Sullivan County, New York

Hazard Mitigation Plan

Volume II—Annexes



October 2026

TETRA TECH

Sullivan County Hazard Mitigation Plan

October 2026
#105S052522

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1. INTRODUCTION

1.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for local hazard mitigation. Such planning efforts can generate a unified local voice on hazard mitigation, with cross-jurisdictional support for a hazard mitigation plan's recommended mitigation actions. They also help to form working relationships among participants' emergency managers, floodplain administrations, and other development agencies (FEMA 2021). Eligible participants for multi-jurisdiction hazard mitigation plans are local governments defined as follows in Title 44 of the Code of Federal Regulations, Part 201 (Mitigation Planning):

> "Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity." (44 CFR Section 201.2)

In multi-jurisdictional hazard mitigation planning, every participating jurisdiction must meet the federal requirements for local mitigation planning. This means that each jurisdiction must actively participate in the planning process and must officially adopt the plan (44 CFR Section 201.6a(4)).

For the Sullivan County Hazard Mitigation Plan (HMP), a Planning Partnership was formed to leverage resources and to meet the federal local mitigation planning requirements for as many eligible governments in the County as possible. Members of the Planning Partnership consisted of representatives from each participating jurisdiction. Sullivan County was the lead agency for this planning effort and directed the planning process with assistance from a contract planning consultant (Tetra Tech). A Steering Committee with broad representation across the county provided guidance and direction for the HMP planning process. Each participating planning partner has prepared a jurisdictional annex to this plan.

This chapter describes the Sullivan County HMP Planning Partnership, its responsibilities throughout the planning process, and the jurisdictional annexes developed as a result of the plan update efforts. The remaining chapters in this volume of the HMP present the annexes for each participating jurisdiction.

1.2 PLANNING PARTNER INVOLVEMENT

1.2.1 Initial Solicitation

Sullivan County solicited the participation of all eligible jurisdictions in the County at the commencement of this project. The following is a list of the jurisdictions that participated in the update process and have met the minimum requirements of participation as established by the County and the Steering Committee:

- Sullivan County
- Village of Ateres
- Town of Bethel
- Village of Bloomingburg
- Town of Callicoon
- Town of Cochecton
- Town of Delaware
- Town of Fallsburg
- Town of Forestburgh
- Town of Fremont
- Town of Highland
- Village of Jeffersonville
- Town of Liberty
- Village of Liberty
- Town of Lumberland
- Town of Mamakating
- Village of Monticello
- Town of Neversink
- Town of Rockland
- Town of Thompson
- Town of Tusten
- Village of Woodridge
- Village of Wurtsboro

1.2.2 Planning Partner Expectations

The following list of planning partner expectations was agreed to in each letter of intent to participate:

The **Planning Partnership** is responsible for developing and reviewing draft sections of the hazard mitigation plan, creating the mitigation strategy for their jurisdiction, and adopting the final plan. Members of the Planning Partnership have the expertise to develop the plan and have their jurisdiction's authority to implement the mitigation strategy developed during the planning process.

- Identify jurisdictional representatives to serve as the planning points of contacts. These people were responsible for representing the community and assuring that these participation expectations are met by their community.
- Support the Steering Committee selected to oversee the development of this plan.
- Provide representation at jurisdictional Planning Committee meetings
- Provide data and information about the community as requested by the Steering Committee or the contract consultant, including:
  - Structure and facility inventory data
  - New development and anticipated development
  - Natural hazard risk areas
  - Natural hazard events and losses that have impacted the community in the last five years
  - Plans, studies, reports, and ordinances addressing natural hazard risk
  - Mitigation activity in the community in the last five years, including progress on previously identified mitigation actions.
- Support public outreach efforts in the community, which may include:
  - Providing notices of the planning project on the jurisdictional website with links to a County project website
  - Providing notice of the planning project, the availability of plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in the area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in the community.

- Assist with the identification of stakeholders within the community who should be informed and potentially involved with the planning process.
- Complete data and information collection survey forms in a timely manner.
- Identify specific mitigation actions to address each of the natural hazards posing significant (or high or medium) risk to the community.
- Involve the local NFIP Floodplain Administrator in the planning process.
- Review draft plan sections when requested and provide comment and input as appropriate.
- Adopt the plan by resolution of the local governing body after FEMA conditional approval.
- Periodically provide the Steering Committee with reports of jurisdictional staff and volunteer labor spent on the planning process.

Under the plan implementation and maintenance protocol established in Volume I of the HMP, it is intended that the Planning Partnership will remain active to support maintenance of the HMP after the plan has been adopted. By adopting this plan, each planning partner agrees to the plan implementation and maintenance protocol. Given that individual commitments change over time, it will be the responsibility of each jurisdiction and its points of contact to inform the County's coordinator for this HMP of any changes in representation.

1.3 JURISDICTIONAL ANNEX PREPARATION PROCESS

Jurisdictional annexes provide a unique, stand-alone guide to mitigation planning for each jurisdiction participating in a multi-jurisdiction HMP. The Sullivan County HMP is organized so that there is an annex for Sullivan County and for every jurisdiction within the County's borders. This volume of the HMP includes an annex for each jurisdiction in Sullivan County, including those that did not fully participate.

Workshops and additional meetings (in person, by email, or by teleconference) to complete the jurisdictional annexes were held with the County, the contract consultant, and the Steering Committee throughout the planning process. Details regarding these meetings are described further in Volume I.

1.3.1 Incorporation of Information from Previous HMP

In order to facilitate the update of the jurisdictional annexes, data from the 2021 Sullivan County HMP annexes was transferred to the most current annex format, which has evolved to meet changing federal and state criteria. Clear instructions were provided to the representatives of each planning partner. This transfer of information provided a basis to address the following:

- Changes in local capabilities and vulnerabilities
- The current status of the 2021 HMP mitigation strategy
- A new mitigation strategy to address identified issues and to increase community resiliency

1.3.2 Kickoff Meeting

The County invited all jurisdictions to participate in a planning partner kickoff meeting held on November 13, 2025, to provide an overview of the planning process, including meetings and worksheets that would be used to gather information for annex preparation. Key elements of the worksheets were discussed and subsequently completed by the appropriate jurisdictional personnel for each worksheet. The worksheets were collected, and the information

was incorporated into each jurisdictional annex. In the event additional information was needed, the jurisdictional point of contact was contacted to provide more input into their annex.

1.3.3 Hazard Ranking Exercise

At the in-person jurisdictional annex meetings on February 18-19, 2026, the consultant summarized the findings of the risk assessment for the hazards of concern evaluated in this HMP, including an initial ranking of hazards using the risk-related ranking methodology described in Volume I. Each planning partner was asked to review the hazard ranking for its jurisdiction and revise as appropriate based on history of events, probability of occurrence, and the potential impact on people, property, and the economy. This exercise familiarized the planning partners with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as “high” for each jurisdiction as a result of this exercise were considered to be priorities for identifying appropriate mitigation actions, although jurisdictions also identified actions to mitigate “medium” or “low” ranked hazards as appropriate.

1.3.4 Mitigation Strategy Workshop

At the in-person jurisdictional annex meetings on February 18-19, 2026, an overview was provided on how to develop a strong mitigation strategy. In preparation for the jurisdictional annex meetings, the consultant provided a list of problem areas and vulnerabilities identified during the planning process, along with feedback from the public survey, to support the development of relevant projects for the mitigation strategy. Participants received the following FEMA publications to use as a resource as part of a 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 meetings included the development of focused problem statements based on the impacts of natural hazards in the County and its communities. These problem statements provide detailed descriptions of problem areas, including known impacts on the jurisdiction (past damage, loss of service, etc.). Where possible, the statements include the street address of the problem location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing site conditions (topography, terrain, hydrology). The problem statements form a bridge between the risk assessment (which quantifies impacts on each community), the capability assessment (which identifies capabilities for reducing hazard risks and supporting hazard mitigation), and the development of actionable mitigation strategies.

The County and the mitigation consultant worked with each jurisdiction to identify clear, implementable mitigation actions and to further support the completion of the jurisdictional annexes. The Action Worksheet template and instructions are provided in Appendix E.

1.4 JURISDICTIONAL ANNEX FORMAT

The jurisdictional annex format is designed to document local compliance with the 44 CFR local mitigation planning regulations. It also achieves the following:

- Providing a locally relevant synthesis of the overall mitigation plan that can be readily presented, distributed, and maintained

- Facilitating local understanding of the community's risk from natural hazards
- Facilitating local understanding of the community's capabilities to manage natural hazard risk, including opportunities to improve those capabilities
- Facilitating local understanding of the efforts the community has taken, and plans to take, to reduce its natural hazard risk
- Facilitating the implementation of mitigation strategies, including the development of grant applications
- Providing a framework by which the community can continue to capture relevant data and information for future plan updates

The following are the elements of the jurisdictional annex.

- **Section X.1: Hazard Mitigation Planning Team:** Identifies the hazard mitigation planning primary and alternate contacts and floodplain administrator. Provides details on which departments were involved in the development of the jurisdictional annex. The widest range of departments, stakeholders, and persons familiar with the jurisdiction should be involved in the development of the jurisdictional annexes. Further detail on participants is provided in Volume I.
- **Section X.2: Community Profile:** Provides a profile of the jurisdiction, including population and socially vulnerably populations.
- **Section X.3: Jurisdictional Risk Assessment:** Provides information regarding each jurisdiction's vulnerability to the identified hazards. Full data and information on the hazards of concern, the methodology used to develop the vulnerability assessments, and the results of those assessments that serve as the basis of these local hazard rankings may be found in Volume I.
- **Section X.4: Growth/Development Trends:** Summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.
- **Section X.5: National Flood Insurance Program (NFIP) Compliance:** Summarizes jurisdiction-specific information related to managing and regulating the regulatory floodplain, including current and future compliance with the NFIP.
- **Section X.6: Jurisdictional Capability Assessment and Integration:** Provides an inventory and evaluation of the jurisdiction's tools, mechanisms, and resources available to support hazard mitigation and natural hazard risk reduction. Tables provide an inventory of the jurisdiction's planning, regulatory, administrative, technical, and fiscal capabilities, its level of participation in state and federal programs designed to promote and incentivize local risk reduction efforts, and its adaptive capacity to adjust to damage and respond to consequences.
- **Section X.7: Mitigation Strategy and Prioritization:** Discusses and provides the status of past mitigation actions and status and describes proposed hazard mitigation actions and prioritization.

Each jurisdiction's annex is a living document that will continue to be improved as resources permit. Continued efforts to maintain the annex will ensure that it remains current and will improve its effectiveness as the key tool, reference, and guiding document by which the jurisdiction will implement hazard mitigation locally.

1.5 COVERAGE UNDER THE PLAN

All planning partners fully met the participation requirements specified by the Steering Committee and have annexes included in this volume. Those that did not meet the requirements will not be able to seek FEMA or state approval at the time of plan submittal, nor will they be eligible to obtain FEMA grant funding. Table 1-1 lists the status of each

jurisdiction. Note that participation in scheduled Planning Partnership meetings provides only a partial indication of the level of participation of each jurisdiction. Appendices in Volume III provide details on further participation and meeting attendance.

Table 1-1. Jurisdictional Status

	Attended Workshops, Meetings, and Calls	Provided Update on Past Projects	Submitted Mitigation Actions for Current Plan	Seeking Approval for Adoption (meets all previous requirements)
Sullivan County	X	X	X	X
Village of Ateres	X	X	X	X
Town of Bethel	X	X	X	X
Village of Bloomingburg	X	X	X	X
Town of Callicoon	X	X	X	X
Town of Cochecton	X	X	X	X
Town of Delaware	X	X	X	X
Town of Fallsburg	X	X	X	X
Town of Forestburgh	X	X	X	X
Town of Fremont	X	X	X	X
Town of Highland	X	X	X	X
Village of Jeffersonville	X	X	X	X
Town of Liberty	X	X	X	X
Village of Liberty	X	X	X	X
Town of Lumberland	X	X	X	X
Town of Mamakating	X	X	X	X
Village of Monticello	X	X	X	X
Town of Neversink	X	X	X	X
Town of Rockland	X	X	X	X
Town of Thompson	X	X	X	X
Town of Tusten	X	X	X	X
Village of Woodridge	X	X	X	X
Village of Wurtsboro	X	X	X	X

2. COUNTY OF SULLIVAN

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the County of Sullivan 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 Sullivan, describes who participated in the planning process, assesses Sullivan's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

2.1 HAZARD MITIGATION PLANNING TEAM

The County of Sullivan identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many County departments.

Table 2-1 summarizes the County officials who participated in the development of the annex. Additional documentation of the County's planning activities through Planning Partnership meetings is included in Volume I.

Table 2-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Heather Brown, Division of Planning, Community Development and Environmental Management Commissioner Address: 100 North Street, Monticello, NY 12701 Phone Number: (845) 807-0527 Email: Heather.Brown@sullivanny.gov	Name/Title: Justin Rocque, Division of Planning, Community Development and Environmental Management Planner Address: 100 North Street, Monticello, NY 12701 Phone Number: (845) 807-0532 Email: Justin.Rocque@sullivanny.gov
National Flood Insurance Program Floodplain Administrator	
NFIP activities are conducted at the local level of government.	
Additional Contributors	
Name/Title: Edward McAndrew, Commissioner of Public Works Method of Participation: Provided pertinent information to assist with the development of the County annex.	
Name/Title: Scott Schulte, Commissioner of Public Safety Method of Participation: Provided pertinent information to assist with the development of the County annex.	
Name/Title: Ryan Fridlich, Detective, Sheriff's Office Method of Participation: Provided pertinent information to assist with the development of the County annex.	
Name/Title: Dermot Dowd, Engineer Method of Participation: Provided pertinent information to assist with the development of the County annex.	
Name/Title: Roman Dicio, Engineer Method of Participation: Provided pertinent information to assist with the development of the County annex.	

2.2 COMMUNITY PROFILE

2.2.1 Community Classifications

Table 2-2 summarizes classifications for community programs available to Sullivan.

Table 2-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	Yes	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	Yes	Bronze	February 10, 2010
NYSERDA Clean Energy Community	Yes	Designated	October 11, 2022
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

2.2.2 Community Profile

Please see the County Profile for more information on the County.

Table 2-3 through Table 2-6 note land area, population, and building stock information for the County of Sullivan.

Table 2-3. Total Land Area in the County of Sullivan

Jurisdiction	Total Land Area	
	Acres	Square Miles
Sullivan County	607,658.9	949.5

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 2-4. Population Estimates in the County of Sullivan

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
78,624	100.0%	79,147	100.0%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 2-5. At Risk Populations in the County of Sullivan

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
15,058	19.0%	4,656	5.9%	3,268	4.1%	12,459	15.7%	11,547	14.6%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 2-6. General Building Stock in the County of Sullivan

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
51,804	$47,794,705,561	46,026	$29,611,943,658	3,881	$9,999,108,405	411	$2,470,611,883	1,486	$5,713,041,615

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

2.3 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 Sullivan's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

2.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Sullivan are shown in Volume 1. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Sullivan has significant exposure.

2.3.2 Previous Event History

The history of natural and non-natural hazard events in Sullivan is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 2-7 and Table 2-8 provide details on the loss and damage in Sullivan during hazard events since the last hazard mitigation plan update.

Table 2-7. Presidential Disaster Declarations History in Sullivan

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Sullivan
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The County abided by masking mandates, work from home orders and social distancing. Many departments worked with half-staff shifts.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The damage reported was at the municipal level.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The damage reported was at the municipal level.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 2-8. Hazard Event History in Sullivan

Event Date	Estimated Property Damages	Summary of Event
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet tall. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

2.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery.

Table 2-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
This is reported in the applicable municipal annexes and the appendices.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

2.3.4 Local Hazard Impacts Assessment

Representatives from the County of Sullivan Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 2-10.

Table 2-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Toasperns Pond Dam is a high hazard dam owned by Sullivan County, and the dam was fully rebuilt in 2025. American Rivers is working with property owners to remove the Lake Jefferson Dam and restore floodplain. They are currently in the engineering phase. Swan Lake Dam has considerable work that needs to be done on the dam and the County/State was asked if they wanted to take it over. The State said they would take ownership and remove the dam. Swinging Bridge and the Toronto Dam had major repairs done. Smaller dams have failed and they do some minor damage downstream. There are not many issues with Beaver Dams impacting County owned infrastructure and roadways.
Drought	The Town of Fallsburg has a lack of water issue and an overuse of water they do have. The Town of Fallsburg did run out of water in 2025. The County also reported crop loss issues throughout the County in relation to drought events and 2024 was a dry fall which increased the wildfire risk, Peekamoose recently had a wildfire that occurred. Cornell Cooperative Extension also has an information meeting about farmers clearing debris to mitigate risk to fire events.
Earthquake	Very minor shaking, no known impacts
Flood	There are smaller streams and intersections that tend to flood including the Hamlet of Livingston Manor, the Hamlet of Roscoe, and Callicoon Creek, located in the Town of Callicoon. The Neversink River has moved up and impacted areas of Fallsburg, but it tends to not frequently flood. Flooding also tends to be rather localized along the Shawangunk, West Brookville, Pinekill, and Mamakating.
Landslide	Steep slopes lead to washouts along roadways and are typically along locally owned roads.
Pandemic	The County incurred impacts on the older adults and retirement homes. The Hospital does have a backup generator.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Severe Storm	The County can bring in generators if power outages are extensive. Countywide power outages can last days. There was an event in 2017/2018 where the County had three back-to-back blizzards which took out the grid completely with strong winds. This same year, there was a microburst which hit the same areas that were hit by the blizzard. NYSEG speed of restoring power has improved. The northwest part of the County tends to be tornado prone, and every storm recently tends to come with a Tornado watch or warning. Hail has impacted agriculture and resulted in many damaged crops, but damages tend to be very localized.
Severe Winter Storm	The DPW is efficient at clearing roadways and performs routine clearing after the storms. The County plows about half of their roads and has agreements in place with some municipalities. The pretreatment and salting is performed routinely. During the 2025/2026 winter season, salt was slow at coming in, but the County did not run out of salt and was able to give salt to the jurisdictions. County is looking into upsizing two of the four of their salt sheds in the near future, and increasing the size of general DPW facility is important too.
Wildfire	The Peekamoose Mountain fire in 2024 occurred rough terrain and burned about 500 acres and only a few accessory structures were impacted. The County went 62 days without precipitation which is when this fire broke out. The County has some concerns with tourists and fire related issues, and the Visitors Association posted fire safety to try and educate tourists.

2.3.5 Vulnerable Community Assets

Representatives from the County of Sullivan Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 2-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 2-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	There is significant pressure for farmland to be converted into development. Towns of Liberty, Fallsburg, and Callicoon are feeling pressure to convert farmland. There is also a big push for smaller farms to purchase tunnels and irrigation systems for a more controlled environment for crop production due to increasing issues with drought and extreme temperature concerns, but funding is an issue. Trainings have been held relating to local zoning ordinances and Cornell held an educational workshop with farmers regarding solar lease information.	**Area: Concentration of Local Businesses, Major Employers**	The Center for Discovery is the largest employer in the County and they deal with at risk populations. A new children's hospital opened in Rock Hill, which also operates as emergency sheltering.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Area: Concentration of Residences	Fox Croft is a mobile home park that is located in the Town of Fallsburg. They are below the Neversink Dam and have been flooded several times. The "Island" in Jeffersonville has also flooded many times. The Town of Rockland is very flood prone. Where the Callicoon Creek meets Delaware River tends to contribute to residential flooding.	**Local Roads, Highways, Culverts, Bridges**	The Kohlertown Road (County Road 164) needs culvert upsizing towards the end of the road. State Route 52, in Kohlertown, lies low in the floodplain.
Municipal Buildings	The County Government Center does not have a backup generator. The County has warming centers in Liberty and Monticello. People tend to go to local libraries to seek temporary sheltering.	**Medical Centers (non-hospital)**	No known impacts
College/University	No known impacts	**Place of Worship**	The United Methodist Church in Liberty is where the County warming center is.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	The Callicoon Creek Park, where the Callicoon Creek meets the Delaware River is flood prone, but no infrastructure impacted.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	No known impacts
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	The County has three nursing homes, and all have backup power.	**Utilities**	The current grid infrastructure is weak and outdated, leading to communication vulnerabilities. The government building has power outages consistently in the summer.
Fire/Police Stations	Fire Services are almost all on a volunteer basis.	**Wastewater Treatment Plants**	Callicoon's Wastewater Treatment Plant is located in a floodplain. Watermain breaks are a concern during extreme temperature events.
Gas Stations, Grocery Stores, Supermarkets	The Kohlertown Dollar General experiences flooding.	**Water: Drinking Water Resources**	No known impacts
Hospitals	No known impacts	**Other**	No known impacts

2.3.6 Dams

Table 2-12 includes all dams in the County of Sullivan. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 2-12. Dams Located in Sullivan

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
See the Dam Failure Profile for the complete list of dams located in the County.						

