2025 Hazard Mitigation Plan

Onondaga County, New York

Village of Elbridge Annex

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This Annex details the hazard mitigation elements specific to the Village of Elbridge, a participating jurisdiction in the 2025 Onondaga County Hazard Mitigation Plan update. This Annex is not intended to be a standalone document but supplements the information contained in **Volume 1 (Countywide Planning Elements)**. Therefore, all sections of **Volume 1**, including the planning process, hazard identification and risk assessment, mitigation strategy (includes mitigation goals and objectives), and plan maintenance, apply to and were met by the Village of Elbridge. This Annex provides additional information specific to the Village, with a focus on providing additional details on the hazard risk assessment and mitigation strategy (i.e., mitigation actions) for this community.

1. HAZARD MITIGATION LOCAL PLANNING TEAM

The following individuals have been identified as the Village of Elbridge Local Planning Team for the 2025 Onondaga County Hazard Mitigation Plan. These individuals participated in all aspects of the planning process and developed a risk and vulnerability assessment, capability assessment, and mitigation strategy (including mitigation actions) specific to the jurisdiction.

Name	Title	Department
Christopher DeCola	Mayor	Mayor's Office
Bradley Milton	Chief	Department of Public Works

2. MUNICIPAL PROFILE

The Village of Elbridge is located within the Town of Elbridge, at the junction of NY-5 and NY-317, near the western border of Onondaga County, New York. *The Town of Elbridge has developed its own dedicated annex as part of this Plan.* Skaneateles Creek goes past the west side of the Village. The Village has a total area of one (1) square mile, and the area around the Village is very hilly, which includes Science Hill.

2.1. Population

In 2023, the Village of Elbridge had a population of 1,308, a 30.3% increase from the estimated 2018 population of 1,004. **Table 1** summarizes population distribution between 2010 and 2023, and the percentage of the 2023 population that is under five (5) years old, over 65 years old, and living below the poverty level.

Table 1. Population Trends

Population				Underserved Population		
2010[1]	**2018**[2]	**2023**[3]	**Population Change** *(2018 – 2023)*	**Youth**[3] *(Under 5 years old)*	**Elderly**[3] *(Over 65 years old)*	**Below Poverty Level**[4]
995	1,004	1,308	30.3%	12.4%	21.6%	7.0%

[1] United States Census Bureau. (2010). DP05: ACS Demographic and Housing Estimates (2010: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2010.DP05?g=160XX00US3623789.
[2] United States Census Bureau. (2018). DP05: ACS Demographic and Housing Estimates (2018: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2018.DP05?g=160XX00US3623789.
[3] United States Census Bureau. (2023). DP05: ACS Demographic and Housing Estimates (2023: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2023.DP05?g=160XX00US3623789.
[4] United States Census Bureau. (2023). S1701: Poverty Status in the Past 12 Months (2023: 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSST5Y2023.S1701?g=160XX00US3623789.

2.2. History and Cultural Resources

The Village of Elbridge was part of the Central New York Military Tract and was first settled around 1791 by Josiah Buck. Due to its location along Skaneateles Creek, the Village of Elbridge became a center of economic growth within the Town of Elbridge. The Village of Elbridge was incorporated on April 1, 1848. The Elbridge Village Historic District was listed on the National Register of Historic Places in 2002.

3. GROWTH/DEVELOPMENT TRENDS

Understanding development trends can help evaluate whether the jurisdiction's vulnerability has increased, decreased, or remained the same. **Table 2** summarizes the total housing units built in the Village of Elbridge between 2019 and 2023.[5]

Table 2. Housing Units Built (2019 – 2023)

Type	2019	2020	2021	2022	2023
Single-Family Units	0	0	1	1	0
Multi-Family Units	0	0	0	0	0
2-Family Units	*0*	*0*	*0*	*0*	*0*
3-Family Units	*0*	*0*	*0*	*0*	*0*
Apartment Units	*0*	*0*	*0*	*0*	*0*
Total Units	**0**	**0**	**1**	**1**	**0**

The Onondaga County Housing Needs Assessment, a component of the County's Comprehensive Plan, explores the County's housing market and its challenges in greater depth and argues that one of the County's greatest housing needs is an improved approach to land use planning. In the Assessment, it is stated that there are similarities and affinities between certain groups of municipalities. Therefore, the County was sub-divided into seven (7) sub-regions, each of which covers multiple municipalities. The municipalities within each sub-region, share sufficient geographic and market characteristics to be treated as a single place for purposes of further understanding the county housing market.

The Village of Elbridge is in the Rural Countryside sub-region. This sub-region has a greater proportion of married couple families, both elderly (17%) and non-elderly (65%), and relatively fewer single parent families and people living alone. Total household growth between 2000 and 2020 was 8.8% (the average of all the County towns/villages was 12.0%). Growing demand in the County would likely support continued large-lot homebuilding within the towns. Villages, without a clear market for aging housing in mostly remote locations, would slowly continue on their early 20th Century trajectory. If household growth in the towns within this sub-region grew sufficiently, it could encourage development of some additional commercial uses. Under a low-growth scenario, it is likely that the towns within Rural Countryside could continue to add large-lot houses in a rural setting, though construction would likely slow. Market changes would happen gradually, with strong areas remaining strong for a period of time.

The Village of Elbridge is fully developed, with both residential and commercial areas built out. There is no available land for new construction, limiting the potential for further development. **Table 3** summarizes major recent residential/commercial development (in the past five (5) years), and any known or anticipated significant residential/commercial development and significant infrastructure development, as of December 2024, that is likely to occur within hazard-prone areas in the next five (5) years.

[5] Data provided by the Onondaga County Department of Planning based on Real Property Data (2024).

Table 3. Growth and Development

Property or Development Name	Location	Type *(e.g., residential, commercial)*	# of Units/ Structures	Known Hazard Zone(s)	Status of Development
Recent Development in the Past Five (5) Years (2019 – 2024)					
The Village has not experienced significant development in hazard-prone areas over the past five (5) years.					
Known or Anticipated Development in the Next Five (5) Years (2024 – 2029)					
The Village does not anticipate significant development in hazard-prone areas over the next five (5) years.					

3.1. Changes in Priority

Since the last Plan update, drainage and culvert issues have become a significant priority for the Village. After each storm, the Village faces challenges managing stormwater, underscoring the need to address these infrastructure concerns. Additionally, to improve consistency in zoning practices, the Village is working with the Town of Elbridge to align the zoning ordinances of both jurisdictions.

Mitigation actions from the previous Plan were updated, and a more concerted effort to achieve equitable outcomes for all communities, including underserved communities and socially vulnerable populations, has been implemented.

4. CAPABILITY ASSESSMENT

Federal regulations require hazard mitigation plans to identify goals for reducing long-term vulnerabilities to the identified hazards in the planning area (Section 201.6(c)(3)(i)). A critical step in developing specific hazard mitigation actions and projects is assessing existing authorities, policies, programs, and resources and capabilities, and using or modifying local tools to reduce losses and vulnerability from profiled hazards.

A capability assessment was conducted for the Village of Elbridge's authorities, policies, programs, and resources. Goals and mitigation actions were developed using input from this assessment. Information regarding the Village's implementation of and continued participation in the National Flood Insurance Program (NFIP) can be found in Section 5 of this Annex.

The Local Planning Team assessed the Village's capabilities that can contribute to the reduction of long-term vulnerabilities to hazards. The capabilities include the following categories:

- Planning and Regulatory Capabilities
- Administrative and Technical Capabilities
- Fiscal Capabilities
- Education and Outreach Capabilities

Additionally, ways to expand on and improve these existing policies and programs to integrate hazard mitigation into the day-to-day activities and programs of the Village were considered.

4.1. Planning and Regulatory Capabilities

Table 4 includes local ordinances, policies, and laws to manage growth and development (e.g., land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes, and zoning ordinances).

