The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.</p> | | |
| Description of the Solution: | <p>The municipality will work with the County to develop a Substantial Damage Management Plan, following the six-step planning process in 2021 Developing a Substantial Damage Management Plan (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p> | | |
| Estimated Cost: | Staff Time | | |
| Potential Funding Sources: | Town Budget, County Budget | | |
| Implementation Timeline: | Within 5 years to develop the plan; ongoing to maintain and update the plan | | |
| Goals Met: | 1, 3, 4, 5 | | |
| Benefits: | This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly. | | |
| Impact on Socially Vulnerable Populations: | Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations. | | |
| Impact on Future Development: | A Substantial Damage Management Plan would include all existing, current, and future development in the municipality. | | |
| Impact on Critical Facilities/Lifelines: | A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality. | | |
| Impact on Capabilities: | This action improves disaster recovery capabilities. | | |
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery. | | |
| Mitigation Category | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES) | |
| Priority | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current problem continues |



| | | |
|--|---|--|
| | Rely on state or federal resources following disaster events | Resources may not be available during major widespread events |
| | Establish MOUs with outside agencies to conduct Substantial Damage Determinations | A plan outlining responsibility is still necessary to prevent missing important requirements |



Action 2025-WaterlooT-03. Socially Vulnerable Populations Outreach

| | | |
|--|--|---|
| Lead Agency: | Planning Board | |
| Supporting Agencies: | Seneca County Emergency Management | |
| Hazard(s) of Concern: | <input checked="" type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm |
| Description of the Problem: | <p>The Town does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations relating to the identified hazards of concern. Identifying, communicating, and educating vulnerable populations can increase the resiliency of the Town through the reduction of long-risk risks associated with each hazard of concern. Furthermore, emergency responders will be able to prioritize assistance, when feasible, in an emergency to help those who need it most.</p> | |
| Description of the Solution: | <p>Create outreach materials, or utilize those from Seneca County, on hazard risks and methods of mitigation measures for socially vulnerable populations, including dam failure, drought, earthquake, extreme temperature, flood, landslide, severe storm, and severe winter storm. Methods of distribution may include Town events, the Town newsletters, social media, the Town website, and having the materials on display for the public at Town libraries and offices. Consider hiring staff to work directly with socially vulnerable populations. Outreach materials will be specified with education and information for each individual hazard of concern, with measures identified which can assist in reducing long-term risk to the identified hazards of concern.</p> | |
| Estimated Cost: | Staff Time | |
| Potential Funding Sources: | Town Budget, HMGP | |
| Implementation Timeline: | Within 3 Years, ongoing after established | |
| Goals Met: | 1, 3, 4, 6 | |
| Benefits: | <p>This action will ensure there is an individual working to identify and work with the socially vulnerable populations in the Town. Furthermore, this action will create opportunities to educate and inform populations on hazard risks.</p> | |
| Impact on Socially Vulnerable Populations: | <p>Socially vulnerable populations in the Town will become educated on hazards and risks. The Town will identify an individual to identify and work with these populations to ensure the most up-to-date information is being shared.</p> | |
| Impact on Future Development: | N/A | |
| Impact on Critical Facilities/Lifelines: | <p>Educating populations on hazard risk and how to mitigate the risks can decrease the demand for utilities and emergency services including health and medical, law enforcement, and search and rescue.</p> | |
| Impact on Capabilities: | <p>This action would build upon the Town's public education and outreach program.</p> | |
| Climate Change Considerations: | <p>Climate change is likely to increase the intensity and frequency of many climate-related disaster events. This action will inform residents and business owners of how to reduce risk from hazards and how climate change may exacerbate those risks.</p> | |
| Mitigation Category | <input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category | <input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Priority | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium |
| Alternatives | Action | |
| | No action | |
| | Rely on state or federal resources | |
| | Use only a few methods for distribution | |
| | | Evaluation |
| | | Current problem continues |
| | | Resources may be generalized and not specific to the risks in the Town |
| | | Using only a few methods of distribution may hinder socially vulnerable populations from receiving guidance |



Action 2025-WaterlooT-04. High Hazard Dam Outreach

| | | | |
|--|--|---|------------------------------|
| Lead Agency: | Town Highway Department | | |
| Supporting Agencies: | Village of Waterloo, Dam Owners | | |
| Hazard(s) of Concern: | <input checked="" type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm | |
| Description of the Problem: | The Waterloo Dam located in the Village of Waterloo, a critical infrastructure and High Hazard Potential Dam, is located near the Town. This structure has the potential to impact the residents of the Town, as well as the structures, environment, and infrastructure in the inundation area. Heavy rains associated with severe storms may influence a dam failure event, as the water load may be too much for the dam's structure. A dam failure could result in destructive flooding. | | |
| Description of the Solution: | The Town will work with the Village of Waterloo and the owners of the dams to ensure inspections and safety procedures are up to date. EAPs will be collected by the Village of Waterloo and shared with the County OEM. The Town and the Village of Waterloo will conduct public outreach to the high hazard dam owner and provide examples of mitigation actions to protect these structures from dam failure. | | |
| Estimated Cost: | Low | | |
| Potential Funding Sources: | Municipal Budget | | |
| Implementation Timeline: | 1 year | | |
| Goals Met: | 1, 2, 7 | | |
| Benefits: | High hazard dam owners will be better educated on the risk of dam failure and be aware of possible mitigation actions to pursue. This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies. | | |
| Impact on Socially Vulnerable Populations: | Outreach to high hazard dam owners will reduce flood risk to the community, by promoting mitigation actions to protect against dam failure. The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists. | | |
| Impact on Future Development: | This action will protect future development in and around the high hazard dams. Future development near inundation areas will be more secure as safety procedures and inspections are regularly performed on the dams. | | |
| Impact on Critical Facilities/Lifelines: | Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam. | | |
| Impact on Capabilities: | This action will improve planning and response capabilities through the understanding of responsibilities and procedures. | | |
| Climate Change Considerations: | Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event. This action will increase the capabilities to respond to these events. | | |
| Mitigation Category | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES) | |
| Priority | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | Do nothing. | | Problem persists |
| | Remove dams | | Not an option, costly |
| | Relocate residents | | Not an option, costly |