Notable comments regarding dams in the jurisdiction:

The Toasperns Pond Dam is a high hazard dam owned by Sullivan County, and the dam was fully rebuilt in 2025. American Rivers is working with property owners to remove the Lake Jefferson Dam and restore floodplain. They are currently in the engineering phase. Swan Lake Dam has considerable work that needs to be done on the dam and the County/State was asked if they wanted to take it over. The State said they would take ownership and remove the dam.

2.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 2-13 identifies the preliminary hazard ranking for Sullivan, whether the County agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 2-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

2.4 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 2-14 through Table 2-17.

2.4.1 Development and Permitting

Table 2-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Performed at the local level. Refer to Volume II, Chapters 3-24.
What is your process for tracking building permits?	
Are permits tracked by hazard area? (For example, floodplain development permits.)	

Topic	Comment
Does your community have a buildable land inventory? If yes, please describe.	

Table 2-15. 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
2020	Performed at the local level. Refer to Volume II, Chapters 3-24.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 2-16. Recent Major Development and Infrastructure from 2020 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
Airport Terminal	Transportation	-	-	-	Fully built
New Jail facility	Government	-	-	-	Fully built. Has backup generator

Table 2-17. 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
Courthouse Annex	Government	-	-	-	Mandated from State and in discussion
Road upgrades	Transportation	-	104, 103, 102, 107	-	-

2.5 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 Table 2-1 is responsible for maintaining this information.

2.5.1 NFIP Statistics

Table 2-18 summarizes the NFIP policy and claim statistics for the County of Sullivan.

Table 2-18. Sullivan NFIP Summary of Policy and Claim Statistics

# Policies	362
# Claims (Losses)	464
Total Loss Payments	$8,926,733.01
# Repetitive Loss Properties	155
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

2.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The National Flood Insurance Program is administered at the local level.

2.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Sullivan 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 Sullivan to identify opportunities for integrating mitigation concepts into ongoing County procedures.

2.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 2-19 and Table 2-20 detail the available planning and regulatory capabilities of the County.

Regulatory Capabilities

Table 2-19. Regulatory Capabilities in Sullivan

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	Municipalities handle their own development	NYS State	Local and County
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	No	-	-	-
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	Yes	Only two miles in Mamakating. The purpose of an MS4 report is to document the efforts of municipalities, counties, and other public entities to reduce stormwater pollution. Key components of the MS4 report include the Stormwater Management Plan (SWMP) Implementation, Public Education & Outreach, Public Involvement & Participation, Illicit Discharge Detection & Elimination (IDDE), Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management, and Good Housekeeping & Pollution Prevention	MS4 Annual Report	Public Works
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	No	-	-	-
Stormwater Management Code	No	-	-	-
Subdivision Code	No	-	-	-
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	No	-	-	-

Planning Capabilities

Table 2-20. Planning Capabilities in Sullivan

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	Due for an updated	Agriculture and Farmland Protection Plan, 2015	Cornell Cooperative Extension of Sullivan County
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	Yes	As part of its climate action plan, Sullivan County set a goal to reduce greenhouse gas emissions from government operations by 50 percent by 2020 from 2011 levels. Sullivan County has been moving toward this goal by switching to solar energy to power county facilities. The county owns two solar electric arrays, a 15-kilowatt solar array in Bethel and a 50-kilowatt solar array in Liberty.	Sullivan County Climate Action Plan, 2014 Updated in 2022 with an annex	Climate Action Planning Advisory Board

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Comprehensive Plan	Yes		Sullivan County 2005-2020Comprehensive Plan, currently updating	County Administration
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Updated yearly with budget	Capital Improvement Plan	County Administration
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Sullivan County Comprehensive Emergency Management Plan	Office of Emergency Management/Homeland Security
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens in the event of an emergency of disaster.	Sullivan County Emergency Operations Plan	Division of Emergency Services
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Local Waterfront Revitalization Plan	Yes	There has been a lot of work in the Upper Delaware aimed at increasing visitation and enjoyment of the natural resources. A principal objective of this Plan is to build on the energy vision as expressed through existing plans and documents, and as expressed by residents during public outreach meetings and charrette, and to tie them together. The Plan serves as a vehicle to coalesce the ongoing efforts and visions into a regional connected effort. The Plan highlights concepts and ideas and set forth a means of achieving the vision. Residents, businesses, everyone should use this plan as a resource for ideas, partners and ongoing efforts.	Upper Delaware River: Making the Connections, 2015	Sullivan County Planning
Open Space Plan	Yes	The Plan is a comprehensive resource for the protection and enhancement of our many open space resources.	Conserving Open Space and Managing Growth, 2008, will be updated as part of comprehensive plan process	Division of Planning and Environmental Management
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A Community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	Yes	Embedded into MS4 reporting.	Stormwater Management Program	County Soil and Water

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	Yes	Transportation needs were identified through several approaches and documented in the Coordinated Transportation Services Plan.	Sullivan County Coordinated Transportation Services Plan, 2025	County Administration
Watershed Management or Protection Plan	Yes	The Neversink Water Management Plan is a non-regulatory guidance document that lays out a holistic multi-jurisdictional planning approach necessary to ensure the sound future management and conservation of the Neversink watershed. This plan acts as a tool for stakeholders to develop and work towards a shared vision and common goals that will benefit the future of the watershed.	Neversink Water Management Plan, 2024	Division of Planning, Community Development and Environmental Management
Other	Yes	Assessment of all water and wastewater treatment facility to be completed at the end of 2026. Groundwater Study to be completed in 2027	Water and Wastewater Treatment Facility Assessments Groundwater Study	Department of Public Works Soil and Water Conservation District

2.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 2-21 details the available administrative and technical capabilities of the County.

Table 2-21. Administrative and Technical Capabilities

Capability Type	In Place in Municipality	Comments
Civil Engineer	Yes	Highway and Bridge's Department and the County Buildings Department
Construction/Building/Code Enforcement Department	Yes	County Building Department
Economic Development Commission/Committee	Yes	Emerald Corporate Center Economic Development Corp
Emergency Management/Public Safety Department	Yes	Sullivan County Division of Emergency Services

Capability Type	In Place in Municipality	Comments
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Office of Grants Administration and Division of Planning
Maintenance Programs to Reduce Risk	Yes	Highway, Soil and Water, and Planning
Mitigation Planning Committee	Yes	Sullivan County Hazard Mitigation Planning Committee
Mutual Aid Agreements	Yes	Sullivan County Emergency Services and Division of Planning
Open Space Board/Committee	No	-
Parks and Recreation	Yes	Sullivan County through its Parks and Recreation Department operates and maintains Lake Superior State Park, The Delaware &Hudson Canal Linear Park and Interpretive Center, Stone Arch Bridge Historical Park, Minisink Battleground Park, Livingston Manor Covered Bridge Park, and the Sullivan County Cultural Center (Museum) for its residents and visitors. Fort Delaware Museum of Colonial History is owned by the County but operated by The Delaware Company, which also handles programming at the Minisink Battleground Park.
Personnel skilled or trained in website development	Yes	IT Department
Planning Board	No	-
Planning Department	Yes	The Sullivan County Division of Planning, Community Development and Environmental Management is responsible for the creation of programs that foster orderly development and redevelopment of the County's physical infrastructure in a manner that conserves natural resources while providing economic opportunity for area residents.
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Sullivan County ITS, GIS Program staff
Planner or Engineer with knowledge of land development and land management practices	Yes	Planners and DPW
Planners or engineers with an understanding of natural hazards	Yes	Planners and DPW
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building Department and DPW
Professionals trained in conducting damage assessments	Yes	Building Department and DPW
Public Health	Yes	The mission of the local County Health Department - Sullivan County Public Health, is to prevent illness and disease, and to protect and promote public health.

Capability Type	In Place in Municipality	Comments
Public Works/Highway Department	Yes	The Sullivan County Division of Public Works and Solid Waste provides a wide range of essential services to county residents and visitors. More than 200 dedicated staff in the division's fifteen (15) departments work designing, maintaining and repairing roads and bridges, plowing snow, operating and maintaining county buildings and parks as well as fueling, maintaining and repairing the County's vehicle fleet. The division also operates the Sullivan County Sanitary Landfill, transfer stations, recycling program and sponsors County cleanup initiatives. The Division maintains and operates the Sullivan County International Airport and provides Weights and Measures services to insure sale quantity accuracy within the County.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	-
Surveyor(s)	Yes	-
Sustainability Office	Yes	The Sullivan County Office of Sustainable Energy (OSE) works to develop cost effective projects, policies and practices that make County operations and our surrounding community more sustainable, resilient, healthy, energy efficient and environmentally responsible. The OSE works to achieve these goals in County operations and throughout the community by providing research, analysis, strategies, informational outreach and project support on a range of issues relating to sustainability, and by working in close coordination with numerous County departments, local and state agencies and community organizations to maximize the resources available to the County and its residents.
Zoning Board of Appeals	No	-
Other	No	-

2.6.3 Fiscal Capability

Table 2-22 summarizes financial resources available to Sullivan.

Table 2-22. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
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	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, part of 2026 budget
Incur debt through special tax bonds	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes, FAA funding at times and National Fish and Wildlife
FEMA funding programs	No
Other State funding programs	Yes, BridgeNY, CulvertNY and CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

2.6.4 Education and Outreach Capability

Table 2-23 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 2-23. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, County does a monthly letter
Hazard awareness campaigns, such as school and community programs and events	Yes, MS4 information shared with recycling coordinator and Planning Department does municipal training on zoning, wastewater, transportation, etc. Whatever the interest is, the County will develop materials to address.
Hazard mitigation information available on your website	Yes, link to MitigateNY
Local News	Yes
Natural disaster/safety programs in place for schools	Yes, Fire Drills
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Office for the Aging, Youth Bureau, and Department of Community Services, Veterans Service Agency, Center for Discovery
Public information officer or communications office	Yes, Director of Communications
Social media for hazard mitigation education and outreach	Yes, Facebook, Instagram, X
Warning systems for hazard events	Yes, NY Alerts

2.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 2-24 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*

- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 2-24. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Wildfire	Moderate

2.7 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.

2.7.1 Past Mitigation Action Status

The tables below indicate progress on the County's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Sullivan-1—Town Highway 17- Bridge #241 Replacement Including Flood Mit. Improvement	
Hazards Addressed	Flooding, Ice Storm, Hurricane, Tornado, Snow Storm
Lead Agency / Department	Sullivan County Highways & Bridges
Supporting Agency / Department	-
Action Location	Highway 17
Summary of Original Problem	On Town Highway 17, DeWitt Flatts Road in Callicoon, Bridge #241 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts and avoid failure.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the bridge #241 on Town Highway 17 needs to be upsized and reinforced to meet current and future flood capacity.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Action complete

T. Sullivan-2—Town Highway 38- Bridge #261 Replacement Including Flood Mit. Improvements	
Hazards Addressed	Flooding, Ice Storm, Hurricane, Snow Storm, Tornado
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	Highway 38
Summary of Original Problem	On Town Highway 38, Liberty/Fallsburg, Herner Rd, Bridge #261 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts and avoid failure.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the bridge #261 on Town Highway 38 needs to be upsized and reinforced to increase capacity to meet current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Action complete

T. Sullivan-3—Town Highway 61- Bridge #313 Replacement Including Flood Mit. Improvements	
Hazards Addressed	Flooding, Ice Storm, Snow Storm, Hurricane, Tornado
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	Highway 61- Bridge #313
Summary of Original Problem	On Town Highway 61, Starlight Rd. in Thompson, Bridge #313 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts and avoid failure.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the bridge #313 on Town Highway 61 needs to be upsized and reinforced to increase capacity to meet current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Sullivan-4— Town Highway 21- Bridge #272 Replacement Including Flood Mit. Improvements	
Hazards Addressed	Flooding, Hurricane, Tornado, Ice Storm, Snow Storm
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	Highway 21- Bridge #272
Summary of Original Problem	On Town Highway 21, Bridge #272, Denman Rd. Town of Liberty, experiences periodic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the bridge #272 on Town Highway 21 needs to be upsized and reinforced to increase capacity to meet current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Action complete

T. Sullivan-5— Town Highway 22- Bridge #270 Replacement Including Flood Mit. Improvements	
Hazards Addressed	Flooding, Ice Storm, Snow Storm, Hurricane, Tornado
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	Highway 22- Bridge #270
Summary of Original Problem	On Town Highway 22, Flugertown Rd in Neversink, Bridge #270 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts and avoid failure.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the bridge #270 on Town Highway 22 needs to be upsized and reinforced to increase capacity to meet current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Action complete

T. Sullivan-6— County Road 153- Road/River Embankment Stabilization/Fortification	
Hazards Addressed	Flooding, Ice Storm, Snow Storm, Hurricane, Tornado
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	County Road 153
Summary of Original Problem	County Road 153 in Neversink, experiences periodic flooding that is causing streambank instability on the Roundout Creek requiring fortification of the river embankment to prevent catastrophic loss.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the streambank on County Road 153 in Neversink will be improved by fortifying and stabilizing the road shoulder to mitigate against erosion to accommodate current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Whole road is located on the side of a slope. Miles would need to be completely redone. Very expensive. County does repairs on a temporary basis. No detour is present if road had to be closed.
If discontinue, explain why	Not applicable

T. Sullivan-7— County Road 164- Closed Drainage System (Phase II) Incl. Flood Mit. Improvements	
Hazards Addressed	Flooding, Hurricane, Tornado, Ice Storm, Snow Storm
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	County Road 164
Summary of Original Problem	County Road 164 experiences periodic flooding from overtopped streambank that damages the road and becomes impassible which impacts local community and business and increases emergency response times.
Summary of Solution (Project)	To reduce long-term risks of flooding for existing assets and future development, the County will construct a drainage system County Road 164 to divert the excess creekflow under the road.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	A lot of homeowners and easements have not been feasible. Flood study would be needed because potential solutions would lead to flooding another road. County has mitigated some issues as they can.
If discontinue, explain why	Not applicable

T. Sullivan-8— County Road 121 - Road/River Embankment Stabilization/Fortification	
Hazards Addressed	Flooding, Hurricane, Landslide
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	County Road 121
Summary of Original Problem	County Road 121, in the Town of Delaware experiences periodic flooding that is causing river bank instability requiring fortification of the river embankment to prevent catastrophic loss.
Summary of Solution (Project)	To reduce long-term risks of flooding and landslides to existing assets and future development, the County will fortify and stabilize the road shoulder on County Road 121, to mitigate against erosion to accommodate current and future flood levels.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Sullivan-9— County Road 14 - Closed Drainage System Including Flood Mit. Improvements	
Hazards Addressed	Flooding, Hurricane, Ice Storm, Snowstorm
Lead Agency / Department	Sullivan County Highways and Bridges
Supporting Agency / Department	-
Action Location	County Road 14
Summary of Original Problem	The drainage system on County Road 14 in Bethel needs improvements to reduce flooding.
Summary of Solution (Project)	To reduce long-term risk to flooding for existing assets and future development, the drainage system on County Road 14 needs to be improved by adding additional basins and increasing pipe sizing to accommodate current and future stormwater drainage needs.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	A lot of rock, funding would be expensive.
If discontinue, explain why	Not applicable

2.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the County of Sullivan identified the following mitigation efforts completed since the last HMP:

- Significant efforts to maintain repairs on roadways include ditching, culvert/bridge upsizing, paved, etc.

2.7.3 Identified Issues

The County of Sullivan has identified the following vulnerabilities within their community for mitigation strategy development:

- There are 14 high hazard potential dams in the County which have the potential to impact the people, property, infrastructure, and environment nearby. These dams, listed below, are located in nine of the County's local jurisdictions.
  - Cliff Lake Dam (Town of Lumberland)
  - Lake Jefferson Dam (Town of Callicoon)
  - Lake Louise Marie Dam (Town of Thompson)
  - Mongaup Falls Dam (Town of Forestburgh)
  - Neversink Reservoir Dam (Town of Neversink)
  - Pleasure Lake Dam (Town of Fallsburg)
  - Rio Dam (Town of Lumberland)
  - St Josephs Lake Dam (Town of Forestburgh)
  - Swinging Bridge Dam (Town of Forestburgh)
  - Toasperns Pond Dam (Town of Highland)
  - Toronto Lake Reservoir Dam (Town of Bethel)

  - Wanaksink Lake Dam (Town of Thompson)
  - White Crane Lake Dam (Town of Highland)
  - Yankee Lake Dam (Town of Mamakating)
- The County Government Center is a County owned facility where numerous County Departments and Offices are located, and continuity of operations cannot be maintained during power outages due to the lack of backup power. This facility also houses the DMV which also cannot operate during outages. This facility will also be able to be utilized as a temporary heating/cooling shelter as needed.
- The County last updated their Agriculture and Farmland Protection Plan in 2015 and has had some changes to farming density across the County. There is also significant pressure for farmland to be converted into development, and a big push for smaller farms to purchase tunnels and irrigation systems for a more controlled environment for crop production due to increasing issues with drought and extreme temperature concerns. There is also interest in converting some farmland to solar farms and Cornell has held educational workshops regarding these.
- The County currently has undersized salt storage at two of the four of the County salt sheds. The County also works with local jurisdictions in supplying salt in emergency situations, and without an adequate supply of salt, the County and local jurisdictions are especially vulnerable to severe winter storm events. This also may impact emergency response in the County.
- State Route 52 is located partially in Kohlertown and it is low lying and located in the flood plain which results in inundation during high precipitation events, which sometimes impacts facilities that are located nearby.
- Sullivan County has two dams that were deemed ‘unsound’ in recent inspections and does not own either of the dams. American Rivers is currently working with private property owners to remove the Lake Jefferson Dam, which is an identified high hazard dam that is in the Town of Callicoon, and wants to restore the natural floodplain. They are currently in the engineering phase. The Swan Lake Dam, which is an identified intermediate hazard dam that is in the Town of Liberty, has considerable work that needs to be done on the dam. The State said they would take ownership of the dam over from Swan Lake Commons LLC and is looking into removing the dam.
- Bridge #313 on Town Highway 61 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts to avoid failure, because failure of bridges or causeways could result in loss to life and limitations to emergency access.
- County Road 153 in the Town of Neversink experiences periodic flooding that contributes to streambank instability along Roundout creek requiring fortification of the creek embankment to prevent catastrophic losses. This road is located completely on the side of a slope, and miles of the road would need to be redone, which is too costly for the County to afford. The County currently does small repairs on a temporary basis, as there is also no available detour if the road had to be closed.
- County Road 164 experiences periodic flooding from an overtopped streambank that repetitively damages the road and makes the road impassable which impacts local businesses and increases emergency response time. To reduce long-term risks the County would have to divert the creek flow, and a lot of the necessary easements have not been feasible to attain. There is also a culvert located towards the end of the road that is in need of upsizing.
- In the Town of Delaware, County Road 121 experiences periodic flooding that is causing riverbank instability where fortification of the river embankment is needed to prevent catastrophic losses. Flooding from severe storms and winter storms may lead to road closures that would inhibit emergency response times.

- Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. The drainage system on County Road 14 is undersized and needs additional basins and increased pipe sizing to reduce flooding to infrastructure. This road is in a rocky area which would make the funding of this project more expensive.
- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The County has 155 repetitive loss properties, but other properties may be impacted by flooding as well.
- The Callicoon Creek Watershed produces some flooding that impacts nearby infrastructure and roadways. The County is currently conducting a culvert assessment for the whole western part of the County for the Mongaup Watershed Protection Plan that is currently in progress. The Callicoon Creek Watershed may also benefit from the culvert assessment in the western part of the County but would need assistance in determining where the vulnerabilities are located.

2.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Sullivan participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Sullivan 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 County priorities.