Table 4. Planning and Regulatory Capabilities

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Planning Capability				
Comprehensive Plan	Yes	Local	Planning Board	137-59 Village Code Smart Growth Comprehensive Plan for the Town of Elbridge, NY and the Villages of Elbridge and Jordan (May 2024) – Pending Adoption
Capital Improvements Plan	No	N/A	N/A	N/A
Floodplain Management / Basin Plan	No	N/A	N/A	N/A
Stormwater Management Plan	No	N/A	N/A	N/A
Open Space Plan	No	N/A	N/A	N/A
Stream Corridor Management Plan	No	N/A	N/A	N/A
Watershed Management or Protection Plan	No	N/A	N/A	N/A
Economic Development Plan	No	N/A	N/A	N/A
Comprehensive Emergency Management Plan	Yes	Local	Village Board	Emergency Management Plan with the Town of Elbridge, Village of Jordan, and JECSD
Emergency Operation Plan	Yes	N/A	Village Fire Department	Maintained by the Village Fire Department
Evacuation Plan	No	N/A	N/A	N/A
Post-Disaster Recovery Plan	No	N/A	N/A	N/A
Transportation Plan	Yes	Local	Planning Board	The transportation component is included in the Comprehensive Plan.
Strategic Recovery Planning Report	No	N/A	N/A	N/A
Climate Adaptation Plan	No	N/A	N/A	N/A
Resilience Plan	No	N/A	N/A	N/A
Other Plans:	No	N/A	N/A	N/A

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Regulatory Capability				
Building Code	Yes	Local, State	Codes Office	Chapter 16 of the New York State Building Code Local Law #3 of the Village Code
Zoning Ordinance	Yes	Local	Codes Office	Local Law #3 of the Village Code
Subdivision Ordinance	Yes	Local	Codes office	Local Law #2 of the Village Code
NFIP Flood Damage Prevention Ordinance	Yes	Local, State, Federal	Codes Office	Chapter 75 of the Village Code Local Law #1 of the Village Code
NFIP: Cumulative Substantial Damages	No	N/A	N/A	N/A
NFIP: Freeboard	Yes	State	Codes Office	Chapter 16 of the New York State Building Code State mandated two (2) feet above the BFE for all construction, both residential and non-residential.
Growth Management Ordinances	Yes	Local	Planning Board	Local Law #1 of the Village Code
Site Plan Review Requirements	Yes	Local	Planning Board	Local Law #1 of the Village Code
Stormwater Management Ordinance	Yes	Local, State	Planning Board	Local Law #2 of the Village Code
Municipal Separate Storm Sewer System (MS4)	Yes	Federal	State	Permits are required for stormwater discharges from MS4s in urbanized areas and for construction activities disturbing one (1) or more acres. The Town has been automatically designated as a regulated MS4 and required to develop a comprehensive stormwater management program.
Natural Hazard Ordinance	No	N/A	N/A	N/A
Post-Disaster Recovery Ordinance	No	N/A	N/A	N/A
Real Estate Disclosure Requirement	Yes	Local, State	New York State Department of State, Real Estate Agent	New York Code – Article 14 §460-467 (Property Condition Disclosure Act)
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	N/A	N/A	N/A

4.2. Administrative and Technical Capabilities

The administrative and technical capabilities listed in **Table 5** include community (i.e., public and private) staff, their skills, and tools that can be used for mitigation planning and implementation. This capability includes engineers, planners, emergency managers, Geographic Information System (GIS) analysts, building inspectors, grant writers, and floodplain managers. Small communities may rely on other government entities, such as counties or special districts, for resources.

Table 5. Administrative and Technical Capabilities

Capability	Yes/No	Position/Department/Agency
Administrative Capability		
Planning Board	Yes	
Mitigation Planning Committee	No	N/A
Environmental Board/Commission	Yes	Town of Elbridge Environmental Commission *The Village does not have their own but relies on the Town's Commission.*
Open Space Board/Committee	No	N/A
Economic Development Commission/Committee	No	N/A
Maintenance programs to reduce risk	Yes	Department of Public Works
Mutual aid agreements	Yes	Mutual Aid Agreements with schools, and the Town and Village of Jordan
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Planning Board
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineering Consultant
Planners or engineers with an understanding of natural hazards	No	N/A
NFIP Floodplain Administrator	Yes	Code Enforcement Officer, Codes Office
Surveyor(s)	Yes	Engineering Consultant
Personnel skilled or trained in GIS applications	Yes	Engineering Consultant
Scientist familiar with natural hazards	No	N/A
Warning systems/services	Yes	Onondaga County Emergency Communications (911)
Emergency Manager	Yes	Village Mayor Fire Chief
Grant writer(s)	Yes	Consultant
Staff with expertise or training in benefit/cost analysis	No	N/A
Professionals trained in conducting damage assessments	No	N/A

4.3. Fiscal Capabilities

Table 6 lists fiscal capabilities available to the Village that may be used to implement mitigation activities to reduce risk and enhance resiliency. This capability includes available funding sources from local budgets, state and federal grants, potential cost-sharing arrangements with private entities, existing insurance policies, and the ability to generate additional revenue through fees and bonds related to mitigation.

Table 6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Federal Hazard Mitigation Assistance Program *(i.e., Hazard Mitigation Grant Program (HMGP), HMGP Post Fire, Flood Mitigation Assistance (FMA) Program)*	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	Yes
Open Space Acquisition funding programs	No

4.4. Education and Outreach Capabilities

Table 7 lists the Village's education and public outreach capabilities that can be used to inform residents about potential hazards, educate on mitigation strategies, and encourage proactive actions to reduce the community's impacts to disasters. These capabilities include fire safety programs, hazard awareness campaigns, public information, and communications offices.

Table 7. Education and Outreach Capabilities

Capability	Yes/No	Position/Department/Agency
Public Information Officer	No	N/A
Personnel skilled or trained in website development	No	N/A
Hazard mitigation information available on the jurisdiction's website	No	N/A
Utilize social media for hazard mitigation education	No	N/A
Citizen boards or commissions that address issues related to hazard mitigation	No	N/A
Other programs already in place that could be used to communicate hazard-related information	No	N/A

Capability	Yes/No	Position/Department/Agency
An established warning system for hazard events	Yes	Onondaga County Emergency Communications (911)

4.5. Community Classifications

The community classification relates to the community's ability to provide effective services to reduce its vulnerability to the identified hazards. These classifications can be viewed as indicators of the community's capabilities across all phases of emergency management (i.e., preparedness, response, recovery, and mitigation) and are used as underwriting parameters to determine the costs of various insurance forms. **Table 8** summarizes classifications for community programs available to the Village of Elbridge.

Table 8. Community Classifications

Program	Yes/No	Classification *(if applicable)*	Date Classified *(if applicable)*
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No	N/A	N/A
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	03/3Y	-
New York State Department of Environmental Conservation Climate Smart Community	No	N/A	N/A
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A
Natural disaster/safety programs in/for schools	Yes	N/A	N/A
Organizations with mitigation focus (advocacy group, non-government)	No	N/A	N/A
Public private partnership initiatives addressing disaster-related issues	No	N/A	N/A

4.6. Self-Assessment of Capability

Table 9 provides an approximate measure of the Village of Elbridge's capability to work in a hazard mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9. Self-Assessment Capability for the Municipality

Capability Area	Degree of Hazard Mitigation Capability		
	Limited *(If limited, what are your obstacles?)*	***Moderate***	***High***
Planning and Regulatory Capabilities			**X**
Administrative and Technical Capabilities		**X**	
Fiscal Capabilities	**X** *(Low funds)*		
Education and Outreach Capabilities		**X**	
Community Political Capabilities			**X**
Community Resiliency Capabilities		**X**	

Capability Area	Degree of Hazard Mitigation Capability		
	Limited *(If limited, what are your obstacles?)*	*Moderate*	*High*
Capability to integrate mitigation into municipal processes and activities			X

4.7. Needs to Expand/Improve Capabilities

Based on the capability self-assessment in Section 4.6, the Village of Elbridge identified existing authorities, policies, programs, funding, and/or resources that need to be expanded and/or improved in order to support the implementation of the hazard mitigation initiatives identified in this Plan (e.g., mitigation actions).

- Building codes and ordinances should be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses. Furthermore, the Village's building and zoning codes and ordinances should be aligned with the Town of Elbridge for consistency.

5. NATIONAL FLOOD INSURANCE PROGRAM

The Village of Elbridge is a member of the National Flood Insurance Program (NFIP), but has chosen not to participate in the NFIP Community Rating System (CRS) Program. The Village is in good standing with the NFIP through adoption and enforcement of floodplain management requirements (e.g., regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. The Village's NFIP participation information is listed in **Table 10**.

Table 10. NFIP Participation Information

CID	NFIP Participation Date	Current Effective FIRM Date	CRS Entry Date	CRS Current Effective Date	CRS Rating
360576	8/16/1982	11/4/2016	N/A	N/A	N/A

5.1. NFIP Floodplain Administrator

All NFIP participating jurisdictions have a designated Floodplain Administrator who is charged with enforcing floodplain regulations, routinely monitoring the floodplains, and providing community assistance, such as encouraging owners to maintain flood insurance. The Village of Elbridge Floodplain Administrator information is listed in **Table 11**.

Table 11. Floodplain Administrator

Name	Title	Department	Phone Number
Howard Tanner	Code Enforcement Officer	Codes Office	(315) 689-3404

5.2. Repetitive Loss and Severe Repetitive Loss Property

FEMA defines a Repetitive Loss property as an NFIP-insured property meeting at least one (1) of the following paid loss criteria since 1978, regardless of any changes in ownership:

- Four (4) or more separate claims payments greater than $5,000 each (including building and contents payment).

- Two (2) or more separate flood insurance claims payments (building payments only), where the total of the payments is greater than the property's current value.

Additionally, to receive a designation, at least two (2) of the claim payments must occur within 10 years of one another.[6]

A Severe Repetitive Loss property is defined by FEMA as any NFIP-insured single-family or multi-family residential building meeting at least one (1) of the following paid loss criteria since 1978 or from a building constructed after 1978, regardless of any changes in ownership:[7]

- That has incurred flood-related damage for which four (4) or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000.
- For which at least two (2) separate claims payments (building payments only) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the building.

Table 12 summarizes FEMA Repetitive Loss and Severe Repetitive Loss properties within the Village of Elbridge.

Table 12. Repetitive Loss and Severe Repetitive Loss Properties

Repetitive Loss Properties		Severe Repetitive Loss Properties	
Total	*Occupancy*	*Total*	*Occupancy*
1	**1** Single Family	0	--

Occupancy Type: *Single Family = Single family residence • Two (2)-Four (4) Unit Residential Building = Two (2)-four (4) unit residential building • More Than Four (4) Units Residential Building = Residential building with more than four (4) units • Non-Residential Building = Non-residential building • Non-Residential Business = Non-residential business • Single Family Residential Building = Single-family residential building with the exception of a mobile home or a single residential unit within a multi-unit building • Residential (2, 3, or 4 units) Non-Condo Building = Residential non-condo building with two (2), three (3), or four (4) units seeking insurance on all units • Residential (5 or more units) Non-Condo Building = Residential non-condo building with 5 or more units seeking insurance on all units • Residential Mobile/Manufactured Home = Residential mobile/manufactured home • Residential Condo Association = Residential condo association seeking coverage on a building with one (1) or more units • Single Residential Unit = Single residential unit within a multi-unit building • Non-Residential Mobile/manufactured Home = Non-residential mobile/manufactured home • Non-Residential Building = Non-residential building • Non-Residential Unit = Non-residential unit within a multi-unit building*

Table 13 summarizes the NFIP active policies and coverage in force data for the Village of Elbridge.

Table 13. NFIP Policies

NFIP Policies	Insurance in Force	Total Claims Paid	Sum of Claims Paid
1	$3,613	6	$21,974

5.3. Participation Activities

The Village of Elbridge NFIP participation over the last five (5) years includes the following:

- Provides the following services – permit review, GIS, inspections, and engineering capability.

[6] Federal Emergency Management Agency, National Flood Insurance Program. (2023). A Policyholder's Guide to Severe Repetitive Loss. Retrieved from https://agents.floodsmart.gov/sites/default/files/fema_nfip-policyholders-guide-severe-repetitive-loss_brochure_07-2023.pdf.

[7] Federal Emergency Management Agency, National Flood Insurance Program. (2021). National Flood Insurance Program: Flood Insurance Manual. Retrieved from https://www.fema.gov/sites/default/files/documents/fema_nfip-all-flood-insurance-manual-apr-2021.pdf.

- Teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- Enforces local floodplain regulations and monitors compliance.
- Floodplain management regulations meet or exceed FEMA or State minimum requirements.

5.3.1. Regulatory

Flood Damage Prevention Ordinance

The Village of Elbridge's Flood Damage Prevention Law (Local Law # 4 of 2016) meets FEMA and State minimum standards and specifies requirements which include a floodplain permit that is required for all construction and other development in special flood hazard areas and a certificate of compliance. The Local Law was adopted 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.
- Qualify for and maintain participation in the NFIP.

The objectives of this Local Law include to:

- Protect human life and health.
- Minimize expenditure of public money for costly flood control projects.
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- Minimize prolonged business interruptions.
- Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone, and sewer lines, streets and bridges located in areas of special flood hazard.
- Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas.
- Provide that developers are notified that property is in an area of special flood hazard.
- Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Substantial Damage

Substantial damage means damage of any origin sustained by a structure by which the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. *(Village of Elbridge Local Law #4 of 2016)*

Substantial Improvement

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement. The term includes structures which have incurred *substantial damage*, regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
- Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure. *(Village of Elbridge Local Law #4 of 2016)*

There are other local ordinances, plans, or programs (e.g., site plan review) that support floodplain management and meet the NFIP requirements.

Substantial Damage/Substantial Improvement Determination Process

The Village of Elbridge's Substantial Damage/Substantial Improvement determination process ensures compliance with the NFIP and the local floodplain management ordinances (as outlined earlier in this section). To determine whether a structure has sustained Substantial Damage/Substantial Improvement after a flood event, the Village building inspectors conduct an analysis and review of the structure or, if needed, with the assistance of a registered design professional (e.g., architect, engineer).

6. HAZARD MITIGATION PLAN INTEGRATION

For a community to successfully reduce long-term risk, hazard mitigation must be integrated into day-to-day planning mechanisms and initiatives. Plan integration is the process by which communities critically assess the existing planning framework and align efforts with the goal of reducing long-term risks and building a more resilient community. It involves a two (2) way exchange of information and incorporation of ideas and concepts between hazard mitigation plans and other community plans. In particular, plan integration involves incorporating hazard mitigation principles and actions into other plans and integrating planning mechanisms into hazard mitigation plans. Plan integration involves community plans, policies, codes, and programs that guide development, roles, and responsibilities in implementing these capabilities. Additionally, plan integration is achieved through the involvement of key staff and community officials in collaborative hazard mitigation planning.

6.1. Existing Plan Integration

A hazard mitigation plan must explain how the jurisdiction incorporated the previous Plan update over the last five (5) years to demonstrate progress in local mitigation efforts. During the performance period since the adoption of the previous Hazard Mitigation Plan, the Village of Elbridge has made progress in integrating components of the hazard mitigation strategy (e.g., goals, objectives, and actions) into planning initiatives and mechanisms. **Table 14** highlights the planning mechanisms/initiatives in which the previous Plan was integrated and the information integrated.

Table 14. Current Plan Integration

Planning Initiative	Current Integration Description
Comprehensive Plan	The Smart Growth Comprehensive Plan for the Town of Elbridge and the Villages of Elbridge and Jordan, updated in 2024, has direct references to the goals and recommendations from the 2019 Onondaga County Hazard Mitigation Plan, specifying the need for the consideration of natural hazards and hazard mitigation in municipal land use policies and planning processes. Additionally, the Comprehensive Plan includes potential hazard mitigation improvements through flood protection, habitat conservation, and smart growth principles, among many others.
Stormwater Management Plan	The Village of Elbridge is a Municipal Separate Storm Sewer System (MS4) regulated community with a formal Stormwater Management Plan. The Stormwater Management Plan includes projects, actions, and initiatives to reduce stormwater volume or mitigate stormwater flooding. Hazard mitigation measures have been implemented in activities that impact stormwater.
Ordinances	The Town has multiple local ordinances (e.g., Building Code, Flood Damage Prevention Ordinance, Zoning Ordinance, Subdivision Ordinance) that address hazard mitigation.
Site Plan Review	The Site Plan Review process considers natural hazard risk and requires developers to take additional steps to mitigate it.
Retrofitting/Removal of Structures from Hazard-Prone Areas	The Village supports the retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. The Village works to identify facilities that are viable candidates for each strategy based on cost-effectiveness. Implementation of these hazard mitigation actions is based on available funding.
Municipal Budget	The Village has a line item for mitigation projects/activities in the Municipal Budget and the capital improvement funding.