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 2-25 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-SullivanCo-01. High Hazard Potential Dams

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	NYS DEC, Dam Owners, Town of Lumberland, Town of Callicoon, Town of Thompson, Town of Forestburgh, Town of Neversink, Town of Fallsburg, Town of Highland, Town of Bethel, Town of Mamakating	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	There are 14 high hazard potential dams in the County which have the potential to impact the people, property, infrastructure, and environment nearby. These dams, listed below, are located in nine of the County's local jurisdictions. • Cliff Lake Dam (Town of Lumberland) • Lake Jefferson Dam (Town of Callicoon) • Lake Louise Marie Dam (Town of Thompson) • Mongaup Falls Dam (Town of Forestburgh) • Neversink Reservoir Dam (Town of Neversink) • Pleasure Lake Dam (Town of Fallsburg) • Rio Dam (Town of Lumberland) • St Josephs Lake Dam (Town of Forestburgh) • Swinging Bridge Dam (Town of Forestburgh) • Toasperns Pond Dam (Town of Highland) • Toronto Lake Reservoir Dam (Town of Bethel) • Wanaksink Lake Dam (Town of Thompson) • White Crane Lake Dam (Town of Highland) • Yankee Lake Dam (Town of Mamakating)	
Description of the Solution:	The County will work with local jurisdictions to address the listed needed or suggested upgrades, repairs, and additional measures noted in each county-owned dam assessment inspection. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the County will pursue funding support, permit approval from NYS DEC, and implement the cost-effective measures. In stances where the County does not own the dam, the County will work with local jurisdictions to make contact with the dam owner and identify and implement any upgrades, repairs, or additional measures to decrease the risk of dam failure. The County will seek to perform updated dam assessments to each of the county-owned dams within the next five years.	
Estimated Cost:	Low	
Potential Funding Sources:	County Budget, Local Jurisdiction Budgets, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 4, 6	
Benefits:	This action will improve the safety and security of those who live near the dams and increase the resilience of responding agencies.	
Impact on At Risk Populations:	The action will result in better preparedness for those living near areas where the dams are located.	
Impact on Future Development:	Future development near the dams 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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)

Priority	☒High	☐Medium	☐Low
Alternative	Action	Evaluation	
	No action	Current problem persists	
	Utilize information from NYS DEC	Owners may not be required to submit a safety plan to the State	
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory	

Action 2026-SullivanCo-02. County Government Center

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	County Government Center Facility Manager	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The County Government Center is a County owned facility where numerous County Departments and Offices are located, and continuity of operations cannot be maintained during power outages due to the lack of backup power. This facility also houses the DMV which also cannot operate during outages. This facility will also be able to be utilized as a temporary heating/cooling shelter as needed.	
Description of the Solution:	The County will work with County Public Works to conduct a generator study to determine the proper sized generator needed to power the critical functions of the County Government Center. Once the correct sized generator is determined, the County will acquire the necessary funding for the purchase and installation of the generator.	
Estimated Cost:	TBD after generator study	
Potential Funding Sources:	HMGP, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of a critical facility that could support future development including County Planning.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-SullivanCo-03. Agriculture and Farmland Protection Plan Update

Lead Agency:	Sullivan County Administration	
Supporting Agencies:	Sullivan County Farmers, Cornell Cooperative Extension, USDA	
Hazards of Concern:	☐Dam Failure ☒Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	The County last updated their Agriculture and Farmland Protection Plan in 2015 and has had some changes to farming density across the County. There is also significant pressure for farmland to be converted into development, and a big push for smaller farms to purchase tunnels and irrigation systems for a more controlled environment for crop production due to increasing issues with drought and extreme temperature concerns. There is also interest in converting some farmland to solar farms and Cornell has held educational workshops regarding these.	
Description of the Solution:	The County will work with Cornell Cooperative Extension and local farmers to update the current 2015 Farmland Protection Plan to include updated information on County farming density and will capture the concerns and issues that local farmers are having in the plan. The County will use this plan to guide additional training, and to create potential projects in which farmers may be able to acquire grant funding for, including tunnels and irrigation systems to ensure they have a more reliable crop yield.	
Estimated Cost:	TBD	
Potential Funding Sources:	USDA, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 4, 5	
Benefits:	The update of this plan aims to protect valuable farmland from the development pressures and enhances the agricultural economy by preserving land that results in food production jobs. This plan also aims to evaluate and support flood and fire control throughout farms.	
Impact on At Risk Populations:	Protection of local farms aims to protect local jobs that contribute to the local economy and ensure that the local populations have access to reliable jobs.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action protects local farming which is a part of the food, shelter and hydration lifeline, and ensures that the County is supplied with local food in an emergency event.	
Impact on Capabilities:	This action ensures farming capabilities are protected and vulnerabilities to hazard events are mitigated against as much as they can be. This action also supports the County's local economy and aims to use this plan to acquire additional funding to strengthen the County's local farming industry.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove Plan	Not cost effective
	Develop a regional plan	May not include County specific resources, and may not capture local concerns

Action 2026-SullivanCo-04. Salt Shed Improvements

Lead Agency:	Sullivan County Administration	
Supporting Agencies:	Sullivan County Division of Public Works and Solid Waste	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The County currently has undersized salt storage at two of the four of the County salt sheds. The County also works with local jurisdictions in supplying salt in emergency situations, and without an adequate supply of salt, the County and local jurisdictions are especially vulnerable to severe winter storm events. This also may impact emergency response in the County.	
Description of the Solution:	The County will evaluate the capacity needed at the two undersized salt shed sites and will then work to acquire the funding for the purchase and installation of the salt sheds which will better protect the transportation lifeline in the County by keeping the roadways cleared.	
Estimated Cost:	TBD	
Potential Funding Sources:	WQIP, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	Salt sheds provide essential protection for bulk salt storage, ensuring its effectiveness, reducing environmental impact, and offering cost-effective, durable solutions for Sullivan County and its respective municipalities.	
Impact on At Risk Populations:	The upsized salt sheds aim to account for the needs of the County to keep roadways clear and accessible by emergency responders and protects individuals that have to travel during winter weather conditions.	
Impact on Future Development:	Future development will benefit from an efficient Public Works Division with an adequate supply of salt.	
Impact on Critical Facilities/Lifelines:	This action ensures the transportation lifeline remains open, which allows for critical facilities to remain open.	
Impact on Capabilities:	This action ensures winter weather preparation capabilities are enhanced. This action also supports the County's transportation lifeline.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring County	Not cost effective due to distance of salt shed
	Remove undersized salt sheds and do not replace them	Does not fix issue

Action 2026-SullivanCo-05. State Route 52

Lead Agency:	NYSDOT	
Supporting Agencies:	Sullivan County Division of Public Works and Solid Waste, Sullivan County Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	State Route 52 is located partially in Kohlertown and it is low lying and located in the flood plain which results in inundation during high precipitation events, which sometimes impacts facilities that are located nearby.	
Description of the Solution:	The County will develop specific mitigation solutions for State Route 52 under the leadership of NYSDOT. Once solutions are determined, the County will support the State in implementing the best and most cost-effective solution.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, State Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	This action aims to improve the transportation lifeline by reducing flood vulnerabilities along well traveled roads that may be used by emergency responders or individuals traveling to a critical facility.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-SullivanCo-06. Lake Jefferson Dam and Swan Lake Dam

Lead Agency:	County Administration	
Supporting Agencies:	American Rivers, NYSDEC, Property Owners	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Sullivan County has two dams that were deemed 'unsound' in recent inspections and does not own either of the dams. American Rivers is currently working with private property owners to remove the Lake Jefferson Dam, which is an identified high hazard dam that is in the Town of Callicoon, and wants to restore the natural floodplain. They are currently in the engineering phase. The Swan Lake Dam, which is an identified intermediate hazard dam that is in the Town of Liberty, has considerable work that needs to be done on the dam. The State said they would take ownership of the dam over from Swan Lake Commons LLC and is looking into removing the dam.	
Description of the Solution:	The County, respective Towns, State and property owners will work to conduct engineering studies to determine if and how the dams can be safely removed to return both areas back to the state of the natural floodplain without impacting infrastructure.	
Estimated Cost:	TBD based on mitigation measures	
Potential Funding Sources:	HHPD, FMA, HMGP, Property Owners, State/County Budget,	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 4, 5, 6	
Benefits:	Dam failure will be avoided, which will reduce the risk of harm to people and property downstream. Certain safety requirements will be met that can allow for funding to be received for further mitigation projects.	
Impact on At Risk Populations:	The most at risk populations may live directly downstream of the dam and lack the ability to receive notifications of dam failure or evacuate when notified. Preventing dam failure allows those communities to remain intact and reduces the risk of loss of life and property in those areas.	
Impact on Future Development:	A community is more likely to remain in or relocate to an area where dam failure is less likely to occur. Future development downstream of dams will also be protected from dam failure.	
Impact on Critical Facilities/Lifelines:	Damage or failure of an intermediate or high hazard dam will impact nearby infrastructure and may impact safety of individuals located in or near the dam inundation area, all of which may be critical facilities.	
Impact on Capabilities:	Conducting an engineering analysis will allow for more efficient allocation of resources and grant funds to retrofit structures as needed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct dams	Not cost effective
	Repair dams	Repaired dams will need routine maintenance, and the dams would serve no purpose to the County or jurisdictions

Action 2026-SullivanCo-07. Town Highway 61, Bridge 313 Mitigation

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	NYSDOT	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Bridge #313 on Town Highway 61 experiences periodic flooding and is at risk of washout from catastrophic flooding. The bridge needs to be upsized and reinforced to reduce flooding impacts to avoid failure, because failure of bridges or causeways could result in loss to life. Flooding from severe storms and winter storms may lead to road closures that would inhibit emergency response times.	
Description of the Solution:	The County will consult with an engineer to identify necessary mitigation and reinforcement measures to implement on Bridge #313 to reduce long-term risk to flooding for existing assets and future development to meet current and future flood levels.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding near the bridge.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Increases community resiliency to flooding events in vulnerable areas that would normally be vulnerable to prolonged isolation after high-water events.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove Bridge	Not feasible
	Construct a second bridge	Not cost effective

Action 2026-SullivanCo-08. County Road 153 Mitigation

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	Town of Neversink	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	County Road 153 in the Town of Neversink experiences periodic flooding that contributes to streambank instability along Roundout creek requiring fortification of the creek embankment to prevent catastrophic losses. This road is located completely on the side of a slope, and miles of the road would need to be completely redone, which is too costly for the County to afford. The County currently does small repairs on a temporary basis, as there is also no available detour if the road had to be closed. Flooding from severe storms and winter storms may lead to road closures that would inhibit emergency response times.	
Description of the Solution:	The County will develop specific mitigation solutions for County Road 153, including stabilizing the road shoulder to mitigate against erosion. Once additional solutions are determined, the County will acquire funding to implement the best and most cost-effective solution.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	This action aims to improve the transportation lifeline by reducing flood vulnerabilities along well traveled roads that may be used by emergency responders or individuals traveling to a critical facility.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-SullivanCo-09. County Road 164 Mitigation

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	Private Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	County Road 164 experiences periodic flooding from an overtopped streambank that repetitively damages the road and makes the road impassable which impacts local businesses and increases emergency response time. To reduce long-term risks the County would have to divert the creek flow, and a lot of the necessary easements have not been feasible to attain. There is also a culvert located towards the end of the road that is in need of upsizing.	
Description of the Solution:	The County will work to attain necessary easements needed to complete drainage improvements along County Road 164. The County will then work to conduct a flood study and will determine cost effective mitigation strategies that could be implemented. Once additional solutions are determined, the County acquire funding to implement the best and most cost-effective solution, in addition to acquiring funding for the upsizing of the culvert pipe at the end of the road.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	This action aims to improve the transportation lifeline by reducing flood vulnerabilities along well traveled roads that may be used by emergency responders or individuals traveling to a critical facility.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-SullivanCo-10. County Road 121 Mitigation

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	Town of Delaware	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	In the Town of Delaware, County Road 121 experiences periodic flooding that is causing riverbank instability where fortification of the river embankment is needed to prevent catastrophic losses. Flooding from severe storms and winter storms may lead to road closures that would inhibit emergency response times.	
Description of the Solution:	The County will develop specific mitigation solutions for County Road 121, including stabilizing the road shoulder to mitigate against erosion. Once additional solutions are determined, the County will acquire funding to implement the best and most cost-effective solution.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	This action aims to improve the transportation lifeline by reducing flood vulnerabilities along well traveled roads that may be used by emergency responders or individuals traveling to a critical facility.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-SullivanCo-11. County Road 14 Culvert Upsizing

Lead Agency:	Sullivan County Division of Public Works and Solid Waste	
Supporting Agencies:	Town of Bethel	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. The drainage system on County Road 14 is undersized and needs additional basins and increased pipe sizing to reduce flooding to infrastructure. This road is in a rocky area which would make the funding of this project more expensive.	
Description of the Solution:	The County will work with an engineer to complete an engineering survey of the culverts on County Road 14 which are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The County will acquire the funding for the purchase and installation of those culverts notes to be undersized.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-SullivanCo-12. Repetitive Loss Properties

Lead Agency:	Sullivan County Division of Planning, Community Development and Environmental Management	
Supporting Agencies:	Municipal Floodplain Administrators, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The County has 155 repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The County will support the applicable municipalities in conducting outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the applicable jurisdiction will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Municipality Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the County's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-SullivanCo-13. Callicoon Creek Watershed

Lead Agency:	Sullivan County Soil & Water	
Supporting Agencies:	Affected Municipalities, NYSDEC, Sullivan County Division of Planning	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Callicoon Creek Watershed produces some flooding that impacts nearby infrastructure and roadways. The County is currently conducting a culvert assessment for the whole western part of the County for the Mongaup Watershed Protection Plan that is currently in progress. The Callicoon Creek Watershed may also benefit from the culvert assessment in the western part of the County but would need assistance in determining where the vulnerabilities are located.	
Description of the Solution:	The County will acquire funding for additional analysis needed for the Callicoon Watershed to reduce flooding and drainage issues. The County will work with engineers to determine the best and most cost-effective solutions to reduce flooding and will work with NYSDEC and the appropriate municipalities to implement cost effective solutions.	
Estimated Cost:	TBD based on mitigation alternative	
Potential Funding Sources:	NYSDEC, County Budget	
Implementation Timeline:	5 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by implementing cost effective projects to reduce flooding and preserve the integrity of the watershed.	
Impact on At Risk Populations:	Collecting data regarding prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	This action aims to reduce flooding in the County, including the transportation lifeline which ensures that roadways will remain open and clear.	
Impact on Critical Facilities/Lifelines:	Any critical facilities impacted negatively by the Callicoon Watershed will be better protected with the addition of floodproofed infrastructure.	
Impact on Capabilities:	This action aims to reduce flooding in the Callicoon Watershed to enhance response capabilities and protect County residents, businesses and critical infrastructure.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Table 2-25. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-SullivanCo-01	High Hazard Potential Dams	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High
2026-SullivanCo-02	County Government Center	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-03	Agriculture and Farmland Protection Plan Update	0	1	1	1	1	0	0	1	1	1	1	1	0	0	10	Medium
2026-SullivanCo-04	Salt Shed Improvements	1	0	1	1	1	0	1	1	1	1	1	1	1	1	12	High
2026-SullivanCo-05	State Route 52	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-06	Lake Jefferson Dam and Swan Lake Dam	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2026-SullivanCo-07	Town Highway 61, Bridge 313 Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-08	County Road 153 Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-09	County Road 164 Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-10	County Road 121 Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2026-SullivanCo-11	County Road 14 Culvert Upsizing	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-SullivanCo-12	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High

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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-SullivanCo-13	Callicoon Creek Watershed	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

3. VILLAGE OF ATERES

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Ateres 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 Ateres, describes who participated in the planning process, assesses Ateres' risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

3.1 HAZARD MITIGATION PLANNING TEAM

The Village of Ateres identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 3-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 3-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Zisha Berger, Village Clerk Address: 4656 State Route 42 Phone Number: (347) 213-1643 Email: z.berger@villageofateres.com	Name/Title: S Lebovitz, Village Secretary Address: 4656 State Route 42 Phone Number: (845) 794-2727 Email: s.lebovitz@villageofateres.com
National Flood Insurance Program Floodplain Administrator	
Village does not participate	

3.2 COMMUNITY PROFILE

3.2.1 Community Classifications

Table 3-2 summarizes classifications for community programs available to Ateres.

Table 3-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

3.2.2 Community Profile

Geographical Description

A small village located within the Town of Bethel. It is part of the Catskill region, characterized by hilly terrain and forested areas.

Table 3-3 through Table 3-6 note land area, population, and building stock information for the Village of Ateres.

Table 3-3. Total Land Area in the Village of Ateres

Jurisdiction	Total Land Area	
	Acres	Square Miles
Ateres (V)	838.1	1.3

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 3-4. Population Estimates in the Village of Ateres

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
-	-	834	1.1%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 3-5. At Risk Populations in the Village of Ateres

At Risk Populations – American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
-	-	-	-	-	-	-	-	-	-

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 3-6. General Building Stock in the Village of Ateres

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
99	$104,501,618	92	$71,125,877	5	$24,905,260	1	$1,068,336	1	$7,402,144

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

3.3 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 Ateres' risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

3.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Ateres are shown in Figure 3-1 and Figure 3-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Ateres has significant exposure.

Figure 3-1. Ateres Flood, Wildfire and Dam Inundation Area Map

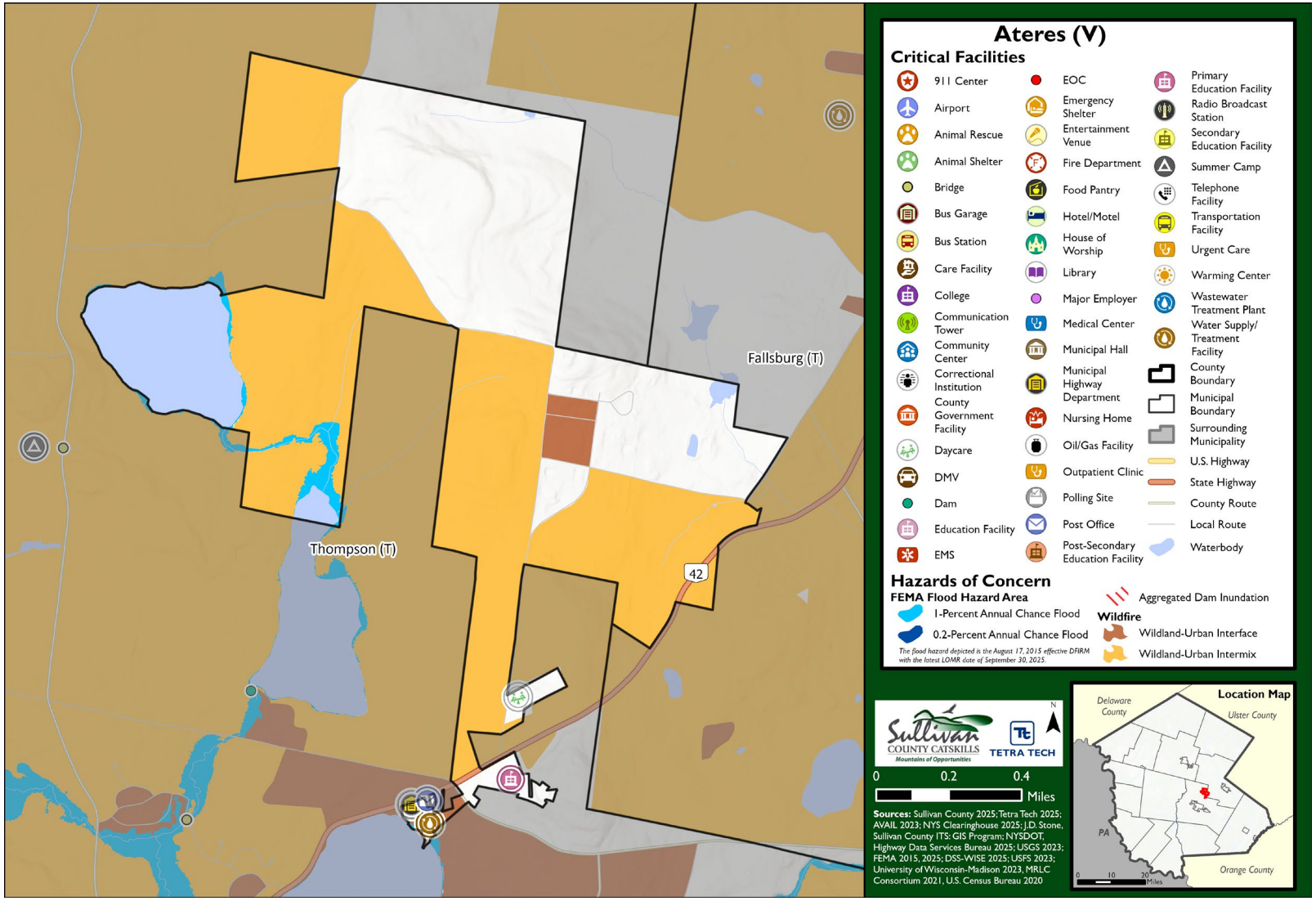
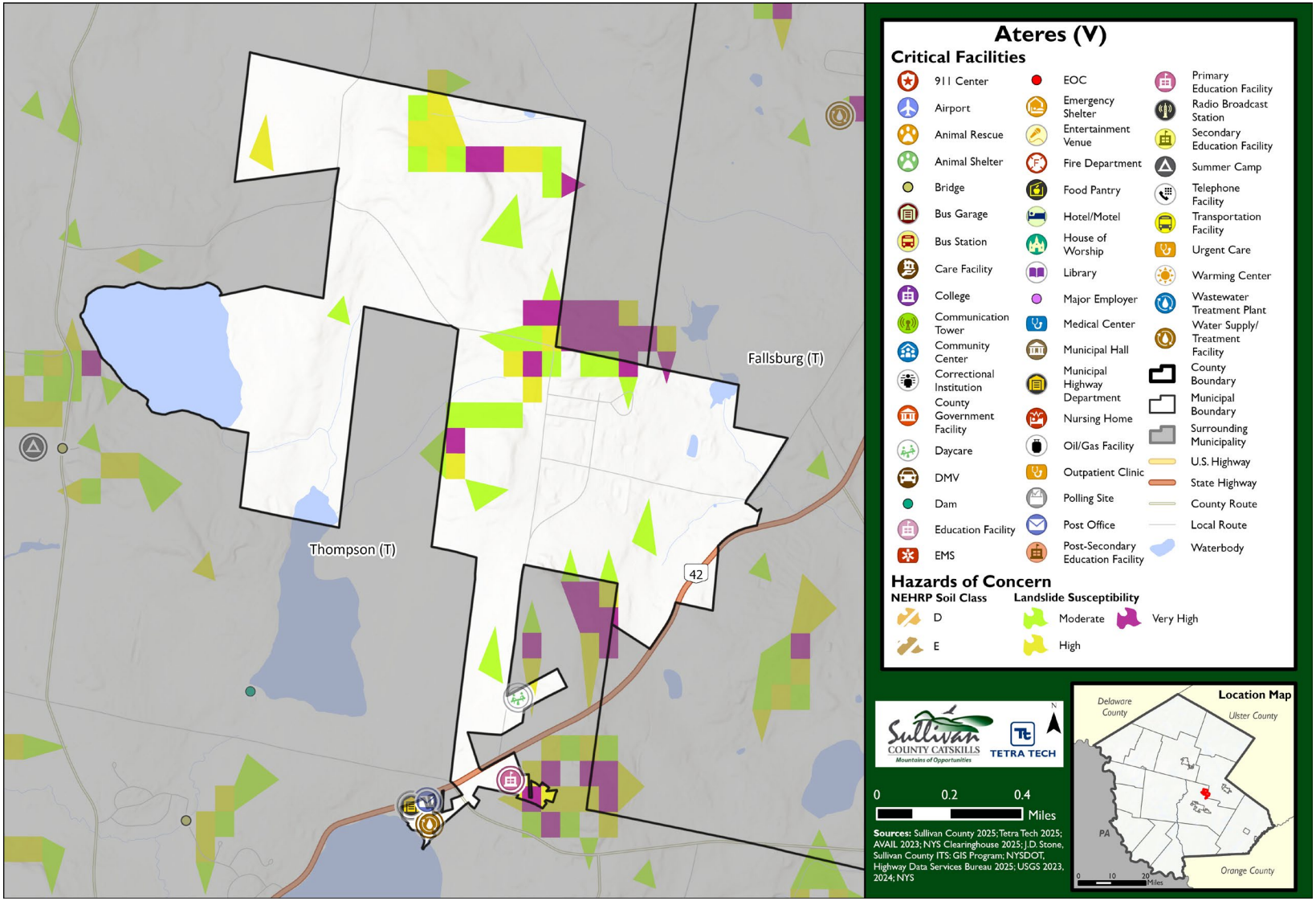


Figure 3-2. Ateres NEHRP Soil and Landslide Area Map



3.3.2 Previous Event History

The history of natural and non-natural hazard events in Ateres is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 3-7 and Table 3-8 provide details on the loss and damage in Ateres during hazard events since the last hazard mitigation plan update.

Table 3-7. Presidential Disaster Declarations History in Ateres

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Ateres
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Village was created April/May of 2024 and went into effect in June 2025
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Village was created April/May of 2024 and went into effect in June 2025
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Village was created April/May of 2024 and went into effect in June 2025

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 3-8. Hazard Event History in Ateres

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Ateres
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Village was created April/May of 2024 and went into effect in June 2025
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Village was created April/May of 2024 and went into effect in June 2025
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Village was created April/May of 2024 and went into effect in June 2025
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Village was created April/May of 2024 and went into effect in June 2025
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Village was created April/May of 2024 and went into effect in June 2025
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Village was created April/May of 2024 and went into effect in June 2025

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Ateres
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	Village was created April/May of 2024 and went into effect in June 2025
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Village was created April/May of 2024 and went into effect in June 2025
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Village was created April/May of 2024 and went into effect in June 2025

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.
Note: Village was developed after these dates. Information is from the Towns.

3.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 3-9 includes an inventory of critical facilities and infrastructure for the Village of Ateres.

Table 3-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
None Identified					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

3.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Ateres Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 3-10.

Table 3-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Not applicable

Hazard Name	Local Impacts: People, Community Services, Local Economy
Drought	No known impacts
Earthquake	No known impacts
Flood	Village had a resident that had catch basin that overflowed and impacted his infrastructure after a high precipitation event.
Landslide	No known impacts
Pandemic	No known impacts
Severe Storm	No known impacts – most wires are underground.
Severe Winter Storm	No known impacts
Wildfire	Village has a lot of wooded areas that may be vulnerable to fire.

3.3.5 Vulnerable Community Assets

Representatives from the Village of Ateres Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 3-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 3-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not applicable	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	No known impacts
Municipal Buildings	Rented space for Village Hall. No known impacts	**Medical Centers (non-hospital)**	Not applicable
College/University	No known impacts	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Not applicable
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	No known impacts
Fire/Police Stations	Using the Town currently. No known impacts	**Wastewater Treatment Plants**	Using the Town – No known impacts

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	No known impacts
Hospitals	Not applicable	**Other**	No known impacts

3.3.6 Dams

Table 3-12 includes all dams in the Village of Ateres. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** – Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** – Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** – Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** – Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 3-12. Dams Located in Ateres

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
None Identified						

Notable comments regarding dams in the jurisdiction:

No dams located in or near the Village that would be of concern.

3.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented

project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 3-13 identifies the preliminary hazard ranking for Ateres, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 3-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

3.4 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 3-14 through Table 3-17.

3.4.1 Development and Permitting

Table 3-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Village
What is your process for tracking building permits?	Everything is currently on paper. Village has a hired Building Department.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, evaluate floodplain and require County form.
Does your community have a buildable land inventory? If yes, please describe.	Room for buildout

Table 3-15. 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
2020				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2021				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2022				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2023				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2024				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2025				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-

SFHA = Special Flood Hazard Area (1% flood event)
Note: Started issuing permits in June of 2025. Towns would have issued permits during the time periods reported above.

Table 3-16. Recent Major Development and Infrastructure from 2020 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
Residential Development	Residential	92	Rimon Lane	-	In progress. Infrastructure is being put in.
Synagogue	Religious	1	-	-	In Development

Table 3-17. 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					

3.5 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 Table 3-1 is responsible for maintaining this information.

3.5.1 NFIP Statistics

Table 3-18 summarizes the NFIP policy and claim statistics for the Village of Ateres.

Table 3-18. Ateres NFIP Summary of Policy and Claim Statistics

NFIP Community Number	-
# Policies	21
# Claims (Losses)	-
Total Loss Payments	-
# Repetitive Loss Properties	-
# Severe Repetitive Loss Properties	-

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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

- = Data is Not Available

Source: FEMA 2025

3.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The Village does not participate in the NFIP.

3.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Ateres 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 Ateres to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

3.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 3-19 and Table 3-20 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 3-19. Regulatory Capabilities in Ateres

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	No	Adopt Town of Thompson Building Codes.	-	-
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	No	-	-	-
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	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	Property Condition Disclosure Act, NY Code -	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Article 14 §460-467	
Site Plan Code	No	-	-	-
Stormwater Management Code	No	-	-	-
Subdivision Code	No	-	-	-
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	No	Adopt Town of Thompson Zoning Codes.	-	-

Planning Capabilities

Table 3-20. Planning Capabilities in Ateres

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Village Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	No	Village is looking at creating one.	-	-
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will	Comprehensive Emergency Management Plan, 2007	Sullivan County

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.		
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	Village wants to look into developing this plan. Include sidewalks and parks – the community needs to be walkable.	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

3.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 3-21 details the available administrative and technical capabilities of the Village.

Table 3-21. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contract as needed
Construction/Building/Code Enforcement Department	Yes	Contract
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	No	County
Environmental Commission/Specialist	No	County
Grant Writer	Yes	Within the Building Department
Maintenance Programs to Reduce Risk	Yes	Town of Thompson Highway
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	With the Town of Thompson for Village of Assessor, Sanitary Sewer Services, Office of the Registrar, and Highway.
Open Space Board/Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Personnel skilled or trained in website development	No	-
Planning Board	Yes	This Board acts as the Zoning Board as well.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Clerk
Planner or Engineer with knowledge of land development and land management practices	Yes	Contracted Building Department
Planners or engineers with an understanding of natural hazards	Yes	Contracted Building Department
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Contracted Building Department
Professionals trained in conducting damage assessments	Yes	Contracted Building Department
Public Works/Highway Department	Yes	Use the Town of Thompson and is contracted with them
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Contracted Building Department
Surveyor(s)	Yes	Contracted Building Department
Zoning Board of Appeals	Yes	See above
Other	No	-

3.6.3 Fiscal Capability

Table 3-22 summarizes financial resources available to Ateres.

Table 3-22. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	No
Authority to levy taxes for specific purposes	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	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 (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

3.6.4 Education and Outreach Capability

Table 3-23 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 3-23. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	No
Local News	No
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	No
Public information officer or communications office	No
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Yes, NY Alert through the State

3.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 3-24 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 3-24. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Drought	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Earthquake	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Flood	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Landslide	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Pandemic	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Severe Storm	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Severe Winter Storm	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.
Wildfire	Weak – the Village is new and is building out capabilities. For now, the Village will need to rely on outside assistance should an event occur.

3.7 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.

3.7.1 Past Mitigation Action Status

The Village did not participate in the last plan, as the Village did not exist.

3.7.2 Identified Issues

The Village of Ateres has identified the following vulnerabilities within their community for mitigation strategy development:

- As a new municipality, the Village of Ateres seeks to grow safely and economically to support and benefit its population. The Village does not have an existing comprehensive plan, which would serve as a strategic framework to guide the future growth and development of a community, ensuring sustainable and organized progress.
- As a new municipality, the Village of Ateres seeks to grow safely and economically to support and benefit its population. The Village has not evaluated methods to encourage future development amongst existing routes of transportation, nor has an evaluation been performed to identify if existing transportation routes are capable to support future development in the Village.
- Undersized drainage often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the drainage system. The existing stormwater management system within the Village are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.
- Critical facilities require backup power to ensure continuity of operations. The Village Hall does not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- A lack of building codes places new construction at risk during hazard events, as high winds can cause damage to structures, snow loads can impact roofs, and older construction materials may lead to a structure to be more susceptible to landslide, severe storm, severe winter storm, and wildfire damages. Swift flowing waters from floods can cause structures to buckle or come off their foundation due to the immense pressure.
- The Village faces significant impacts of flooding, including impacted properties. There are 21 properties in the Village which currently have flood insurance policies through NFIP providers. The Village is not currently apart of the NFIP and would like to explore joining the program to be able to partake in its benefits.
- The Village does not have a developed flood damage prevention ordinance. In order to participate in the NFIP, the Village must adopt a flood damage prevention ordinance which includes the 2-foot mandated NYS freeboard requirements.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review on integrating floodplain management practices into zoning and building codes should be thoroughly discussed, as these codes have not yet been developed in the Village.
- The Village lacks a zoning code. A zoning code regulates the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.
- The Village does not have its own Comprehensive Emergency Management Plan (CEMP). During development, hazard mitigation principles need to be integrated into the CEMP. A CEMP establishes the overall authority, roles, and functions performed during incidents. Incorporating hazard mitigation principles into a CEMP ensures hazard risk is identified.

- The Village has a lot of wooded areas that may be vulnerable wildfires but does not have an education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery. The Village will focus education efforts to those located within the wildfire-urban interfaces.

3.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Ateres participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Ateres 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 Village priorities.

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 3-25 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-AteresV-01. Comprehensive Plan

Lead Agency:	Planning Board	
Supporting Agencies:	Village Board, Sullivan County	
Hazards of Concern:	☒Dam Failure ☒Drought ☒Earthquake ☒Flood ☒Landslide	☒Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	As a new municipality, the Village of Ateres seeks to grow safely and economically to support and benefit its population. The Village does not have an existing comprehensive plan, which would serve as a strategic framework to guide the future growth and development of a community, ensuring sustainable and organized progress.	
Description of the Solution:	The Village will develop a comprehensive plan. Ensure that the local comprehensive plan incorporates hazard mitigation techniques through a courtesy review or draft plans by the County Planning Department.	
Estimated Cost:	Staff time, Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within five years	
Goals Met:	1, 4, 5	
Benefits:	This action will have the Village develop a comprehensive plan. The integration of hazard mitigation principles will present the opportunity for the Village to identify areas of the Village which may be impacted by hazards and plan for future land use accordingly.	
Impact on At Risk Populations:	The inclusion of hazard mitigation principles into the comprehensive plan may encourage discussions on how hazard risks may impact at risk populations in the Village.	
Impact on Future Development:	This action will have a direct impact on future land use in the Village, as the comprehensive plan guides land use principles in the Village.	
Impact on Critical Facilities/Lifelines:	Developing a comprehensive plan which includes hazard mitigation principles may present an opportunity to discuss hazard risks to critical facilities and lifelines in the Village.	
Impact on Capabilities:	This action will create a planning capability of the Village, making it more resilient.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Integrate hazard mitigation principles in only plan elements	The plan will miss integration opportunities in the comprehensive plan main document
	Integrate hazard mitigation principles in only comprehensive plan main document	The plan will miss integration opportunities in the plan elements

Action 2026-AteresV-02. Transportation and Growth Plan

Lead Agency:	Village Board	
Supporting Agencies:	Sullivan County	
Hazards of Concern:	☒Dam Failure ☒Drought ☒Earthquake ☒Flood ☒Landslide	☒Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	As a new municipality, the Village of Ateres seeks to grow safely and economically to support and benefit its population. The Village has not evaluated methods to encourage future development amongst existing routes of transportation, nor has an evaluation been performed to identify if existing transportation routes are capable to support future development in the Village.	
Description of the Solution:	The Village of Ateres will develop a transportation plan with an additional evaluation for safe growth initiatives by referencing the NYS Smart Growth Community Planning Program, which promotes sustainable, equitable, and livable communities through comprehensive planning and development initiatives. The Village may seek to reference the Town of Thompson's and the Village of Monticello's "Grow the Gateways" Strategic Plan for Gateway Corridor, which identifies safe growth initiatives to stir economic development, while ensuring travel routes are protected and developed appropriately.	
Estimated Cost:	Medium	
Potential Funding Sources:	Village Budget, Smart Growth Community Planning Grant Program	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 4, 5	
Benefits:	The transportation plan will define future policies, goals, investments, and spatial planning designs to prepare for future needs to move people and goods to destinations. The collaborative process will incorporate the input of many stakeholders, including various government agencies, the public, and private businesses.	
Impact on At Risk Populations:	This plan will account for transportation and traffic safety measures which can benefit the overall population in the Village, including at risk populations, such as school-aged children and the elderly, who may utilize crosswalks and sidewalks to get to and from school, school activities, and shuttle or transportation systems.	
Impact on Future Development:	The development of this plan will address expectations for future development within the Village of Ateres. The plan may influence where future development will take place.	
Impact on Critical Facilities/Lifelines:	This action will enhance the transportation lifeline. The plan produced will identify spatial planning designs to prepare for future needs to move people and goods to destinations	
Impact on Capabilities:	The transportation and growth plan will be a new planning capability for the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Adopt the Town of Thompson's and the Village of Monticello's "Grow the Gateways" Strategic Plan for Gateway Corridor	While the planning area includes where the Village is located, the plan does not account for development within the Village, as it did not exist when the plan was developed.
	Develop a transportation plan without smart growth planning.	The developed plan may not integrate safety measures to reduce risk to pedestrians, bicyclists, and other individuals. Further, it may not consider how transportation routes will influence future development.

Action 2026-AteresV-03. Undersized Drainage

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized drainage often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the drainage system. The existing stormwater management system within the Village are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	The Village Engineer will complete an engineering survey of the stormwater infrastructure in the Village to identify those which are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-AteresV-04. Village Hall Generator

Lead Agency:	Engineering	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Village Hall does not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Village Engineer will conduct a study to determine the required generator capacity to support the critical facility. The Village will then purchase and install the generator and all necessary electrical hookup components. The installation of the back-up emergency generators will ensure continuity of operations for the critical facility and their operations during each identified hazards of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-AteresV-05. Building Code Development

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Board	
Hazards of Concern:	☒Dam Failure ☐Drought ☒Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	A lack of building codes places new construction at risk during hazard events, as high winds can cause damage to structures, snow loads can impact roofs, and older construction materials may lead to a structure to be more susceptible to landslide, severe storm, severe winter storm, and wildfire damages. Swift flowing waters from floods can cause structures to buckle or come off their foundation due to the immense pressure.	
Description of the Solution:	The Village will review, revise, and adopt the Town of Thompson's building codes. Revisions may include the integration of hazard mitigation principles to create a more resilient community. The Village will also use available tools and resources from FEMA and other sources to integrate climate adaptation planning such as FEMA's "Climate Adaptation Planning: Guidance for Emergency Managers" document. Adopted building codes will meet the minimum requirements set by the State.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	4 years	
Goals Met:	1, 2, 4, 5	
Benefits:	Mitigation considerations being taken when developing building and codes can lessen the risk of damage from a hazard event and increase overall community resiliency.	
Impact on At Risk Populations:	Communities that collaborate and coordinate their regulatory efforts are more likely to have identified ways to best work with at risk populations to increase their level of preparedness.	
Impact on Future Development:	Developing and adopting building codes ensure that any new development that does take place is built to the safest standards based upon the best available data.	
Impact on Critical Facilities/Lifelines:	Integrating mitigation into building codes protects existing infrastructure and guides the safe development of new construction.	
Impact on Capabilities:	A consolidated review process brings together the capabilities of agencies and departments and better identifies what resources are available at any given point in time and where they are needed most.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not reach minimum State standards	Will be below standards
	Adopt building code without integrating hazard mitigation principles	Will not increase Village's resiliency

Action 2026-AteresV-06. NFIP Participation

Lead Agency:	Village Board	
Supporting Agencies:	Sullivan County, NYS DEC, FEMA	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village faces significant impacts of flooding, including impacted properties. There are 21 properties in the Village which currently have flood insurance policies through NFIP providers. The Village is not currently apart of the NFIP and would like to explore joining the program to be able to partake in its benefits.	
Description of the Solution:	The Village will work with the County, State, and Federal officials to consider community participation in the National Flood Insurance Program by completing an application and adopting a resolution of intent to participate and cooperate with FEMA, as well as adopting and submitting a floodplain management ordinance that meets or exceeds the minimum NFIP criteria.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 3, 4, 5	
Benefits:	Residents who may be in the flood hazard area can benefit from flood insurance discounts.	
Impact on At Risk Populations:	At risk populations will have access to more affordable flood insurance.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	Critical facilities that are impacted by flooding will have insurance benefits.	
Impact on Capabilities:	This action improves flood protection capabilities.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Obtain private insurance	Not cost effective
	Join and do not enforce codes	Will not enforce the NFIP as intended