6.2. Potential Future Integration

A hazard mitigation plan must explain how the jurisdiction intends to incorporate this Plan update into planning mechanisms over the next five (5) years. The capability assessment presented in Section 4 of this Annex identifies codes, plans, and programs that provide opportunities for integration. **Table 15** outlines planning mechanisms/initiatives that do not currently integrate the goals and recommendations of this Plan but provide opportunities to do so in the future.

Table 15. Potential Future Integration

Planning Initiative	Potential Integration Description
Comprehensive Plan	The Hazard Mitigation Plan will continue to be incorporated in the upcoming Comprehensive Plan updates to maintain the community's resilience by integrating strategies for risk reduction into land use, development, and infrastructure planning. Furthermore, hazard mitigation goals will remain aligned with the Comprehensive Plan's vision, and hazard risk assessment information could be used to address vulnerabilities.
Stormwater Management Plan	The Village is a Municipal Separate Storm Sewer System (MS4) regulated community with a formal Stormwater Management Plan. Mitigation actions in this Hazard Mitigation Plan can inform updates and revisions to the Stormwater Management Plan. Furthermore, projects outlined in the Stormwater Management Plan and this Hazard Mitigation Plan could be aligned. The Hazard Mitigation Plan may identify new funding sources for stormwater improvement projects and may result in modifications to proposed projects based on the risk assessment results.
Zoning Ordinance	Hazard mitigation could be integrated into future Zoning Ordinance updates to inform appropriate use of property within the Village. Portions of this Hazard Mitigation Plan should be reviewed to consider any future improvements to the Code, if applicable.

Planning Initiative	Potential Integration Description
Subdivision Ordinance	Hazard mitigation could be integrated into future Subdivision Ordinance updates to guide and regulate the Village's land use. Portions of this Hazard Mitigation Plan should be reviewed to consider any future improvements to the Code, if appropriate.

The Village's Local Planning Team will identify all relevant planning initiatives scheduled for update in the next year and during the annual update process of the Hazard Mitigation Plan. Additionally, the Local Planning Team will identify opportunities to integrate key elements of the Hazard Mitigation Plan, specifically relevant strategies, into the planning initiatives. Mitigation actions were identified to promote plan integration in future revisions of this Plan.

7. SIGNIFICANT HAZARD PAST EVENTS

A complete risk assessment, including past incidents, for each identified hazard of concern, can be found in **Volume 1** of this Plan. A summary of past events is provided under each hazard profile and includes a chronology of events that have affected the County and its municipalities. **Table 16** provides information on significant hazard events that uniquely impacted the Village of Elbridge.

Table 16. Hazard Event History

Date	Event Type *(Disaster Declaration, if applicable)*	Description
August 7, 2023	Flood	Thunderstorms developed ahead of a slow moving cold front tracking through western and central New York during the afternoon and evening of August 7th. Numerous thunderstorm complexes moved over the same locations in Onondaga County, producing up to six (6) inches of rainfall in a short amount of time. Much of the affected area was urbanized land cover. Flooding of streets and drainage systems occurred for several hours. The heavy rainfall resulted in washed out culverts throughout the Village.
July 1, 2017	Flood	A tropical moisture laden air mass produced numerous showers and thunderstorms which traveled repeatedly over the same areas of the Finger Lakes Region and Upper Mohawk Valley. Widespread flash and urban flooding developed in portions of Cayuga, Onondaga, Madison, and Oneida counties. The hardest hit areas were the villages and towns of Moravia, Chittenango, Oneida, and Utica. Total rainfall along a narrow corridor from Moravia to Utica generally ranged from 2.5 to five (5) inches, most of which fell in less than two (2) hours. Total damages from this event range between $10 and $15 Million countywide. The event required overtime by the Village's Department of Public Works.
June 30 – July 1, 2015	Flood	An unseasonably strong storm system tapping into above normal moisture sources across the Great Lakes and northeast, triggered multiple thunderstorms that produced heavy rainfall across the region. Localized torrential rainfall in central New York caused severe urban flash flooding in the Syracuse metropolitan area. The event required overtime by the Village's Department of Public Works.

Date	Event Type *(Disaster Declaration, if applicable)*	Description
April 25, 2011	Severe Weather, Flood (DR-1193)	A slow moving warm front moved northward across central New York late in the afternoon on April 25th, producing severe weather in the region. There were reports of severe thunderstorms with strong winds/damaging winds, hail, and tornadoes. Additionally, these storms produced heavy rainfall, resulting in flash flooding in several locations across central New York. The event required overtime by the Village's Department of Public Works.
May 26, 2011	Severe Weather	On May 26th, a deep upper level low pressure system shifted east from the mid-Mississippi Valley region through the afternoon and evening, allowing numerous showers and thunderstorms to develop. Many reports of large hail and damaging winds occurred in central New York. The event required overtime by the Village's Department of Public Works.

8. HAZARD VULNERABILITY AND IMPACT ASSESSMENT

Exposure and vulnerability to certain hazards affect the entire County, and others are geographically defined. Although the entire County may be vulnerable to these hazards, their impacts may vary based on existing community conditions (e.g., underserved populations or those with access and functional needs may be more susceptible under certain conditions).

Table 17 outlines the ***unique vulnerabilities and impacts*** for the Village of Elbridge and addresses only the hazards relevant to the jurisdiction. A complete risk assessment for each identified hazard of concern is in **Volume 1** of this Plan. Hazard mapping can be found in **Appendix A** of this Annex.

Table 17. Hazard Vulnerability and Impact Assessment

Hazard	Vulnerabilities and Impacts
Drought	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to drought; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Earthquake	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to earthquakes; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Heat Wave/Extreme Heat	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to heat wave/extreme heat; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.

Hazard	Vulnerabilities and Impacts
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	• Drainage culvert on Crossett Road (was recently rebuilt after the August 2023 heavy rainfall event): This is part of the main drainage artery that goes through the middle of the Village. It begins on Willow Lane and collects runoff from the two (2) hills on the north end of the Village, one of which is Science Hill. The drainage system continues down Crossett Road and then runs through approximately 40 properties through a drainage swale, where it empties under Sandbank Road and into the Town of Elbridge. • Drainage culverts along Kingston Road: The County maintains most of this stretch up until the last few properties in the Village. Lack of maintenance on this portion of the system causes flooding problems for residents in this area. • Skaneateles Creek runs through the Village. • The Village has a significantly large retention pond on the corner of Dobbin Lane and South Street. Hourigan Farms built this approximately 15 years ago (due to clear cutting hedgerows), and the runoff direction changed. For the most part, this has worked perfectly with a few exceptions over the years. The pond drains into a wetland in the Village, but if it gets too high, it also causes issues for residents in Dobbin Lane and Willow Crest. The level of the pond is controlled by an equalization pipe. There is also a drainage swale that runs westward behind Dobbin Lane and continues southward to the end of Dobbin Lane. This part of the swale has a buried culvert that has failed in the past. The Village is discussing replacement and next steps. • Heavy rainfall events result in flooding issues along NY Route 5 on the Village's Library property. The State redesigned the road in 2018, which solved the problem on the south side of Route 5; however, because flood waters have nowhere else to go, flooding occurs on the north side.
Geological Hazards *(landslides, land subsidence, mudboils)*	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to geological hazards; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Harmful Algal Bloom	Indirect impact from Skaneateles Lake because it is the Village's main water source.
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to invasive species and infestation; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Need mitigation on the West side of Kingston Road. Water sheets down from powerlines in the Spring (the site is partially in the Town of Elbridge).
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to winter weather; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Wildfire *(wildfire smoke)*	The Local Planning Team determined that the Village does not have unique vulnerabilities and impacts to wildfire; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.