Action 2026-AteresV-07. Flood Damage Prevention Ordinance

Lead Agency:	Code Enforcement		
Supporting Agencies:	Village Board, NYS DEC, FEMA		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire	
Description of the Problem:	The Village does not have a developed flood damage prevention ordinance. In order to participate in the NFIP, the Village must adopt a flood damage prevention ordinance which includes the 2-foot mandated NYS freeboard requirements.		
Description of the Solution:	The Village will work with Sullivan County and NYS DEC to ensure its Flood Damage Prevention Ordinance is created to adhere to NYS requirements. After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the Village will update and adopt the Flood Damage Prevention Ordinance.		
Estimated Cost:	Low		
Potential Funding Sources:	Village Budget		
Implementation Timeline:	Within 3 years		
Goals Met:	2, 3, 4, 5		
Benefits:	The created ordinance will improve floodplain management, meet NFIP and State requirements, and increase resilience of new and substantially improved structures in the floodplain.		
Impact on At Risk Populations:	The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to at risk populations exist.		
Impact on Future Development:	The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.		
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the requirements set forth in the ordinance.		
Impact on Capabilities:	This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.		
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	Update only freeboard requirements	Other areas of the ordinance which need to be updated would not be	
	Leave NFIP	Residents lose flood insurance coverage	

Action 2026-AteresV-08. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review on integrating floodplain management practices into zoning and building codes should be thoroughly discussed, as these codes have not yet been developed in the Village.	
Description of the Solution:	Where feasible, the Village will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-AteresV-09. Zoning Code Development

Lead Agency:	Village Board	
Supporting Agencies:	Code Enforcement	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☒Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village lacks a zoning code. A zoning code regulates the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.	
Description of the Solution:	The Village will review, revise, and adopt the Town of Thompson's zoning code. Revisions will be made using information from the hazard mitigation plan and the appropriate provisions under § 263 of the Town Law of the State of New York.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget, Smart Growth Community Planning Grant Program	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	The zoning code will regulate the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.	
Impact on At Risk Populations:	A zoning code can restrict development within various hazard areas, including those within flood-prone areas and locations with a higher risk to landslides. This restriction can result in increased safety to the populations which would otherwise build in these areas.	
Impact on Future Development:	The development and adoption of a zoning code can prevent or restrict future development in hazard areas, reducing risk to persons, property, and the environment.	
Impact on Critical Facilities/Lifelines:	Zoning codes can assist in outlining the development of an area which can assist when identifying response areas in the safety and security lifeline and evacuation priority areas within the transportation lifeline.	
Impact on Capabilities:	This action will create a new comprehensive capability for the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Create code without following State provisions	May not reach standards
	Create code without incorporating hazard mitigation principles	May not promote resiliency as much as possible

Action 2026-AteresV-10. Comprehensive Emergency Management Plan

Lead Agency:	Village Board	
Supporting Agencies:	Sullivan County	
Hazards of Concern:	☒Dam Failure ☒Drought ☒Earthquake ☒Flood ☒Landslide	☒Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village does not have its own Comprehensive Emergency Management Plan (CEMP). During development, hazard mitigation principles need to be integrated into the CEMP. A CEMP establishes the overall authority, roles, and functions performed during incidents. Incorporating hazard mitigation principles into a CEMP ensures hazard risk is identified.	
Description of the Solution:	The Village will create a Comprehensive Emergency Management Plan (CEMP), with support from Sullivan County. The CEMP will integrate hazard mitigation principles into its contents, including addresses capabilities related to reducing the risk to the identified hazards of concern identified with this Hazard Mitigation Plan. The Village will send the CEMP to the County for review, followed by a State review.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget, EMPG	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 3, 6	
Benefits:	The CEMP details what the Village will do during a disaster (incident command implementation, command center location and activities, specific plans by department, etc.). The creation of a CEMP will permit the Village to integrate new plans, policies, capabilities, and hazard assessments.	
Impact on At Risk Populations:	The section overview portion of the CEMP covers a discussion of a variety of topics, including population distribution and locations, including any concentrated populations of individuals with disabilities, others with access and functional needs, or individuals with limited English proficiency.	
Impact on Future Development:	Future development will be protected by the actions which the Village performs following the CEMP.	
Impact on Critical Facilities/Lifelines:	The section overview portion of the CEMP covers a discussion of a variety of topics, including vulnerable critical facilities (e.g. nursing homes, schools, hospitals, infrastructure).	
Impact on Capabilities:	This action will update a planning and response capability for the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Integrate hazard mitigation principles in only hazard appendices	The plan will miss integration opportunities in the basic plan and annexes
	Ask County to integrate hazard mitigation into the County CEMP	Village CEMP will remain undeveloped

Action 2026-AteresV-11. Wildfire Education and Outreach

Lead Agency:	Village Supervisor	
Supporting Agencies:	Village Board, Sullivan County	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village has a lot of wooded areas that may be vulnerable wildfires but does not have an education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery. The Village will focus education efforts to those located within the wildfire-urban interfaces.	
Description of the Solution:	Create outreach materials, or utilize those from Sullivan County, on wildfire risks and methods of mitigation measures. Methods of distribution may include Village events, the Village newsletters, social media, the Village website, and having the materials on display for the public at Village libraries and offices. Outreach materials will be specified with education and information for the wildfire hazard.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	1 year	
Goals Met:	2, 3	
Benefits:	This action will improve the public education and outreach capabilities in the Village by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Village.	
Impact on At Risk Populations:	At risk populations will learn how to prepare for and mitigate the wildfire hazard which may impact them in the Village.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of the wildfire hazard. With these businesses becoming more resilient, this action would contribute to their continuity of operations.	
Impact on Capabilities:	This action would build upon the County's public education and outreach capabilities and adapt it to the Village's needs.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Village
	Use only a few methods for distribution	Using only a few methods of distribution may hinder at risk populations from receiving the guidance

Table 3-25. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-AteresV-01	Comprehensive Plan	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	High
2026-AteresV-02	Transportation and Growth Plan	0	1	1	1	1	0	0	1	1	1	0	1	1	1	10	Medium
2026-AteresV-03	Undersized Drainage	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-AteresV-04	Village Hall Generator	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-AteresV-05	Building Code Development	0	1	1	1	1	1	1	1	1	1	1	1	0	1	12	High
2026-AteresV-06	NFIP Participation	1	1	1	1	1	1	1	1	1	0	1	1	1	0	12	High
2026-AteresV-07	Flood Damage Prevention Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2026-AteresV-08	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-AteresV-09	Zoning Code Development	0	1	1	1	1	1	1	1	1	1	1	1	0	1	12	High
2026-AteresV-10	Comprehensive Emergency Management Plan	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-AteresV-11	Wildfire Education and Outreach	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

4. TOWN OF BETHEL

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Bethel 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 Bethel, describes who participated in the planning process, assesses Bethel's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

4.1 HAZARD MITIGATION PLANNING TEAM

The Town of Bethel identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 4-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 4-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Daniel Sturm, Town Supervisor Address: 3454 Route 55, White Lake, NY 12786 Phone Number: (845) 583-4350, ext. 102 Email: supervisor@townofbethelny.gov	Name/Title: Rita Sheehan, Town Clerk Address: 3454 Route 55, White Lake, NY 12786 Phone Number: (845) 583-4350, ext. 101 Email: townclerk@townofbethelny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: BetteJean Gettel, Building Inspector Address: 3454 Route 55, White Lake, NY 12786 Phone Number: (845) 583-4350 ext. 105 Email: building@townofbethelny.gov	
Additional Contributors	
Name/Title: Joe Smith, Building Department Method of Participation: Provided key input in the planning process	

4.2 COMMUNITY PROFILE

4.2.1 Community Classifications

Table 4-2 summarizes classifications for community programs available to Bethel.

Table 4-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	-	-
NYSDEC Climate Smart Communities	Yes	Bronze	September 10, 2024
NYSERDA Clean Energy Community	Yes	3-Star	October 1, 2024
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

4.2.2 Community Profile

Geographical Description

The Town of Bethel was incorporated in 1809 from the Town of Lumberland by an act of the New York State Legislature. The Town of Bethel is located 90 miles northwest of New York City, southwest of Albany and southeast of Binghamton in Sullivan County New York. The Town of Bethel includes the hamlets of White Lake, Kauneonga Lake, Smallwood, Bethel, parts of Swan Lake, Mongaup Valley and Briscoe. There are over 147 miles of Town Roads (Town of Bethel 2025).

Government Type and Description

The Town is governed by a Town Board, which is comprised of the Town Supervisor (two-year term) and four council members (four-year staggering terms). They set policy, adopt local laws and resolutions, hire most staff, and regulate the Town of Bethel Code and Laws of the State of York. There is no weighted voting, each vote counts equally including the Town Supervisor (Town of Bethel 2025).

Table 4-3 through Table 4-6 note land area, population, and building stock information for the Town of Bethel.

Table 4-3. Total Land Area in the Town of Bethel

Jurisdiction	Total Land Area	
	Acres	Square Miles
Bethel (T)	51,761.8	80.9

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 4-4. Population Estimates in the Town of Bethel

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
3,959	5.0%	3,997	5.1%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 4-5. At Risk Populations in the Town of Bethel

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
1,105	27.6%	147	3.7%	200	5.0%	633	15.8%	604	15.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 4-6. General Building Stock in the Town of Bethel

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
4,671	$3,993,363,362	4,001	$2,016,055,231	316	$773,930,264	27	$147,969,030	327	$1,055,408,837

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

4.3 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 Bethel's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

4.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Bethel are shown in Figure 4-1 and Figure 4-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Bethel has significant exposure.

Figure 4-1. Bethel Flood, Wildfire and Dam Inundation Area Map

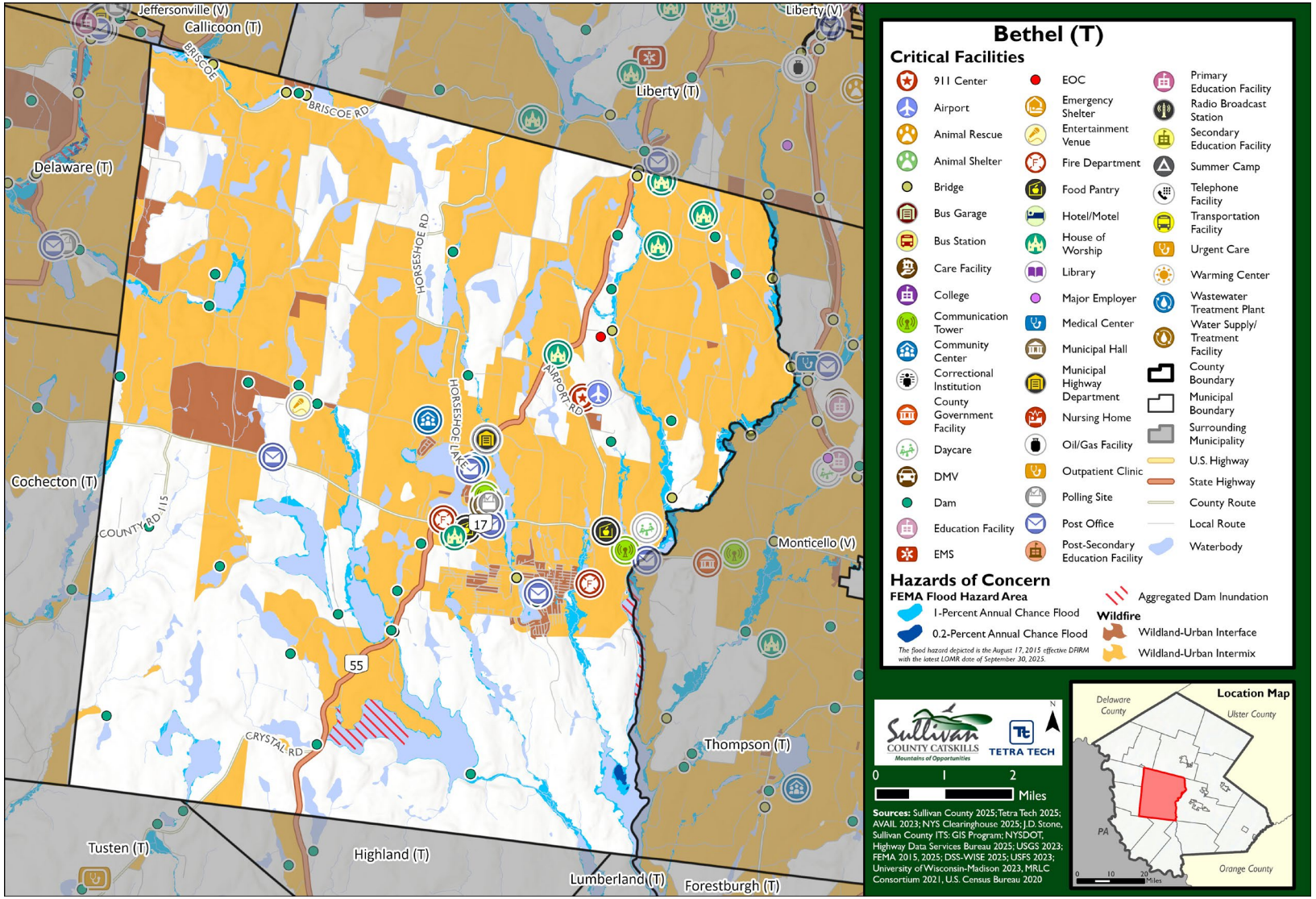
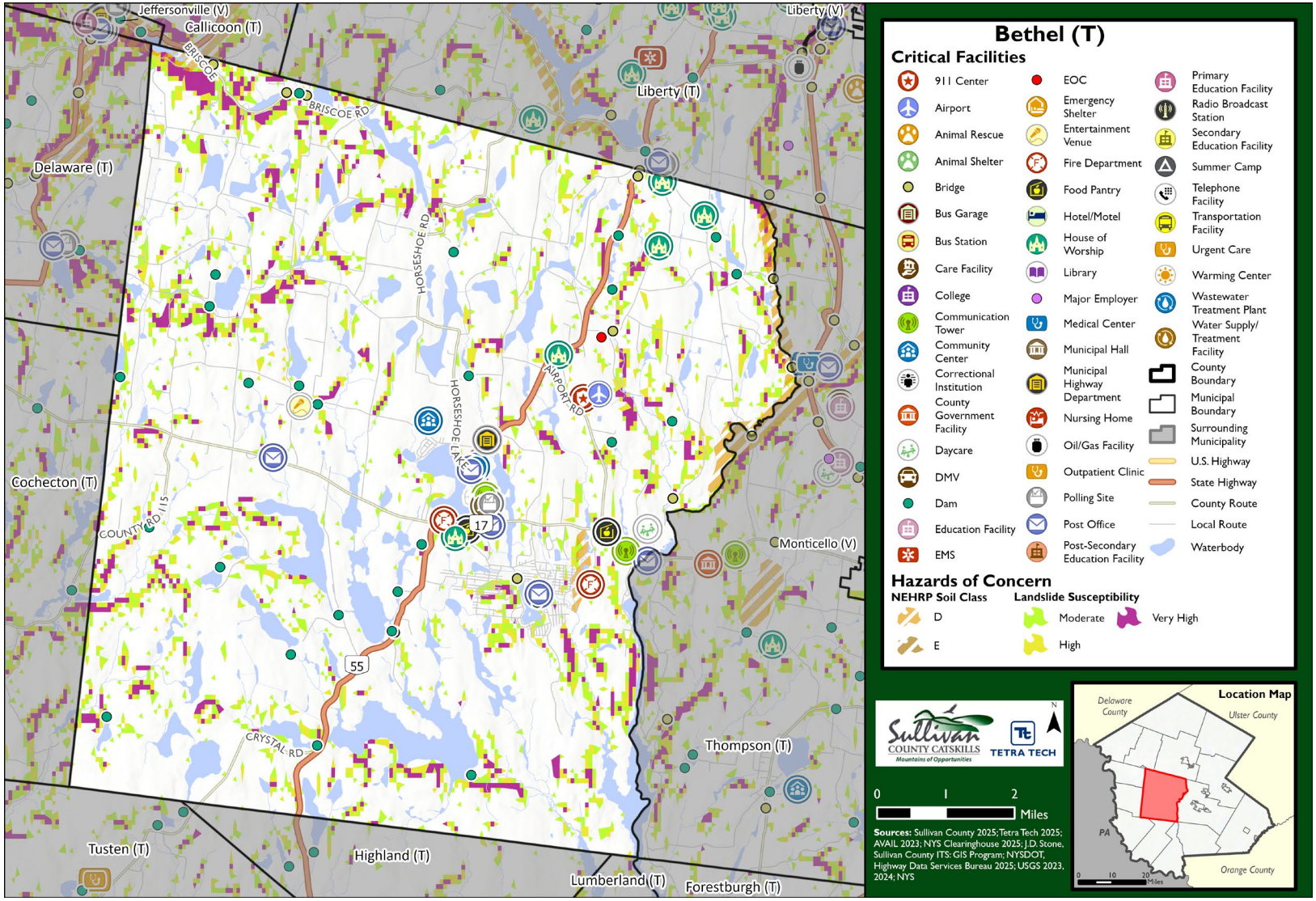


Figure 4-2. Bethel NEHRP Soil and Landslide Area Map



4.3.2 Previous Event History

The history of natural and non-natural hazard events in Bethel is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 4-7 and Table 4-8 provide details on the loss and damage in Bethel during hazard events since the last hazard mitigation plan update.

Table 4-7. Presidential Disaster Declarations History in Bethel

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Bethel
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Town abided by social distancing, work from home orders, and masking mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town did not incur any documented damage or losses
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town did not incur any documented damage or losses

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 4-8. Hazard Event History in Bethel

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Bethel
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town did not incur any documented damage or losses
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town did not incur any documented damage or losses

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Bethel
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town did not incur any documented damage or losses
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

4.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 4-9 includes an inventory of critical facilities and infrastructure for the Town of Bethel.

Table 4-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Eight bridges and five dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

4.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Bethel Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 4-10.

Table 4-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Town reported issues with Beaver dams at the forest reserve. Laird Road has a beaver dam along this area. Pine Grove Road culvert collapsed and has since been repaired due to a break. DEC has also flagged areas of concern including, Warmouth Road culvert, Black Lake Estates (Little Black Lake South of 17B), and John Bishop Road. Boy Scouts have permits to work on the issue at Reservoir Pond - Mahls Road.
Drought	There is a mix of well water and private water systems (not town owned). There are certain areas that will go dry, however most reports are unverified complaints. The Smallwood Seasonal Water Company has reports that system is aging and infrastructure upgrades are needed (this is the company the Town is buying). The Town also has a report on exactly what needs to be done with the water system.
Earthquake	No known impacts
Flood	Brook Road, West Shore Road, Smallwood, Mountain Lakes Road (Beaver dams can overflow this), Ballard Road, Lake Shore Road.
Landslide	No known impacts
Pandemic	Town abided by social distancing, work from home orders, and social distancing.
Severe Storm	Town reported that power is typically lost for days to weeks, and the Town is fully NYSEG. Homeowners also do not let the Town cut down trees which results in road blockages, power outages and other issues with emergency response.
Severe Winter Storm	Town Highway is very effective at clearing roadways. State and County are effective at clearing roadways as well. Town reported that power is typically lost for days to weeks, and the Town is fully NYSEG. Homeowners also do not let the Town cut down trees which results in road blockages, power outages and other issues with emergency response.
Wildfire	The Town reported that the Boy Scout Camp had a fire around 3-5 years ago and it burned around 500 acres. Fire departments are shorthanded due to age and limited staff.

4.3.5 Vulnerable Community Assets

Representatives from the Town of Bethel Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 4-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 4-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	White Lake Homes and Smallwood report flooding concerns. Swan Lake is vulnerable due to high concentration.	**Local Roads, Highways, Culverts, Bridges**	Brook Road, West Shore Road, Smallwood, Mountain Lakes Road (Beaver dams can overflow this), Ballard Road, Lake Shore Road.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Municipal Buildings	The Town Hall, Ambulance Corps and Schools do not have backup power.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Beaver dams tend to flood the dog park and water can get high. Walking trails are occasionally washed out. There is also minor flooding at the Forest Reserve	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Highway is currently getting a new facility, and the Town got a new salt/sand barn about 5-6 years ago.
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	Senior Housing does not have backup power.	**Utilities**	Concern with trees knocking power down and efficiency of restoring power. Limited tree trimming is done.
Fire/Police Stations	Fire Departments (8) need back up power.	**Wastewater Treatment Plants**	A combination of Town owned sewer treatment (1,000 residents hooked up) and private septic systems. Some privately owned wastewater treatment plants. The Town has I&I issues and 90 percent was rectified, but issues still occur. There are needed upgrades that are mandated.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	There is a mix of well water and private water systems (not town owned). There are certain areas that will go dry, however most reports are unverified complaints. The Smallwood Seasonal Water Company has reports that system is aging and infrastructure upgrades are needed (this is the company the Town is buying).
Hospitals	Not applicable	**Other**	No known impacts

4.3.6 Dams

Table 4-12 includes all dams in the Town of Bethel. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.

- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 4-12. Dams Located in Bethel

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-0199	Toronto Lake Reservoir Dam	Black Lake Creek	Eagle Creek Hydro Power, LLC	Private	Hydroelectric	High Hazard Dam
148-5943	Bishop's Road Pond Dam	Judson Brook	Basil & Bungalows, LLC	Private	Not Found	Hazard Classification Not Assigned
147-0299	Briscoe Lake Dam	TR-East Branch Callicoon Creek	Lake Briscoe INC	Private	Recreation	Low Hazard Dam
148-5506	Toronto Lake Dam	Toronto Creek	Iroquois Hunting & Fishing Club, INC	Private	Recreation	Low Hazard Dam
148-5778	Bethel Woods Center Dam	TR - Lemons Brook	Bethel Woods Center	Private	Recreation	Low Hazard Dam
148-5759	Kauneonga Estates Dam	TR - Judson Brook	Kauneonga Estates Inc.	Private	Recreation	Low Hazard Dam
148-2814	Fraser's Pond Dam	TR-Mongaup River	Roland Degroot and Russell Fraser	Private	Recreation	Low Hazard Dam
148-1483	Kappy's Lake Dam	TR-Mongaup River	I KAPLAN	Private	Recreation	Low Hazard Dam
148-1201	Quigan Dam	Beaverdam Brook	M J QUIGAN	Private	Recreation	Low Hazard Dam
148-1186	Wheeler Pond Dam	TR-West Branch Mongaup River	Horace Wheeler	Private	Recreation	Low Hazard Dam
148-4997	Commonwealth Farms Dam	-	Commonwealth Enterprises Products Corporation	Private	Fire Protection, Stock, Or Small Farm Pond, Fish and Wildlife Pond	Low Hazard Dam
148-1167	Woods Pond Dam	TR-West Branch	Sam Woda	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
		Mongaup River				
148-4224	Mountain Lake Dam	White Lake Brook	Smallwood Estates INC	Private	Recreation, Water Supply - Secondary	Low Hazard Dam
148-4842	Kris Krekun Pond Dam	TR-Black Lake Creek	Krsto Krekun	Private	Recreation	Low Hazard Dam
148-2045	Wasserlauf Dam	TR-Black Lake Creek	David Wasserlauf	Private	Recreation	Low Hazard Dam
148-0219	Black Lake Dam	TR-Black Lake Creek	Pajud Realty Corporation	Private	Flood Control and Storm Water Management	Low Hazard Dam
148-4486	Lake Superior Dam	TR-Black Lake Creek	NYSOPRHP – Palisades Interstate Park Commission	State	Recreation	Low Hazard Dam
148-1116	Filippini Pond Dam	TR-Lemons Brook	Bethel Woods Center	Private	Recreation	Low Hazard Dam
148-4598	Indian Field Pond Dam	TR-Toronto Reservoir	Indian Field Hunting and Fishing Club INC	Private	Recreation	Low Hazard Dam
148-4154	Forman Pond Dam	Unnamed	Dr. Marvin Forman	Private	Recreation	Low Hazard Dam
148-4484	Mallory Pond Dam	Mallory Brok	Cherokee Preserve Club	Private	Recreation	Low Hazard Dam
148-5022	Tuzzolind Pond Dam	TR-Hunter Lake	Carl Tuzzolind	Private	Other	Low Hazard Dam
148-4597	Hunter Lake Dam	Jaketown Creek	John Danchak	Private	Recreation	Low Hazard Dam
148-3044	Albert Pines Pond Dam	Tenmile River	URI Weistein	Private	Recreation	Low Hazard Dam
148-0813	Wildcat Dam	TR-Smith Mill Brook	Bou Scouts of America	Private	Recreation	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Toronto Lake Reservoir Dam sends Town updates on status and if work is being done.

4.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 4-13 identifies the preliminary hazard ranking for Bethel, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 4-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	Significant amount of dams in the Town.	Medium
Drought	Medium	Disagree	Low	Town does not have significant verified issues	Low
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Disagree	High	NYSEG concerns and tree trimming issues	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

4.4 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 4-14 through Table 4-17.

4.4.1 Development and Permitting

Table 4-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town issues permits, Building Department
What is your process for tracking building permits?	Town uses software for tracking permits
Are permits tracked by hazard area? (For example, floodplain development permits.)	A Floodplain Development Permit is required for all work performed in the floodplain including the construction or alteration of any structure and site work. All applications must be reviewed by the Building Inspector for compliance with the applicable Building Codes and Zoning Ordinances prior to placement on the Planning Board agenda, if applicable
Does your community have a buildable land inventory? If yes, please describe.	The Town has updated buildout maps and plans available

Table 4-15. 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
2020				
Total Permits	20	2	10	32
Permits within SFHA	0	0	0	0
2021				
Total Permits	37	1	1	39
Permits within SFHA	0	0	0	0
2022				
Total Permits	59	4	7	70
Permits within SFHA	0	0	0	0
2023				
Total Permits	21	1	13	35
Permits within SFHA	0	0	0	0
2024				
Total Permits	22	3	1	26
Permits within SFHA	0	0	0	0
2025				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-

SFHA = Special Flood Hazard Area (1% flood event)
Note: At the time of this plan update, the Town was not able to provide permitting totals for the year 2025.

Table 4-16. Recent Major Development and Infrastructure from 2020 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
Swan in Swan	Residential	144	8-1-64	-	In Development
174 Old White Lake	Residential	22	8-1-88.1	-	In Development

Table 4-17. 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
MFR Development	Residential	32	3.5-4.3	-	Planning Board Review
600 Mt. Hope	Residential	37	7-1-22.3	-	Planning Board Review
Horseshoe Lake Development	Residential	28	22-1-11.3	-	Planning Board Review
Swan Lakenest	Residential	183	9-1-7.2, 8.1, 8.2, 9-1-6, 8.3	-	Planning Board Review

4.5 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 Table 4-1 is responsible for maintaining this information.

4.5.1 NFIP Statistics

Table 4-18 summarizes the NFIP policy and claim statistics for the Town of Bethel.

Table 4-18. Bethel NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360815#
# Policies	0
# Claims (Losses)	2
Total Loss Payments	$6,671.33
# Repetitive Loss Properties	1
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

4.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 4-19.

Table 4-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Smallwood, White Lake Brook, Mongaup River, Gale Road, Creamery Road
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	BetteJean Gettel, Building Inspector
What local department is responsible for floodplain management?	The Town of Bethel Code Enforcement Officer/ Building Inspector is hereby appointed Local Administrator to administer and implement this Chapter by granting or denying floodplain development permits in accordance with its provisions.

NFIP Topic	Comments
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 178 Flood Damage Prevention
What is the date that your flood damage prevention ordinance was last amended?	September 26, 2014
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, Inspections and engineering are all done and software backs it up
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. Substantial improvement also means "cumulative substantial improvement." The term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
Are there other local ordinances, plans or programs (e.g., site plan review) that support	Yes, they consider flood risk and height restrictions

NFIP Topic	Comments
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?	

4.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Bethel 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 Bethel to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

4.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 4-20 and Table 4-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 4-20. Regulatory Capabilities in Bethel

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as	Chapter 135 Uniform Construction Code	Town of Bethel Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		otherwise provided in the Uniform Code, other state law or other section of this chapter, all buildings, structures and premises, regardless of use or occupancy, are subject to the provisions this chapter.		
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Chapter 178 Flood Damage Prevention	Code Enforcement/ Building Inspector
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	The Site Plan Review process recognizes that some developments and uses, even though generally suitable for location in a particular district, are, because of their design (materials, details, texture), character, nature, size, complexity or other indicia of probable impact, capable of adversely affecting the goals for which this Chapter is established unless careful consideration has been given to critical design elements.	Chapter 345-31, 2014	Town Administration
Stormwater Management Code	Yes	No preliminary plan shall be reviewed or approval granted until the Town Planning Board receives a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications of the New York State Stormwater Management Design Manual and New York Standards and Specifications for Erosion and Sediment Control.	Chapter 300-26, 2008	Town Board
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Town in accordance with the Town of Bethel Comprehensive Plan. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Town residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Protecting the attractiveness of the Town environment by requiring effective design of all subdivisions.	Chapter 300, 2008	Planning Board
Wellhead Protection	Yes	By the adoption of this chapter, the Town Board of the Town of Bethel declares its intent to regulate the installation of wells in the Town of Bethel in a manner consistent with the New York State Health Department Administration Rules and Regulations, Part 72 (Appendix A), and the Public Health Service Drinking Water Standards of 1962 in order to promote the	Chapter 338, 1995	Town Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		general health, safety and welfare of the citizens of the Town.		
Zoning/Land Use Code	Yes	The intent of this chapter is to establish a specific and detailed plan for the orderly and desirable development and use of land in the Town of Bethel in accordance with the authority granted to the Town under Article 16 of the New York Town Law.[1] This chapter is, moreover, intended to protect and promote public health, safety, morals, comfort, convenience and the general welfare of the people by meeting the goals, objectives and recommendations set forth in the Comprehensive Plan and to effectuate the Comprehensive Plan.	Chapter 345, 2009	Zoning Board

Planning Capabilities

Table 4-21. Planning Capabilities in Bethel

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	This plan is designed to offer the Town a toolbox of ideas and actions that can be implemented over time to improve agricultural opportunities in Bethel, preserve important farmlands, and maintain open lands as part of the landscape.	Town of Bethel Agriculture and Farland Protection Plan, August 11, 2010	Farmland Protection Plan Committee
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The Comprehensive Plan aims to establish the objectives that the community wants to achieve, and will guide future sustainable growth within the municipality, enhance the local cultural identity, and protect natural and cultural local resources. Plan is currently being updated.	Town of Bethel Comprehensive Plan, 2026	Town Board, Planning Board
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Yearly Budget	Annual Budget	Town Board
Community Wildfire Protection Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Comprehensive Emergency Management Plan (CEMP)	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens in the event of an emergency of disaster.	Emergency Management Plan, 2010	Town Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	Yes	The Habitat Management Plan for Mongaup Valley Wildlife Management Area (WMA) serves as the overarching guidance for habitat management. The plan incorporates management recommendations from Unit Management Plans, existing WMA habitat management guidelines, NY Natural Heritage Program's WMA Biodiversity Inventory Reports, Bird Conservation Area guidelines, and other documents available for individual WMAs.	Habitat Management Plan for Mongaup Valley Wildlife Management Area, 2022	NYS DEC
Local Waterfront Revitalization Plan	No	White Lake is eligible for this plan, but funding is needed to be able to create this.	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

4.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 4-22 details the available administrative and technical capabilities of the Town.

Table 4-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	No	Contracted
Construction/Building/Code Enforcement Department	Yes	The Building Inspector issues building permits for any construction which is structural in nature in the Town of Bethel.
Economic Development Commission/Committee	Yes	BLDC
Emergency Management/Public Safety Department	Yes	
Environmental Commission/Specialist	Yes	Sustainable Bethel Committee
Grant Writer	Yes	
Maintenance Programs to Reduce Risk	Yes	DPW
Mitigation Planning Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Mutual Aid Agreements	Yes	Emergency Response
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Town Board
Planning Board	Yes	The Planning Board is a seven-member board. Each member is appointed for a seven-year term. Alternates are appointed for a five-year term. The duty of the Board is to act upon but not limited to lot line changes, site plans, change of use, special use permits and sign structures as well as the planning, growth and development of the community. The board also reviews and approves or disapproves subdivisions.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	No	Consultants are retained for this
Planners or engineers with an understanding of natural hazards	No	Consultants are retained for this
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	No	Consultants are retained for this
Professionals trained in conducting damage assessments	No	Consultants are retained for this
Public Works/Highway Department	Yes	The Highway Superintendent is an elected official; term is two years. He is responsible for Highway Department employees, maintenance and purchase of equipment, supplies, scheduling town road maintenance and improvements, snow and ice removal, and roadway signs, for all Town roads.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	Yes	Contracted
Zoning Board of Appeals	Yes	The Zoning Board of Appeals is a seven-member board. Each member is appointed for a seven-year term. Alternates are appointed for a five-year term. The duty of the Board is to act upon but not limited Use and Area Variances.
Other	No	-

4.6.3 Fiscal Capability

Table 4-23 summarizes financial resources available to Bethel.

Table 4-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	Yes, these are set up through the Town. Sewer Project
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes, Sewer
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes, USDA loan for Highway Barn
FEMA funding programs	Yes, Pine Grove Culvert
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

4.6.4 Education and Outreach Capability

Table 4-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 4-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, Monthly newsletter from the Clerk
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Departments and Facebook (Town and Supervisor Page)
Hazard mitigation information available on your website	Yes
Local News	No, County would do this
Natural disaster/safety programs in place for schools	Not applicable

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Lions Club reaches out to seniors and there is a Senior Program at the Senior Center (Meals on Wheels)
Public information officer or communications office	Yes, Town Staff
Social media for hazard mitigation education and outreach	Yes, Facebook (Town and Supervisor Page)
Warning systems for hazard events	Social Media

4.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 4-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 4-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

4.7 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.

4.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Bethel-1—Bethel – Upgrade Route 141/Route 55 Culvert	
Hazards Addressed	Flood, Hurricane
Lead Agency / Department	Bethel Highway
Supporting Agency / Department	Sullivan County Highways and Bridges
Action Location	Roadways
Summary of Original Problem	Restaurant Row, an important commercial zone located on a county-owned road, experiences basement flooding due to an undersized culvert.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing the culvert under the Restaurant Row and installing new protective measures to reduce debris buildup.
Action Category	-
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project completed

T. Bethel-2—Bethel – Backup Power Generation to Provide Warming Centers for Influx of Long-term Summer Camp Populations	
Hazards Addressed	Coldwave
Lead Agency / Department	Bethel Supervisor
Supporting Agency / Department	Sullivan County Division of Emergency Management
Action Location	-
Summary of Original Problem	At Risk Populations warming station
Summary of Solution (Project)	Reduce risk to at risk populations from extreme cold temperatures by locating a warming center at one of the following location: Bethel Senior Center; one of the 8 fire houses; at town hall; or, at the school. All proposed locations require backup power generators.
Action Category	-
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	There is no backup power at any of the facilities listed above. All locations are warming centers.
If discontinue, explain why	Not applicable

4.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Bethel identified the following mitigation efforts completed since the last HMP:

- The Town has performed structural work to dams to reduce risk of dam failure at the Reservoir Pond Dam and Wassaerlauf Dam.
- The Town performed vegetation removal and bank stabilization measures at several bodies of water including Little Black Lake, White Lake, and Swan Lake.
- Town purchased the Smallwood Seasonal Water Company to offer water services to its own residents.

4.7.3 Identified Issues

The Town of Bethel has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well.
- Toronto Lake Reservoir Dam is a Class I High Hazard Dam that is located on Toronto Reservoir and Black Lake Creek. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of woodland areas and recreation areas. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near White Lake, Swan Lake, White Lake Brook, and Mongaup River are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.
  - Brook Road
  - West Shore Road
  - Smallwood
  - Ballard Road
  - Lake Shore Road
  - Shore Road
  - Gale Road
  - Creamery Road
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times along Mountain Lakes Road, Laird Road, and within the Forest Reserve. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.

- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is sorely needed for all municipal officials and for code enforcement officials in charge of municipalities.
- The Smallwood Seasonal Water Company has noted in reports that its water system is in need of infrastructure upgrade. The Smallwood Seasonal Water Company is being purchased by the Town, with the purchase anticipated to be closed in April 2026.
- Town Sewerage Plant has a number of inflow and infiltration issues (I&), though approximately 90-percent have been rectified. Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread human waste and disease and pollute drinking water sources. Mitigation measures must be implemented, as per NYS DEC mandates.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall, Ambulance Corps, Senior Housing facility, and the Fire Department facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- White Lake is eligible for a Local Waterfront Revitalization Plan to be developed for its waterway area, but the Town lacks funding within its budget to support the development of the plan. Local Waterfront Revitalization Plans are community-driven programs designed to guide sustainable development, enhance public access, and revitalize underutilized waterfront areas.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Pine Grove Road, Warmouth Road, Black Lake Estates, and John Bishop Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters; these locations have been noted as areas of concern by NYS DEC.
- The Town has an established tree trimming program in place; however, private property owners have not welcomed Town employees to maintain trees located on private property. It is unknown the safety of trees throughout the Town located on private property. During wind events or heavy snow, falling tree branches can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.
- Fire departments within the Town are shorthanded frequently due to age and limited staff. The shrinking staffing capabilities are a concern, as portions of the Town are wooded or forested. Without a fire response from first responders, the risk to the wildfire hazard will increase.

4.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Bethel participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Bethel 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.

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 4-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-BethelT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-BethelT-02. Toronto Lake Reservoir Dam Rehab

Lead Agency:	Dam Owners (Eagle Creek Hydro Power, LLC)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Toronto Lake Reservoir Dam is a Class I High Hazard Dam that is located on Toronto Reservoir and Black Lake Creek. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of woodland areas and recreation areas. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Toronto Lake Reservoir Dam, as well as request an updated inspection of the dam. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-BethelT-03. Floodprone Roads

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near White Lake, Swan Lake, White Lake Brook, and Mongaup River are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding. • Brook Road • West Shore Road • Smallwood • Ballard Road • Lake Shore Road • Shore Road • Gale Road • Creamery Road	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-BethelT-04. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times along Mountain Lakes Road, Laird Road, and within the Forest Reserve. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Action 2026-BethelT-05. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is sorely needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-BethelT-06. Water System Upgrades

Lead Agency:	Smallwood Water District	
Supporting Agencies:	Town Board, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Smallwood Seasonal Water Company has noted in reports that its water system is in need of infrastructure upgrades. Infrastructure has been damaged previously from passing weather systems which exposed weaknesses in the system's infrastructure. The Smallwood Seasonal Water Company is being purchased by the Town, with the purchase anticipated to be closed in April 2026.	
Description of the Solution:	The Town will review the Smallwood Seasonal Water Company water system report to evaluate and implement measures to ensure the infrastructure will not cause any health or safety concerns to the population which it serves.	
Estimated Cost:	High	
Potential Funding Sources:	Town Budget, Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS) Grant Program, Water Pollution Control Grants Program, FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities. Access to municipal water systems enhances the quality of life for residents by providing a reliable source of water for drinking, cooking, and sanitation, which are essential for daily living. Moreover, these systems support recreational activities and contribute to the aesthetic value of communities through well-maintained water bodies and parks.	
Impact on At Risk Populations:	Implementing any necessary upgrades to the water system will assist in the prevention of waterborne diseases and ensures that the water supplied is free from harmful substances such as lead and bacteria.	
Impact on Future Development:	This action will ensure water systems in the Town are working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures the water systems in the Town, which are critical pieces of infrastructure and part of the water lifeline, are working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify issues but do not implement preventative measures	Issues likely to reoccur
	Retract purchase	Costly, inefficient, could be a detriment to residents

Action 2026-BethelT-07. Sewerage Plant I&I Mitigation

Lead Agency:	Sewer Department	
Supporting Agencies:	Town Board, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Town Sewerage Plant has a number of inflow and infiltration issues (I&), though approximately 90-percent have been rectified. Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread human waste and disease and pollute drinking water sources. Mitigation measures must be implemented, as per NYS DEC mandates.	
Description of the Solution:	The Sewer Department and Engineering will work to evaluate and identify measures to rectify all I&I issues. The Sewer Department will implement proactive maintenance and monitoring of service lateral sewer lines, cap cleanouts, and routine inspections and maintenance of private lateral lines to help prevent future overflow of untreated wastewater into the environment and reduce the pressure on wastewater treatment facilities.	
Estimated Cost:	High	
Potential Funding Sources:	Town Budget, Clean Water State Revolving Fund (CWSRF), FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Treatment plants are crucial for protecting public health, preserving ecosystems, and ensuring sustainable water use. By resolving issues at the sewerage plant, the Town can ensure the safety of those in and around the community.	
Impact on At Risk Populations:	Treatment plants remove harmful contaminants from wastewater. By effectively treating sewage, these plants ensure that the materials released back into the environment are safe and clear of harmful bacteria, thereby preventing the spread of diseases.	
Impact on Future Development:	This action will ensure the sewerage plant is working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures sewerage plant, a critical facility and part of the water lifeline, is working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify issues but do not implement preventative measures	Issues likely to reoccur
	Close plant and outsource treatment	Costly, inefficient

Action 2026-BethelT-08. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Fire Department, Ambulance Corps, Senior Housing facility	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall, Ambulance Corps, Senior Housing facility, and the Fire Department facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Fire Department, Ambulance Corps, Senior Housing facility	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-BethelT-09. Local Waterfront Revitalization Plan

Lead Agency:	Planning Board	
Supporting Agencies:	Town Board, NYS DOS	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	White Lake is eligible for a Local Waterfront Revitalization Plan to be developed for its waterway area, but the Town lacks funding within its budget to support the development of the plan. Local Waterfront Revitalization Plans are community-driven programs designed to guide sustainable development, enhance public access, and revitalize underutilized waterfront areas.	
Description of the Solution:	The Town will work to develop a Local Waterfront Revitalization Plan for White Lake. The plan will establish goals for long term land and water uses and will specify the legal techniques for implementation. Local regulations will be designed to implement a clear overall concept of how the community's waterfront will be used. Guidance for plan development will be sought from NYS DOS.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, Local Waterfront Revitalization Program,	
Implementation Timeline:	Within 4 years	
Goals Met:	1, 2, 3, 5	
Benefits:	The Local Waterfront Revitalization Plan will improve water quality, protect natural resources, promote public access, and stimulate economic development while guiding development away from sensitive areas.	
Impact on At Risk Populations:	This action will provide a long-term vision for waterfront areas, balancing environmental, recreational, and commercial priorities. This ensures all populations have access to the waterfront areas.	
Impact on Future Development:	This action will assure that new development is designed to reduce impacts from the natural forces of flooding, erosion and rising water levels. It will also bring land use regulations into better conformity with the objectives of State regulations for the protection of natural areas.	
Impact on Critical Facilities/Lifelines:	The plan will ensure public access is provided to the body of water. Further this action will prevent the displacement of essential water dependent uses (recreational, commercial and industrial) by uses which do not require a waterfront location.	
Impact on Capabilities:	This action will produce a new planning capability for the Town, as well as increase zoning and land use capabilities.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Develop plan but do not utilize it to guide future development	Future development may not be appropriate for the zoned areas, which may impede on economic benefits
	Develop the plan but do not include green infrastructure or natural based solutions into future development	Revitalization of the area surrounding White Lake may not flourish.