The Village evaluated whether vulnerability in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, changes in population, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics (e.g., underserved population) were taken into consideration.

Table 18 outlines whether climate change has increased or decreased the Village's vulnerability (i.e., exposure) and impact to each natural hazard over the past five (5) years, and the effect of climate change on the future probability of occurrence and impacts from each natural hazard.

Table 18. Climate Change Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Remained the Same
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Increased
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Increased
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the Same
Harmful Algal Bloom	Increased
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Increased
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Increased
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Increased
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	Increase
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Increase
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	Increase
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Increase
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Increase
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Increase
Wildfire *(wildfire smoke)*	No Change Anticipated

Table 19 outlines whether changes in population within the Village over the past five (5) years have increased or decreased the vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in population may have on the future probability of occurrence and impacts from these natural hazards.

Table 19. Changes in Population Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Remained the Same
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Remained the Same
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Remained the Same
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the Same
Harmful Algal Bloom	Remained the Same
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Remained the Same
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Remained the Same
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Remained the Same
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	No Change Anticipated
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	No Change Anticipated
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	No Change Anticipated
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	No Change Anticipated
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	No Change Anticipated
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	No Change Anticipated
Wildfire *(wildfire smoke)*	No Change Anticipated

Table 20 outlines whether development over the past five (5) years has increased or decreased the Village's vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts from these natural hazards.

Table 20. Changes in Development Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Remained the Same
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Remained the Same
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Remained the Same
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the Same

Hazard	Vulnerability and Impact
Harmful Algal Bloom	Remained the Same
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Remained the Same
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Remained the Same
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Remained the Same
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	No Change Anticipated
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	No Change Anticipated
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	No Change Anticipated
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	No Change Anticipated
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	No Change Anticipated
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	No Change Anticipated
Wildfire *(wildfire smoke)*	No Change Anticipated

8.1. Future Major Assets

Community assets should include anything that is important to a community's character and function. Assets include people (i.e., underserved population); structures (i.e., new and existing buildings); community lifelines and other critical facilities; natural, historic, and cultural resources; and the economy and other activities that have value to the community. The Village of Elbridge does not anticipate that future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan. As stated in Section 3 of this Annex, the Village is fully developed, with both residential and commercial areas built out, and there is no available land for new construction, limiting the potential for further development. Any new assets (e.g., new construction in hazard-prone areas) will be built to comply with the latest building codes and standards, and will be mitigated to protect them from identified and anticipated hazards, especially those expected to increase due to climate change.

9. CRITICAL FACILITIES FLOOD RISK

New York State Department of Environmental Conservation (NYSDEC) Title 6, Chapter V, Subchapter A, Part 502 sets forth local floodplain management criteria for State projects located within 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 built in accordance with certain mitigation specifications, including being raised two (2) feet above the Base Flood Elevation (BFE).[8] While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding.

[8] New York State Department of Environmental Conservation. (n.d.). Chapter V – Resource Management Services. Retrieved from https://dec.ny.gov/regulatory/regulations/chapter-v.

Jurisdictions must identify all critical facilities, assess their vulnerabilities, and ensure they are protected against a 0.2% chance (500-year) flood event. Critical facilities that are located in an SFHA and/or have been previously flooded must be protected against a repeat of that flood or the 0.2% chance flood event, whichever provides the greater protection. The Plan must document that those critical facilities are protected to a 0.2% flood event, or the previous worst-case flood event. For those that do not meet this level of protection, the Plan must include a mitigation action that meets or exceeds this criterion, or explain why it is not feasible to do so.[9]

Table 21 identifies critical facilities in the community located in the 100-year and 500-year floodplain.

Table 21. Potential Flood Losses to Critical Facilities

Name	Address	Type	Exposure		Potential Loss from 100-Year Flood Event		Facility Protected	Addressed by Proposed Action
			100-Year	*500-Year*	*% Structure Damage*	*% Content Damage*		
None identified								

10. HAZARD RISK RANKING

Table 22 presents the local hazard ranking for the Village of Elbridge of all hazards of concern listed in **Volume 1** of this Plan. This ranking summarizes how hazards vary for this jurisdiction. As thoroughly described in **Volume 1** of this 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. For further details on how the probability, extent, vulnerability, and impact factors in **Table 22** were calculated, please refer to Section 4.3 in **Volume 1** of this Plan.

It is important to note that the sub hazards for severe weather (i.e., strong winds/damaging winds, severe thunderstorms, tropical storm/hurricane, hail, and tornado), geological hazards (i.e., landslide, land subsidence, and mudboils), flood (i.e., riverine/creek flooding and ice jam, and urban/flash flooding), and winter weather (i.e., blizzards, lake effect snow, nor'easter, and ice storm, and cold wave/extreme cold) were individually ranked in the hazard risk ranking; however, severe weather, geological hazards, flood, and winter weather are each considered as the main hazard throughout this Annex and **Volume 1**.

Table 22. Village of Elbridge Hazard Risk Ranking

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score *(Probability x Consequence)*
Flood (Urban/Flash Flood)	3	12	11	29	52	73
Winter Weather (Blizzards, Lake Effect Snow, Nor'easter, Ice Storm)	3	12	14	21	47	67
Severe Thunderstorm *(Severe Weather)*	3	12	16	14	42	61
Strong Winds/ Damaging Winds *(Severe Weather)*	3	12	11	16	39	57

[9] New York State Division of Homeland Security and Emergency Services. (2022). 2022 New York State Hazard Mitigation Planning Standards. Retrieved from https://www.dhses.ny.gov/system/files/documents/2023/11/2022-nys-mitigation-planning-standards-final.pdf

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score *(Probability x Consequence)*
Cold Wave/Extreme Cold *(Winter Weather)*	2	12	14	21	47	48
Flood (Riverine/Creek, Ice Jam)	2	12	6	25	43	44
Heat Wave/Extreme Heat	2	9	11	19	39	41
Harmful Algal Bloom	2	9	10	20	39	41
Drought	2	12	12	13	37	39
Invasive Species and Infestation	2	9	6	18	33	35
Tropical Storm/ Hurricane *(Severe Weather)*	1	9	16	24	49	27
Dam and Levee Failure *(Flood)*	1	12	6	27	45	25
Land Subsidence *(Geological Hazards)*	1	9	11	18	38	22
Hail *(Severe Weather)*	1	6	16	14	36	21
Earthquake	1	6	16	12	34	20
Tornado *(Severe Weather)*	1	6	6	22	34	20
Landslide *(Geological Hazards)*	1	6	6	18	30	18
Mudboils *(Geological Hazards)*	1	3	6	12	21	13
Wildfire (Wildfire Smoke)	1	3	6	11	20	13

Consequence: *Sum of all weighted factors.*
Extent: *Sum of the weighted Extent factors.*
Vulnerability: *Sum of the weighted Vulnerability factors.*
Impact: *Sum of the weighted Impact factors.*
Total Risk Score* *= Probability x Consequence*
** Normalized to 100*

Total Risk Score Legend

Classification	Probability Factor	Extent	Vulnerability	Impact	Consequence Score	Total Risk Score
Low (L)	1	0 – 6	0 – 6	0 – 12	0 – 24	0 – 24
Medium (M)	2	7 – 12	7 – 12	13 – 26	25 – 50	25 – 52
High (H)	3	13 – 18	13 – 18	27 – 39	51 – 75	53 and above

*The **legend**—specifically the assignment of low, medium, and high—provides an additional means to qualitatively assess the probability factor, sum of weighted factors, and the total risk scores for each hazard. The **Consequence Score** represents the sum of the Extent, Vulnerability, and Impact Factors. The **Total Risk Score** is a measure of Probability and Consequence.*

11. MITIGATION ACTIONS

This section includes the mitigation actions developed to address the risks and vulnerabilities to the hazards identified in this Plan. This Plan serves only to recommend mitigation measures based on the potential for risk reduction and available funding. Implementation of mitigation actions is dependent on risk reduction priorities, feasibility, and available funding. It is also dependent on the cooperation and support of the jurisdiction and/or department responsible for each action item. Additionally, all mitigation actions identified in the 2019 update or before were updated accordingly. Any new mitigation actions are listed as *New* (under Project Status).