Action 2026-BethelT-10. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Pine Grove Road, Warmouth Road, Black Lake Estates, and John Bishop Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters; these locations have been noted as areas of concern by NYS DEC.	
Description of the Solution:	In addition to the culverts on Pine Grove Road, Warmouth Road, Black Lake Estates, and John Bishop Road, the Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-BethelT-11. Private Property Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has an established tree trimming program in place; however, private property owners have not welcomed Town employees to maintain trees located on private property. It is unknown the safety of trees throughout the Town located on private property. During wind events or heavy snow, falling tree branches can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.	
Description of the Solution:	The Town will provide contact information to property owners for a forester to assess trees on private properties. The Town will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Town.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-BethelT-12. Fire Response Mutual Aid

Lead Agency:	Town Board		
Supporting Agencies:	Jeffersonville Fire District, Kauneonga Lake Fire District, Kenoza Lake Fire District, Smallwood-Mongaup Valley Fire District, Swan Lake Fire District, White Lake Fire District		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire	
Description of the Problem:	Fire departments within the Town are shorthanded frequently due to age and limited staff. The shrinking staffing capabilities are a concern, as portions of the Town are wooded or forested. Without a fire response from first responders, the risk to the wildfire hazard will increase.		
Description of the Solution:	The Town and the fire districts which identify the Town to be within their jurisdiction, will evaluate the feasibility of entering mutual aid agreements with neighboring fire districts to provide response coverage should the need arise.		
Estimated Cost:	Low		
Potential Funding Sources:	Town Budget, Staff Time		
Implementation Timeline:	Within 3 years		
Goals Met:	1, 2		
Benefits:	Mutual aid offers several benefits that enhance community safety including the rapid deployment of resources, resource sharing, enhanced training and preparedness, strengthened community safety, and the bolstering of relationships with neighboring communities and districts.		
Impact on At Risk Populations:	This action will ensure that those in need receive services should the current fire districts be unavailable due to limitations with staffing or if assets are already deployed to another incident.		
Impact on Future Development:	Future development would be secure in knowing response capabilities in the Town are strengthened through partnerships with surrounding fire districts and any emergency needs can be met.		
Impact on Critical Facilities/Lifelines:	This action strengthens and ensures the safety and security lifeline can function properly within the Town.		
Impact on Capabilities:	The emergency response capabilities in the Town will be enhanced.		
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	Merge all fire districts to lessen burden of staffing	Staffing may be more available, but merging districts can be costly due to training, support, and operational needs	
	Increase pay for services to all fire districts to hire additional staffing	The Town may be unable to dictate where payments for services are allocated at each Fire District	

Table 4-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-BethelT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-BethelT-02	Toronto Lake Reservoir Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-BethelT-03	Floodprone Roads	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-BethelT-04	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium
2026-BethelT-05	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-BethelT-06	Water System Upgrades	0	1	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2026-BethelT-07	Sewerage Plant I&I Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-BethelT-08	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-BethelT-09	Local Waterfront Revitalization Plan	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	High
2026-BethelT-10	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-BethelT-11	Private Property Tree Assessment	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2026-BethelT-12	Fire Response Mutual Aid	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

5. VILLAGE OF BLOOMINGBURG

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Bloomingburg 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 Bloomingburg, describes who participated in the planning process, assesses Bloomingburg's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

5.1 HAZARD MITIGATION PLANNING TEAM

The Village of Bloomingburg identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 5-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 5-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eziel Fleischman, Village Mayor Address: 13 North Rd, Bloomingburg, NY 12721 Phone Number: (845) 733-1400 Email: mayor@bloomingburgny.gov	Name/Title: Debra Beuerman, Village Clerk Address: 13 North Rd, Bloomingburg, NY 12721 Phone Number: (845) 733-1400 Email: dbeuerman@bloomingburgny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: Don Roat, Code Enforcement Officer Address: 13 North Rd, Bloomingburg, NY 12721 Phone Number: (845) 733-1400 Email: buildinginspector@bloomingburgny.gov	
Additional Contributors	
Name/Title: Russ Wood, Former Mayor Method of Participation: Provided key information in the planning process	

5.2 COMMUNITY PROFILE

5.2.1 Community Classifications

Table 5-2 summarizes classifications for community programs available to Bloomingburg.

Table 5-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

5.2.2 Community Profile

Geographical Description

The Village of Bloomingburg straddles the border between Sullivan and Orange Counties. It is situated in a valley with adjacent agricultural lands and wooded hills.

Government Type and Description

The Village is governed by a Village Board, which is comprised of the Mayor, Assistant to the Mayor, and three trustees (Bloomingburg NY 2025).

Table 5-3 through Table 5-6 note land area, population, and building stock information for the Village of Bloomingburg.

Table 5-3. Total Land Area in the Village of Bloomingburg

Jurisdiction	Total Land Area	
	Acres	Square Miles
Bloomingburg (V)	430.6	0.7

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 5-4. Population Estimates in the Village of Bloomingburg

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
1,032	1.3%	1,022	1.3%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 5-5. At Risk Populations in the Village of Bloomingburg

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English-Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
59	5.8%	288	28.2%	200	19.6%	83	8.1%	596	58.3%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 5-6. General Building Stock in the Village of Bloomingburg

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
172	$223,874,493	127	$70,219,701	32	$68,261,608	4	$33,770,628	9	$51,622,555

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

5.3 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 Bloomingburg's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

5.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Bloomingburg are shown in Figure 5-1 and Figure 5-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Bloomingburg has significant exposure.

Figure 5-1. Bloomingburg Flood, Wildfire and Dam Inundation Area Map

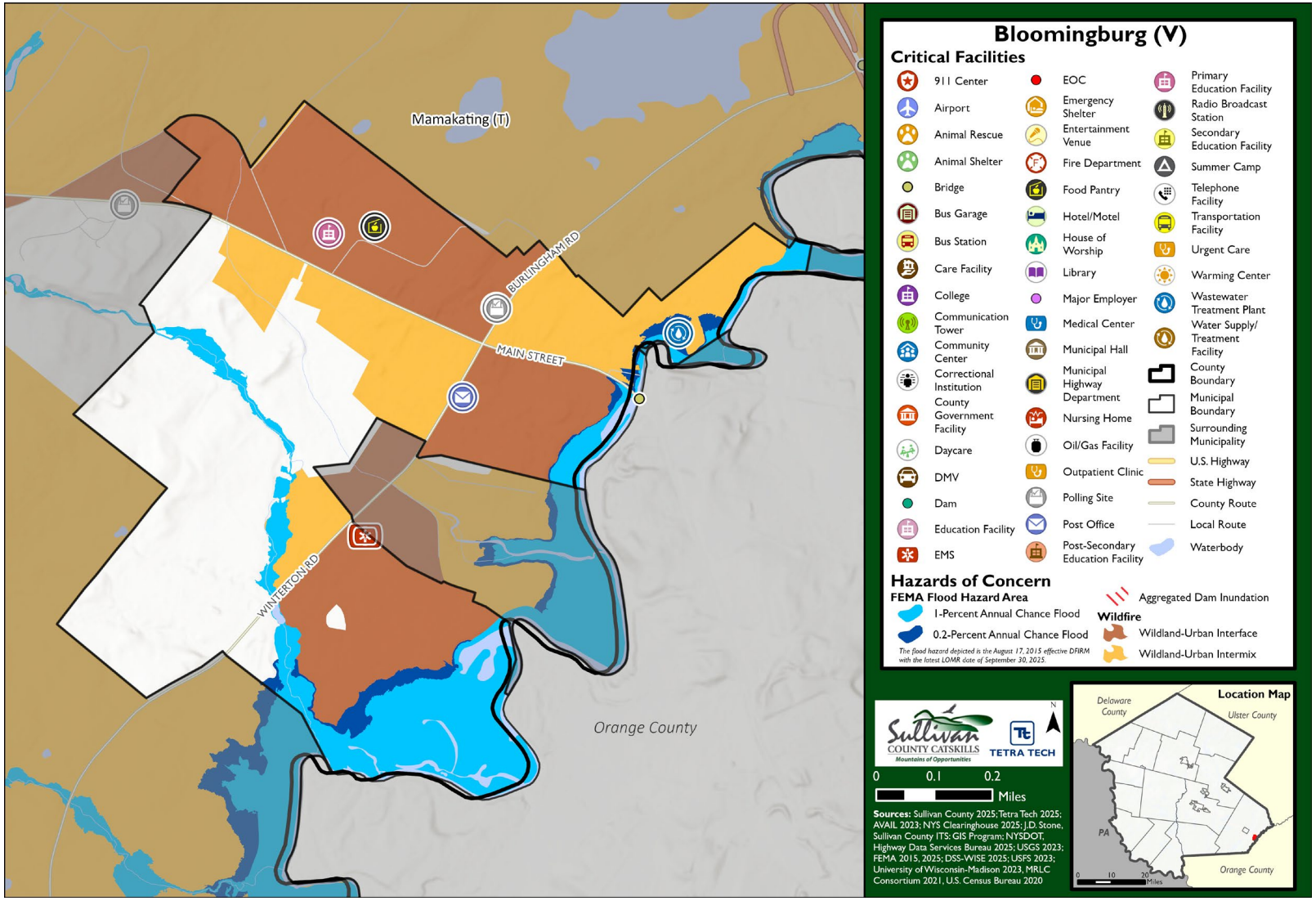
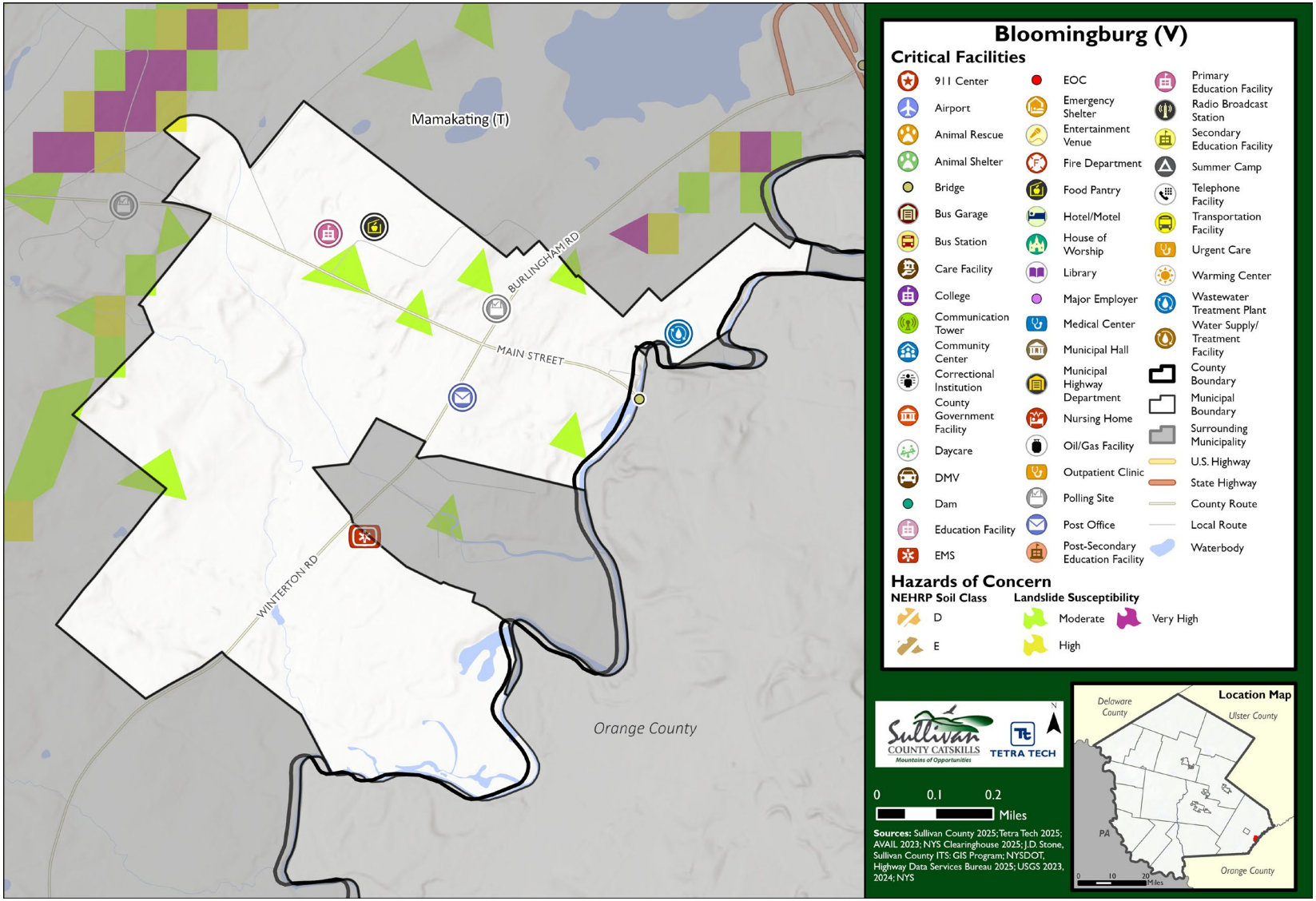


Figure 5-2. Bloomingburg NEHRP Soil and Landslide Area Map



5.3.2 Previous Event History

The history of natural and non-natural hazard events in Bloomingburg is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 5-7 and Table 5-8 provide details on the loss and damage in Bloomingburg during hazard events since the last hazard mitigation plan update.

Table 5-7. Presidential Disaster Declarations History in Bloomingburg

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Bloomingburg
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Village abided by masking mandates, social distancing, work from home orders
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Village did not incur any known documented damage or losses.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Village did not incur any known documented damage or losses.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 5-8. Hazard Event History in Bloomingburg

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Bloomingburg
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Village did not incur any known documented damage or losses.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Village did not incur any known documented damage or losses.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Village did not incur any known documented damage or losses.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Village did not incur any known documented damage or losses.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Village did not incur any known documented damage or losses.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Village did not incur any known documented damage or losses.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Bloomingburg
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Village did not incur any known documented damage or losses.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Village did not incur any known documented damage or losses.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Village did not incur any known documented damage or losses.
Late 2023/Early 2024	-	-	Lightning Storm impacted electrical infrastructure. Pump Station was impacted and resulted in significant damage.
March 2025	-	-	Village Hall roof blew off in a windstorm.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

5.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 5-9 includes an inventory of critical facilities and infrastructure for the Village of Bloomingburg.

Table 5-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Wastewater Treatment Plant	Wastewater Treatment Plant	N	Y	2026-Bloomingburg-01	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: One bridge was identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Village were constructed to required standards, protecting the structure(s) to the required flood level(s).

5.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Bloomingburg Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 5-10.

Table 5-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Village is not impacted by Beaver Dam breaks, nor is concerned with manmade dam structures.
Drought	One part of the Village has a water system that is privately owned, and the rest of the Village is on well water. Some residents have experienced some dry wells and people have to drill new ones or drill deeper.
Earthquake	No infrastructure impacts
Flood	The Village typically does not experience flooding issues due to the topographic nature.
Landslide	No known impacts
Pandemic	The Village learned from the COVID Pandemic.
Severe Storm	Village power is typically restored within hours during power outages. The Town of Mamakating would supply sheltering for the Village, as the Village does not have a facility that could operate as a temporary shelter.
Severe Winter Storm	The Town of Mamakating Highway Department is contracted to do snowplowing and they are very effective.
Wildfire	No known impacts

5.3.5 Vulnerable Community Assets

Representatives from the Village of Bloomingburg Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 5-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 5-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not applicable	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	No known impacts
Municipal Buildings	The Village Hall and two pump stations do not have backup power.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks,	No known impacts	**Public Transportation including fleets,**	No known impacts

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)		**transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	No known impacts
Fire/Police Stations	The Fire District is its own entity in the Village (they have backup power).	**Wastewater Treatment Plants**	There are some I&I concerns relating to the wastewater system; an upgrade is needed. The Village is also actively looking to upgrade capacity of sewer plant.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See table above
Hospitals	Not applicable	**Other**	No known impacts

5.3.6 Dams

Table 5-12 includes all dams in the Village of Bloomingburg. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 5-12. Dams Located in Bloomingburg

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
None Identified						

Notable comments regarding dams in the jurisdiction:

One Dam borders the Village, no known issues with the dam.

5.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 5-13 identifies the preliminary hazard ranking for Bloomingburg, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 5-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Disagree	High	Number of wells that have gone dry is increasing	High
Earthquake	Low	Agree	-	-	Low
Flood	High	Disagree	Medium	Village is not floodprone	Medium
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Disagree	Low	Village learned from COVID-19 pandemic how to respond.	Low
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

5.4 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 5-14 through Table 5-17.

5.4.1 Development and Permitting

Table 5-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Village Building Department issues permits
What is your process for tracking building permits?	IPS
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	No

Table 5-15. 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
2020				
Total Permits	1	7	0	8
Permits within SFHA	0	0	0	0
2021				
Total Permits	1	6	0	7
Permits within SFHA	0	0	0	0
2022				
Total Permits	0	1	0	1
Permits within SFHA	0	0	0	0
2023				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2024				
Total Permits	2	12	0	14
Permits within SFHA	0	0	0	0
2025				
Total Permits	0	8	0	8
Permits within SFHA	0	0	0	0

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

Table 5-16. Recent Major Development and Infrastructure from 2020 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
Emerald Living Estates	Multi-Family	60 Units/ 8 Structures	Honey Lane	-	In Progress
Winterton Gardens, LLC	Multi-Family	27 Units/4 Structures	Pozna Ct.	-	In Progress
Josef Perlstein	Multi-Family	20 Units/2 Structures	Citron Drive	-	In Progress
Winterton Condominiums, LLC	Multi-Family	18 Units/3 Structures	Market Street	-	Completed
Chestnut Ridge Development	Multi-Family	115 Units/24 Structures	Chestnut Ridge	-	Completed
Winterton Condominiums, LLC	Multi-Family	24 Units/ 4 Structures	Presidents Way	-	Completed
Bloomingburg Gardens	Multi-Family	21 Units/ 3 Structures	LeLov Ct.	-	Completed
Hershy Markovitz	Multi-Family	4 Units, 1 Structure	70 Main Street	-	Completed
Roosa Gardens P1, LLC	Multi-Family	6 Units/ 3 Structures	6 Old Roosa Gap	-	Completed

Table 5-17. 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
There are a multitude of future development planned (500-700 new units proposed in the next 5 years), dependent on municipal water and sewer plan expansion. All projects are at Planning Board review.					