The Village of Elbridge agreed on **nine (9)** mitigation actions that apply to the jurisdiction's properties for which it has jurisdictional responsibility and authority. One (1) mitigation action was completed. A summary of the Village's mitigation actions status is listed in **Table 23**.

Note: The mitigation actions outlined in this Plan are designed only to address those natural hazards that received a risk ranking of *medium* or *high* during the hazard risk assessment (**Table 22**). Hazards that ranked *low* (earthquakes, geological hazards, and wildfires) will not have specific mitigation actions detailed in this document.

Table 23. Village of Elbridge Mitigation Action Summary

Status	Mitigation Action Total
Continuous	4
In Progress/Not Yet Completed	1
No Progress/Unknown	0
New	4
TOTAL	**9**
Complete	1
Discontinued	0

Mitigation Actions per Hazard			
Drought	4	Harmful Algal Bloom	3
Earthquake	N/A	Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	3
Heat Wave/Extreme Heat	4	Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm, nor'easter)*	7
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	7	Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold)*	6
Geological Hazards *(landslides, land subsidence, mudboils)*	N/A	Wildfire *(wildfire smoke)*	N/A

A detailed explanation of the Mitigation Strategy can be found in Section 5 of **Volume 1**.

Mitigation Action	Where appropriate, support retrofitting or relocation of structures in high-hazard areas, prioritizing structures that have experienced repetitive losses.				
Action Number	VEL-1	**Goal(s) Addressed**	2, 3, 6	**Prioritization Score**	13/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Village of Elbridge Planning Board	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*	Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.		

Mitigation Action	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not limited to, the following, to promote and effect natural hazard risk reduction: • Provide and maintain links to the Onondaga County Hazard Mitigation Plan website, and regularly post notices on the municipal homepage referencing the Onondaga County Hazard Mitigation Plan webpages. • Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. • Use the Town's e-mail notification systems and newsletters to educate the public on flood insurance better, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. • Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.				
Action Number	VEL-2	**Goal(s) Addressed**	1, 2, 3, 4, 5, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Low				
Lead Agency / Organization	Village of Elbridge Planning Board	**Supporting Agency / Organization** *(If applicable)*	Onondaga County Department of Planning		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Actively support and participate in the implementation, monitoring, maintenance, and updating of this Hazard Mitigation Plan, as outlined and defined in Volume 1.				
Action Number	VEL-3	**Goal(s) Addressed**	1, 2, 3, 4, 5, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Village of Elbridge Planning Board	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP) through implementation and enforcement of floodplain management requirements that, at a minimum, meet the NFIP requirements. These include: • Enforce the flood damage prevention ordinance (e.g., regulating all new and substantially improved construction in Special Hazard Flood Areas). • Participate in floodplain identification and mapping updates. • Provide public assistance/outreach on floodplain requirements and impacts.				
Action Number	VEL-4	**Goal(s) Addressed**	1, 2, 3, 4, 5, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Flood, Severe Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	Village of Elbridge Code Enforcement	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Valley Drive Slope Stabilization: Conduct a feasibility study and risk assessment to determine the best solution to mitigate erosion on Valley Drive. The most effective stabilization technique(s) would need to be determined and designed based on the studies.				
Action Number	VEL-5	**Goal(s) Addressed**	1, 2	**Prioritization Score**	13/15
Year Added to Plan	2019	**Timeline** *(estimated)*	1 to 2 years	**Implementation Priority**	High
Hazard(s) Mitigated		Flood, Severe Weather, Winter Weather			
Project Status		In Progress/Not Yet Complete	If *Discontinued*, provide reason.	N/A	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization	Village of Elbridge Highway Department		**Supporting Agency / Organization** *(If applicable)*	N/A	
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	HMGP, USACE Flood Protection Program		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*	There is erosion on the east side of Valley Drive between house numbers 201 and 201 – approximately 150 feet section of erosion on the downslope. There are guardrails, and the very steep slope is approximately 60 feet or more to the bottom. The road is at risk of collapse, and during heavy rainfall and snow events, the slope is at greater risk of erosion, which would affect 30 residences. Additionally, Valley Drive is a dead end, and a collapse could affect residents' access to evacuation and emergency services.		

Mitigation Action	Temperature Controls and Emergency Power for American Red Cross Emergency Shelter: Upgrade the boiler and air conditioner with appropriately sized equipment to serve as an emergency shelter.				
Action Number	VEL-6	**Goal(s) Addressed**	1, 6	**Prioritization Score**	13/15
Year Added to Plan	2019	**Timeline** *(estimated)*	3 to 6 months	**Implementation Priority**	High
Hazard(s) Mitigated	Heat Wave/Extreme Heat, Winter Weather				
Project Status	Complete	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Village of Elbridge Planning Board, American Red Cross	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	HMGP		
Critical Facility *(Critical Facility located in 1% floodplain?)*	Yes	**Additional Details** *(optional)*	The boiler and Air Conditioner at the Emergency Shelter located in the Village of Elbridge Fire Department (Red Cross) need to be replaced/upgraded. In the event of extreme temperatures, citizens requiring emergency shelter may be at risk and require shelter. Additionally, redundant power must be established to maintain operations.		

Mitigation Action	Conduct a comprehensive study to assess the condition and capacity of the Village's entire drainage system to prevent flooding and infrastructure failure. The study should include, but not be limited to, a thorough assessment of all existing culverts (prioritizing areas with recurring drainage issues), evaluation of culvert capacity, and development of a prioritized replacement and repair plan.				
Action Number	VEL-7	**Goal(s) Addressed**	1, 3, 4, 6	**Prioritization Score**	13/15
Year Added to Plan	2025	**Timeline** *(estimated)*	1 to 2 years	**Implementation Priority**	High
Hazard(s) Mitigated	Flood, Severe Weather, Winter Weather				
Project Status	New	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	Village of Elbridge Public Works	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Medium	**Potential Funding Source**	HMGP, FMA		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Reduce the risk of flooding for residents on Dobbin Lane and Willow Crest by replacing/modifying the culvert at the end of Dobbin Lane and keeping the drainage swale clear to maintain consistent water flow toward the wetland.				
Action Number	VEL-8	**Goal(s) Addressed**	1, 3, 4, 6	**Prioritization Score**	13/15
Year Added to Plan	2025	**Timeline** *(estimated)*	1 to 2 years	**Implementation Priority**	High
Hazard(s) Mitigated		Flood, Severe Weather, Winter Weather			
Project Status		New	If *Discontinued*, provide reason.	N/A	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization	Village of Elbridge Public Works		**Supporting Agency / Organization** *(If applicable)*	N/A	
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	HMGP, FMA		
Critical Facility *(Critical Facility located in 1% floodplain?)*	Yes	**Additional Details** *(optional)*	The Village has a significantly large retention pond on the corner of Dobbin Lane and South Street. Hourigan Farms built this approximately 15 years ago (due to clear cutting hedgerows), and the runoff direction changed. For the most part, this has worked perfectly with a few exceptions over the years. The pond drains into a wetland in the Village, but if it gets too high, it also causes issues for residents in Dobbin Lane and Willow Crest. The level of the pond is controlled by an equalization pipe. There is also a drainage swale that runs westward behind Dobbin Lane and continues southward to the end of Dobbin Lane. This part of the swale has a buried culvert that has failed in the past.		

Mitigation Action	Implement a strategic, adaptive community-based resilience initiative to build long-term community resilience to drought. The initiative will utilize a multi-channel public outreach campaign to provide residents, businesses, and the agricultural community with practical knowledge and resources needed for drought mitigation strategies (e.g., water conservation, the use of drought-tolerant landscaping).				
Action Number	VEL-9	**Goal(s) Addressed**	2	**Prioritization Score**	15/15
Year Added to Plan	2025	**Timeline** *(estimated)*	2 to 4 years	**Implementation Priority**	High
Hazard(s) Mitigated	Drought				
Project Status	New	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Low				
Lead Agency / Organization	Village of Elbridge Planning Board	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Implement a strategic, adaptive community-based resilience initiative to build long-term community resilience against heat waves/extreme heat events. The initiative will utilize a multi-channel public outreach campaign to educate the public about public health illnesses associated with extreme heat, protective actions, and available resources to reduce risk and exposure during heat wave/extreme heat events. Outreach efforts will specifically target individuals who are particularly vulnerable during heat waves/extreme heat events, including, but not limited to, the elderly, young children, pregnant women, individuals with chronic illnesses, individuals without access to air conditioning, and outdoor workers (e.g., agricultural workers). Additionally, implementing climate adaptation measures, such as identifying community centers that can serve as cooling centers, will also be considered.				
Action Number	VEL-10	**Goal(s) Addressed**	2	**Prioritization Score**	15/15
Year Added to Plan	2025	**Timeline** *(estimated)*	2 to 4 years	**Implementation Priority**	High
Hazard(s) Mitigated	Heat Wave/Extreme Heat				
Project Status	New	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Low				
Lead Agency / Organization	Village of Elbridge Planning Board	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

APPENDIX A. HAZARD MAPS

These maps are based on the best available data at the time this Plan was prepared and are considered adequate for planning purposes. Maps have been generated only for hazards that can be distinctly represented using available mapping technologies and data, and for which the Village of Elbridge has significant vulnerability.

- **Figure 1** illustrates the jurisdiction's planning area boundary.
- **Figure 2** illustrates the critical facilities within the planning area.
- **Figure 3** illustrates the jurisdiction's Special Flood Hazard Area (SFHA), including the Flood Zones and the 500-year floodplain in the planning area. Flood Insurance Rate Maps (FIRMs) display flood zones, floodplain boundaries, and Base Flood Elevation (BFE), which are used for floodplain management, flood insurance ratings, and to determine flood insurance requirements. FIRMs show areas with a 1% chance of flooding each year, commonly known as the 100-year floodplains, and are illustrated as the SFHA (Flood Zones A, AE, and AO on the map). The 500-year floodplains show areas with a 0.2% chance of flooding each year.

Figure 1. Village of Elbridge Planning Area

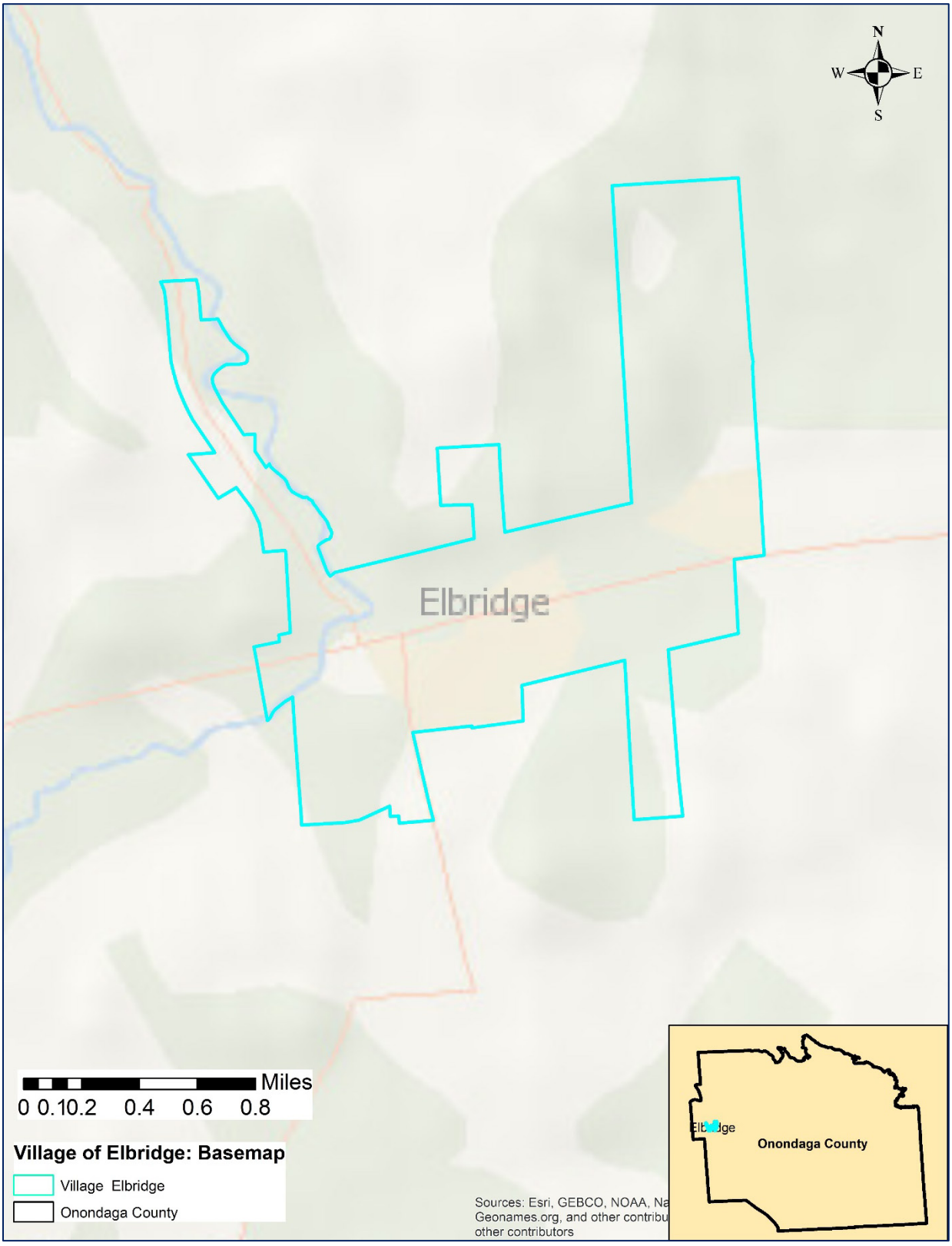


Figure 2. Critical Facilities

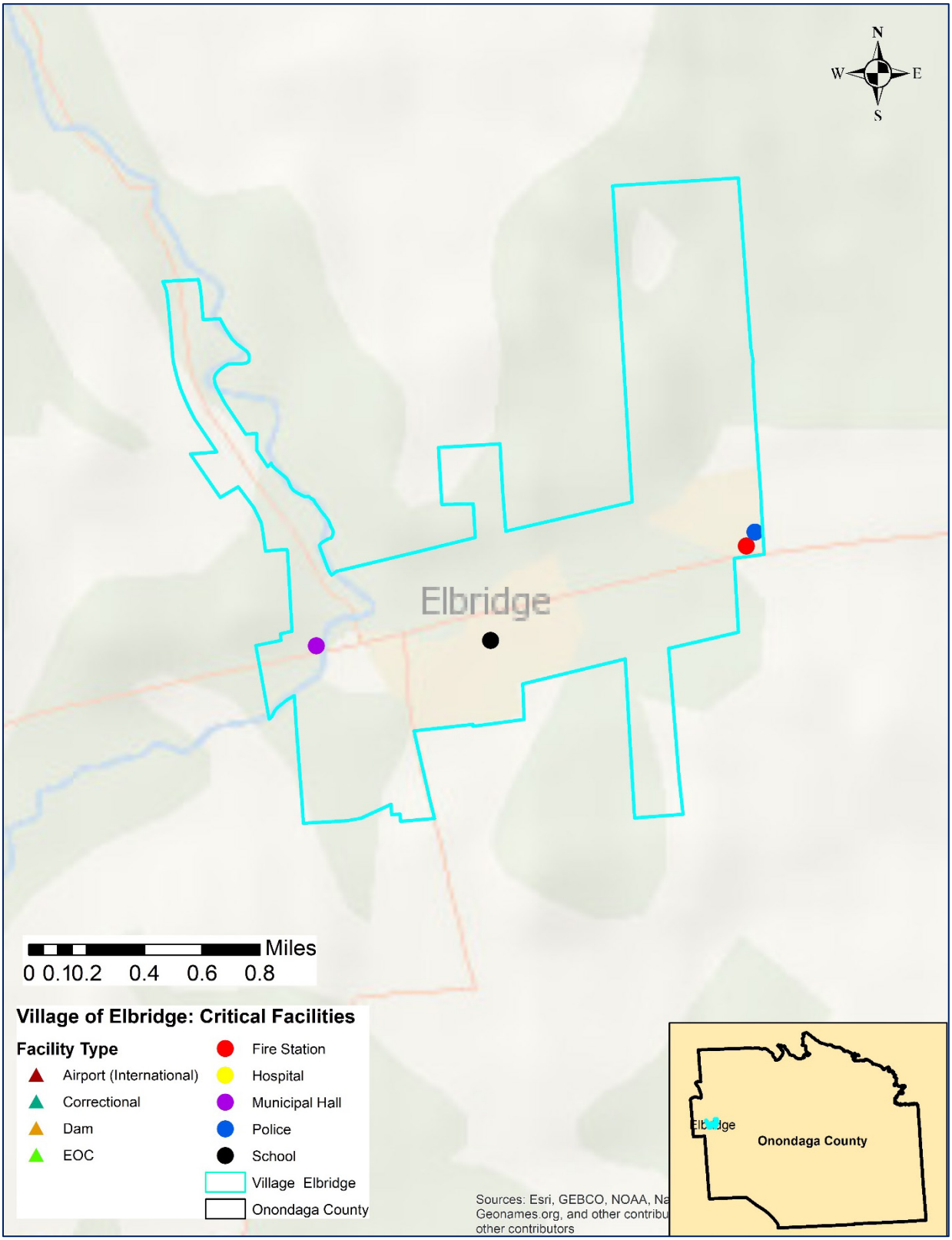
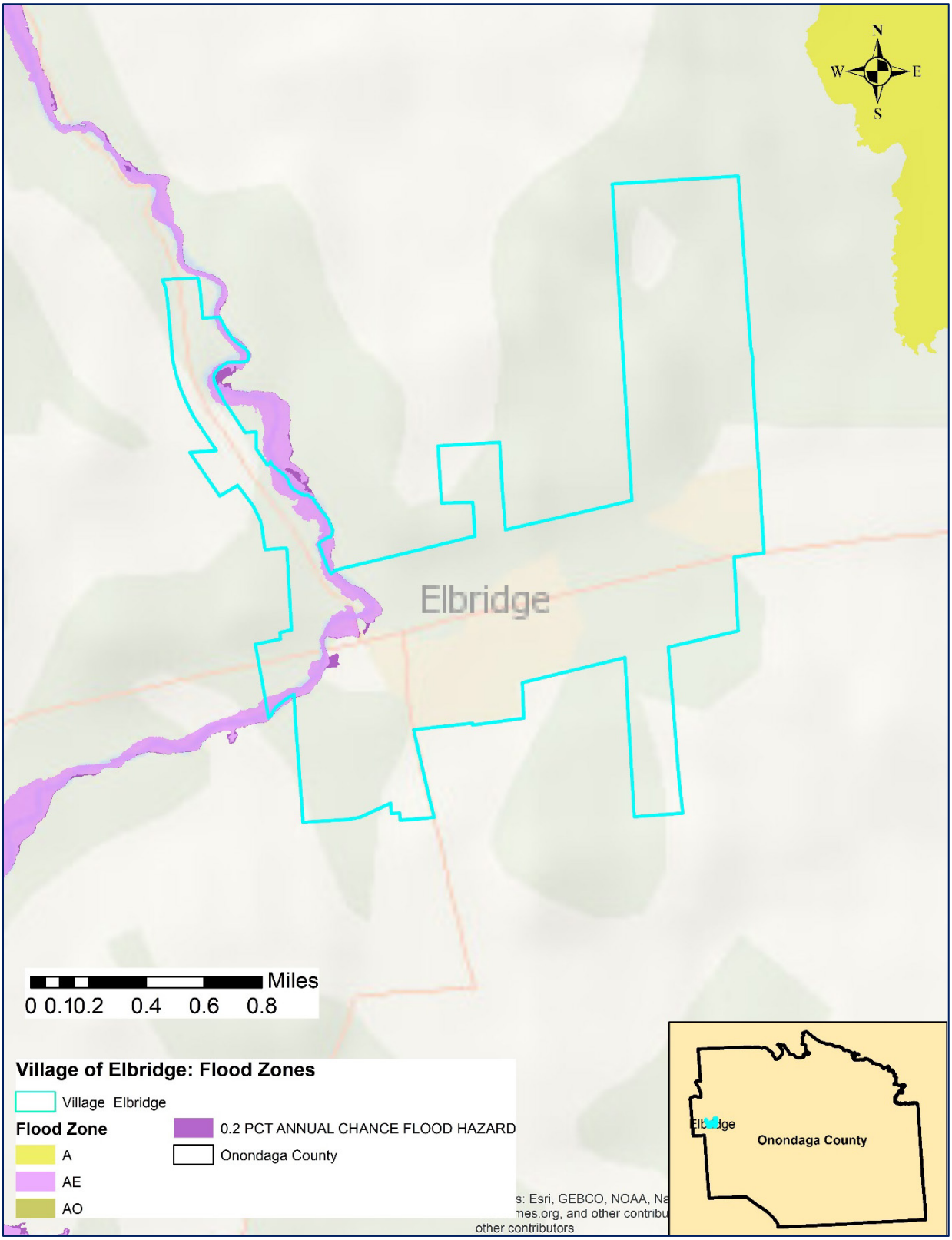


Figure 3. Special Flood Hazard Area



APPENDIX B. LETTER OF INTENT

Statement of Intent to Participate in the
2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of this letter is to establish commitment from, and a cooperative working relationship between, all participating jurisdictions in the development and implementation of the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan (HMP). In addition, the intent of this form is to ensure that the Plan update is developed in accordance with Title 44 of the Federal Code of Regulations Part 201.6; that the planning process is conducted in an open manner involving community stakeholders; that it is consistent with each participating jurisdiction's policies, programs, and authorities; and that it is an accurate reflection of the community's values.

To meet this requirement and to help reduce the loss of life and damage to property in the event of a natural disaster, our municipality intends to participate in a federally funded grant initiative to update the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan.

We understand that the planning process will include a limited number of meetings and/or calls between Planning Team representatives and representatives from participating municipalities and agencies. The subject of the meeting(s) will be to:

- Inform participants on the needs and methods for identifying and prioritizing hazards;
- Share information on hazards affecting local jurisdictions;
- Provide information related to local assets, plans/ordinances, hazard events and damages, new development, etc. within the jurisdiction; and
- Determine possible projects to reduce the impact of future incidents involving hazards which are prerequisites to municipalities later applying for hazard mitigation grant funds.

We recognize the importance of having an updated multi-jurisdictional hazard mitigation plan to help safeguard the lives and property of our citizens and commit to participating in this process with Onondaga County.

Name of Jurisdiction: VILLAGE OF ELBRIDGE

Name of Authorized Representative: CHRISTOPHER A. DECOLA

Signature of Authorized Representative: Christopher A. DeCola

Primary Point-of-Contact (POC):

Name: CHRISTOPHER A. DECOLA
Title: MAYOR
Department:
Phone Number: 315-689-3404
Email: MAYOR@VILLAGEOFELBRIDGE.COM

Secondary Point-of-Contact (POC):

Name: TAMMY KUNZ
Title: CLERK
Department:
Phone Number: 315-689-3404
Email: CLERK@VILLAGEOFELBRIDGE.COM

Please return this form to jefferyharrop@ongov.net, or mail to the Onondaga County Dept. of Planning, 335 Montgomery St, Syracuse, NY 13202. Questions, call Jeff at (315)435-2673.

APPENDIX C. PLAN ADOPTION

[Placeholder for adoption documentation after State and FEMA Approval]