5.5 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 Table 5-1 is responsible for maintaining this information.

5.5.1 NFIP Statistics

Table 5-18 summarizes the NFIP policy and claim statistics for the Village of Bloomingburg.

Table 5-18. Bloomingburg NFIP Summary of Policy and Claim Statistics

NFIP Community Number	361473#
# Policies	13

# Claims (Losses)	-
Total Loss Payments	-
# Repetitive Loss Properties	-
# Severe Repetitive Loss Properties	-

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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

- = Data is Not Available

Source: FEMA 2025

5.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 5-19.

Table 5-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Not applicable
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
What local department is responsible for floodplain management?	Code Enforcement Officer
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 25, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Yes, there is an application to fill out for floodplain development. Permit review is done
What are the barriers to running an effective NFIP program in your community, if any?	Limited Staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	If training is needed, the Village will request it

NFIP Topic	Comments
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Not tracked, but no concerns
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	None
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Not that the Village is aware of
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Interested property owners would educate themselves at the bank
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	Yes, material is referenced
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, Site Plan Review

5.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Bloomingburg 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 Bloomingburg to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

5.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 5-20 and Table 5-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 5-20. Regulatory Capabilities in Bloomingburg

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Village. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law or other section of this chapter, all buildings, structures and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Local Law #8, 2017	Village of Bloomingburg Building Department
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging	Local Law #1 of 2011	Code Enforcement Officer

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	The Site Plan Review process recognizes that some developments and uses, even though generally suitable for location in a particular district, are, because of their design (materials, details, texture), character, nature, size, complexity or other indicia of probable impact, capable of adversely affecting the goals for which this Chapter is	Village of Bloomingburg Zoning Law, Article XI	Combined Zoning and Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		established unless careful consideration has been given to critical design elements. It is the purpose of the Section to provide a vehicle for the review of the applications attention to such elements.		
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Village in accordance with the Village Comprehensive Plan. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Village residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Protecting the attractiveness of the Village environment by requiring effective design of all subdivisions.	Subdivision Ordinance	Combined Zoning and Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	The purpose of this Zoning Law, its regulations, and its zoning district as outlined on the zoning map, is to provide for orderly growth in accordance with a comprehensive plan as presented in the Village of Bloomingburg 2004 Planning Policy Document, adopted March 3, 2005, to lessen congestion in streets, to secure safety from fire, flood and other dangers, to provide adequate light and air, to prevent overcrowding of land, to avoid concentration of population, to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefore, to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements, and to promote the health, safety, and general welfare of the public.	Village of Bloomingburg Zoning Law, 2017	Code Enforcement Officer

Planning Capabilities

Table 5-21. Planning Capabilities in Bloomingburg

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The Comprehensive Plan aims to establish the objectives that the community wants to achieve, and will guide future sustainable growth within the municipality, enhance the local cultural identity, and protect natural and cultural local resources.	Village of Bloomingburg Comprehensive Plan	Combined Zoning and Planning Board, Village Board
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

5.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 5-22 details the available administrative and technical capabilities of the Village.

Table 5-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	The Building Department is responsible for the administration of the NYS Building Code, NYS Fire Prevention Code, the NYS Housing Code and the NYS Energy Code, the Planning and Zoning regulations, the Federal Flood Plain Regulations and various other local laws assigned to the Building Inspector for administration and enforcement by the Village Board.
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	County
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Engineering Company as needed
Maintenance Programs to Reduce Risk	Yes	Village Maintenance
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Town of Mamakating Highway Department and County
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	No	-
Planning Board	Yes	Planning Commission
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	No	Contracted
Planners or engineers with an understanding of natural hazards	Yes	Contracted
Professionals or Engineers trained in construction	Yes	Contracted

Capability Type	In Place in Municipality? Yes or No	Comments
practices related to buildings and/or infrastructure		
Professionals trained in conducting damage assessments	Yes	Contracted
Public Works/Highway Department	Yes	Town of Mamakating Highway Department
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	Yes	Contract as needed
Zoning Board of Appeals	Yes	Combined Zoning and Planning Board has five members
Other	No	-

5.6.3 Fiscal Capability

Table 5-23 summarizes financial resources available to Bloomingburg.

Table 5-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	Yes, Sewer Plant
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes, sewer
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	In process
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

5.6.4 Education and Outreach Capability

Table 5-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 5-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, as needed the Village distributes community letter
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire District
Hazard mitigation information available on your website	Yes
Local News	No
Natural disaster/safety programs in place for schools	Yes, Fire Safety and evacuation
Organizations that conduct outreach to at risk populations and underserved populations	Yes, County
Public information officer or communications office	Yes, Village Staff
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	No

5.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 5-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 5-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate

Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

5.7 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.

5.7.1 Past Mitigation Action Status

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Bloomingburg-1— Comprehensive Plan and Zoning Update	
Hazards Addressed	Extreme Temperatures, Severe Storm, Severe Winter Storm, Geologic Hazards
Lead Agency / Department	Village of Bloomingburg Supervisors Office
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	Comprehensive Plan is out of date and does not reflect current growth and development trends throughout the Village. Zoning code needs to be reviewed and revised to ensure compliance with floodplain requirements.
Summary of Solution (Project)	Comprehensive Plan was last updated in 2004. To reduce long-term hazard risks, the Village will update its comprehensive plan and zoning ordinances to restrict future development of camp communities and other 2nd home developments. Clearcutting of hillside properties for large camp developments is a landslide concern. Current zoning does not include effective enough vegetation clearance regulations or steep slope provisions.
Action Category	-
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Bloomingburg-2—Vegetation Maintenance/Trimming Plan	
Hazards Addressed	Tornado, Snow Storm, Ice Storm, Wind, Hurricane, Cold wave
Lead Agency / Department	Village of Bloomingburg Mayors Office
Supporting Agency / Department	DPW
Action Location	-
Summary of Original Problem	During storm events, particularly with severe winds, dead/loose limbs can lead to downed trees that cause road blockages, power outages and additional property damage.
Summary of Solution (Project)	Reduce long-term risk of all hazards for existing assets and future development by developing and implementing a Village tree-trimming program, that includes Village maintenance, coordination with utility tree-trimming, and outreach promoting private property tree maintenance, particularly in areas where trees are prone to damage property and utility infrastructure.
Action Category	-
Current Status – Please select one:	Discontinued – Ongoing Capability
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Ongoing Capability

T. Bloomingburg-3—Increase Capacity to Manage Snow on Pedestrian Walkways	
Hazards Addressed	Ice Storm, Snowstorm
Lead Agency / Department	Village Maintenance Department
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	Winter storms deposit substantial amounts of snow on pedestrian walkways and paths. An abundance of snow on walkways becomes a slipping hazard and makes travel difficult, especially for some vulnerable populations. Municipal plows cannot reach walkway to and from the wastewater treatment plant.
Summary of Solution (Project)	Reduce the long-term risks of snow and ice storms to existing critical assets and future developments by purchasing an additional snowblower for clearing walkways.
Action Category	-
Current Status – Please select one:	Discontinued – No longer relevant
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	No Longer Relevant

5.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Village of Bloomingburg identified the following mitigation efforts completed since the last HMP:

- Village upgrades water infrastructure as needed.

5.7.3 Identified Issues

The Village of Bloomingburg has identified the following vulnerabilities within their community for mitigation strategy development:

- The Wastewater Treatment Plant is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- Critical facilities require backup power to ensure continuity of operations. The Village Hall and two pump stations do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- The Village Sewerage Plant has a number of inflow and infiltration issues (I&). Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread human waste and disease and pollute drinking water sources. Mitigation measures must be implemented.
- The Village seeks to grow safely and economically to support and benefit its population. The comprehensive plan is out of date and does not reflect current growth and development trends. This plan serves as a strategic framework to guide the future growth and development of a community, ensuring sustainable and organized progress, and must be updated.
- The Village zoning code needs to be reviewed and revised to ensure compliance with floodplain requirements and assess the need for restrictions for development in areas with steep slopes, soft soils, or which closely border woodland or forested areas. A zoning code regulates the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.
- The Village has been impacted by drought, as water wells have dried, causing residents to drill new wells or drill deeper in existing wells. Drought puts a strain on agriculture, recreational use, and daily use of water. The Village does not have a water conservation ordinance to encourage and support water conservation efforts. Extreme temperatures may enhance the impacts of drought by causing the rapid evaporation of moisture from potable wells and floral and fauna.
- The availability of safe drinking water is crucial to the longevity of the Village; some residents have experienced some dry wells and people have to drill new ones or drill deeper. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water

quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.

5.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Bloomingburg participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Bloomingburg 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 Village priorities.

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 5-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-Bloomingburg-01. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Wastewater Treatment Plant is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Village will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Village.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-Bloomingburg-02. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Village Board, Sewer Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Village Hall and two pump stations do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Village Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Village will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Village Budget, User Fees	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-Bloomingburg-03. Sewerage Plant I&I Mitigation

Lead Agency:	Sewer Department	
Supporting Agencies:	Village Board, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village Sewerage Plant has a number of inflow and infiltration issues (I&). Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread human waste and disease and pollute drinking water sources. Mitigation measures must be implemented.	
Description of the Solution:	The Sewer Department and Engineering will work to evaluate and identify measures to rectify all I&I issues. The Sewer Department will implement proactive maintenance and monitoring of service lateral sewer lines, cap cleanouts, and routine inspections and maintenance of private lateral lines to help prevent future overflow of untreated wastewater into the environment and reduce the pressure on wastewater treatment facilities.	
Estimated Cost:	High	
Potential Funding Sources:	Village Budget, Clean Water State Revolving Fund (CWSRF), FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Treatment plants are crucial for protecting public health, preserving ecosystems, and ensuring sustainable water use. By resolving issues at the sewerage plant, the Village can ensure the safety of those in and around the community.	
Impact on At Risk Populations:	Treatment plants remove harmful contaminants from wastewater. By effectively treating sewage, these plants ensure that the materials released back into the environment are safe and clear of harmful bacteria, thereby preventing the spread of diseases.	
Impact on Future Development:	This action will ensure the sewerage plant is working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures sewerage plant, a critical facility and part of the water lifeline, is working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify issues but do not implement preventative measures	Issues likely to reoccur
	Close plant and outsource treatment	Costly, inefficient

Action 2026-Bloomingburg-04. Comprehensive Plan

Lead Agency:	Combined Zoning and Planning Board	
Supporting Agencies:	Village Board, Sullivan County	
Hazards of Concern:	☒Dam Failure ☒Drought ☒Earthquake ☒Flood ☒Landslide	☒Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village seeks to grow safely and economically to support and benefit its population. The comprehensive plan is out of date and does not reflect current growth and development trends. This plan serves as a strategic framework to guide the future growth and development of a community, ensuring sustainable and organized progress, and must be updated.	
Description of the Solution:	The Village will review, revise, and update its comprehensive plan. To ensure that the local comprehensive plan incorporates hazard mitigation techniques, a courtesy review may be performed by the County Planning Department.	
Estimated Cost:	Staff time, Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 4, 5	
Benefits:	This action will have the Village review, revise, and update its comprehensive plan. The integration of hazard mitigation principles will present the opportunity for the Village to identify areas of the Village which may be impacted by hazards and plan for future land use accordingly.	
Impact on At Risk Populations:	The inclusion of hazard mitigation principles into the comprehensive plan may encourage discussions on how hazard risks may impact at risk populations in the Village.	
Impact on Future Development:	This action will have a direct impact on future land use in the Village, as the comprehensive plan guides land use principles in the Village.	
Impact on Critical Facilities/Lifelines:	Reviewing, revising, and updating the comprehensive plan to include hazard mitigation principles may present an opportunity to discuss hazard risks to critical facilities and lifelines in the Village.	
Impact on Capabilities:	This action will update a planning capability of the Village, making it more resilient.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Integrate hazard mitigation principles in only plan elements	The plan will miss integration opportunities in the comprehensive plan main document
	Integrate hazard mitigation principles in only comprehensive plan main document	The plan will miss integration opportunities in the plan elements

Action 2026-Bloomingburg-05. Zoning Code Review

Lead Agency:	Village Board	
Supporting Agencies:	Code Enforcement	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☒Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village zoning code needs to be reviewed and revised to ensure compliance with floodplain requirements and assess the need for restrictions for development in areas with steep slopes, soft soils, or which closely border woodland or forested areas. A zoning code regulates the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.	
Description of the Solution:	The Village will review and revise its zoning code. Revisions will be made using information from the hazard mitigation plan and the appropriate provisions under § 263 of the Town Law of the State of New York.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget, Smart Growth Community Planning Grant Program	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	The zoning code will regulate the built environment, outlining allowed building uses, densities, sizes, and other associated characteristics. As a result, incorporating hazard mitigation principles into the zoning code can help jurisdictions ensure that their communities are more resilient.	
Impact on At Risk Populations:	A zoning code can restrict development within various hazard areas, including those within flood-prone areas and locations with a higher risk to landslides. This restriction can result in increased safety to the populations which would otherwise build in these areas.	
Impact on Future Development:	The development and adoption of a zoning code can prevent or restrict future development in hazard areas, reducing risk to persons, property, and the environment.	
Impact on Critical Facilities/Lifelines:	Zoning codes can assist in outlining the development of an area which can assist when identifying response areas in the safety and security lifeline and evacuation priority areas within the transportation lifeline.	
Impact on Capabilities:	This action will create a new comprehensive capability for the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Create code without following State provisions	May not reach standards
	Create code without incorporating hazard mitigation principles	May not promote resiliency as much as possible

Action 2026-Bloomingburg-06. Water Conservation Ordinance

Lead Agency:	Code Enforcement	
Supporting Agencies:	Combined Zoning and Planning Board, Village Board, NYS DEC	
Hazards of Concern:	☐Dam Failure ☒Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has been impacted by drought, as water wells have dried, causing residents to drill new wells or drill deeper in existing wells. Drought puts a strain on agriculture, recreational use, and daily use of water. The Village does not have a water conservation ordinance to encourage and support water conservation efforts. Extreme temperatures may enhance the impacts of drought by causing the rapid evaporation of moisture from potable wells and floral and fauna.	
Description of the Solution:	The Village will develop a water conservation ordinance to outline water conservation efforts which should be taken during periods of low rainfall, extreme heat, and drought. The Village will look to NYS DEC for assistance in the development of the ordinance.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 3 years	
Goals Met:	2, 4, 5	
Benefits:	This action will support the safe, continued use of potable water to ensure there is adequate drinking water available to support residents. Furthermore, the ordinance will assist in ensuring agriculture practices have water available to support the grower's livelihood.	
Impact on At Risk Populations:	Populations will have access to potable water sources during periods of drought and extreme heat.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	A water conservation ordinance will mitigate potential impacts to the water sources for the Village. This action will inform residents of the importance of the ordinance and how over-utilizing water sources may impact the quality of life in the Village.	
Impact on Capabilities:	This action will ensure potable water is available within the jurisdiction during time of drought by developing a water conservation ordinance.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Only enforce ordinance and do not encourage water conservation practices year-round	Outside of drought periods, water issues may arise
	Do not publicize ordinance once developed	Residents will be uninformed and partaking in practices outside of the Village's ordinances

Action 2026-Bloomingburg-07. Safe Drinking Water

Lead Agency:	Village Board	
Supporting Agencies:	Engineering	
Hazards of Concern:	☐Dam Failure ☒Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the Village; some residents have experienced some dry wells and people have to drill new ones or drill deeper. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.	
Description of the Solution:	The Village will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The Village may choose to reference suggested projects from the US EPA's "*Incident Action Checklists*". Potential projects may include: • Develop an emergency drinking water supply plan and establish contacts to discuss procedures. • Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first. • Monitor water supply and calculate how long water could be provided if the drought persists • Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures. • Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system. • Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies. • Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network. • Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer. • Coordinate with other neighboring water systems to develop a water use plan. • Identify generator needs at water facilities. • Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911. • Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system. • Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Village Budget	
Implementation Timeline:	5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will permit the Village to investigate various methods to provide safe drinking water to its residents.	
Impact on At Risk Populations:	Safe and predicable water supplies are foundational to supporting at risk populations.	
Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.	
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.	
Impact on Capabilities:	This action will ensure the Village is able to maintain its supply of potable water.	

Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)		☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)		☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium	☐Low
Alternative	Action		Evaluation
	No action		Current problem persists
	Rely on State to resolve problem		State does not have jurisdiction
	Rely on County to resolve problem		County does not have jurisdiction

Table 5-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-Bloomingburg-01	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-Bloomingburg-02	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-Bloomingburg-03	Sewerage Plant I&I Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-Bloomingburg-04	Comprehensive Plan	0	1	1	1	1	0	1	1	1	1	1	1	0	1	11	High
2026-Bloomingburg-05	Zoning Code Review	0	1	1	1	1	1	1	1	1	1	1	1	0	1	12	High
2026-Bloomingburg-06	Water Conservation Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2026-Bloomingburg-07	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

6. TOWN OF CALLICOON

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Callicoon 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 Callicoon, describes who participated in the planning process, assesses Callicoon's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

6.1 HAZARD MITIGATION PLANNING TEAM

The Town of Callicoon identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 6-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 6-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Tom Bose, Town Supervisor Address: 19 Legion St, Jeffersonville, NY 12748-5514 Phone Number: (845) 482-5390, ext. 311 Email: tocsupervisor@hvcbiz.rr.com	Name/Title: Kim Klein, Town Clerk Address: 19 Legion St, Jeffersonville, NY 12748-5514 Phone Number: (845) 482-5390, ext. 300 Email: toctownclerk@hvc.rr.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Kristopher Scullion, Code Enforcement Officer Address: 19 Legion St, Jeffersonville, NY 12748-5514 Phone Number: 845-482-5390 Ext 308 Email: toccodedivision@hvc.rr.com	
Additional Contributors	
Name/Title: Ryan Bose, Highway Superintendent Method of Participation: Provided pertinent information to the development of the jurisdictional annex.	

6.2 COMMUNITY PROFILE

6.2.1 Community Classifications

Table 6-2 summarizes classifications for community programs available to Callicoon.

Table 6-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	-	-
NYSDEC Climate Smart Communities	No	-	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

6.2.2 Community Profile

Geographical Description

The Town of Callicoon, located in the southwestern part of Sullivan County, NY, is characterized by a diverse landscape of river valleys, rolling hills, and forested areas. It borders the Upper Delaware River to the west, which forms part of its boundary and contributes to the town's scenic and recreational appeal. The town's terrain includes fertile valleys suited for agriculture alongside upland areas covered with mixed hard wood forests. The Village of Jeffersonville lies within the town's geographic boundaries but functions as a separate municipality. Callicoon's geography supports a variety of outdoor activities and natural resource conservation, with the town participating in regional planning efforts to balance development and preservation. (Town of Callicoon n.d.)

Government Type and Description

The Town is governed by a Town Board comprised of five councilpersons. (Town of Callicoon n.d.)

Table 6-3 through Table 6-6 note land area, population, and building stock information for the Town of Callicoon.

Table 6-3. Total Land Area in the Town of Callicoon

Jurisdiction	Total Land Area	
	Acres	Square Miles
Callicoon (T)	30,590.7	47.8

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 6-4. Population Estimates in the Town of Callicoon

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
2,621	3.3%	2,594	3.3%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 6-5. At Risk Populations in the Town of Callicoon

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
566	21.8%	72	2.8%	15	0.6%	400	15.4%	142	5.5%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 6-6. General Building Stock in the Town of Callicoon

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,942	$1,579,365,779	1,761	$1,183,465,152	75	$144,622,934	2	$1,499,798	104	$249,777,895

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

6.3 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 Callicoon's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

6.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Callicoon are shown in Figure 6-1 and Figure 6-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Callicoon has significant exposure.

Figure 6-1. Callicoon Hazard Area Map

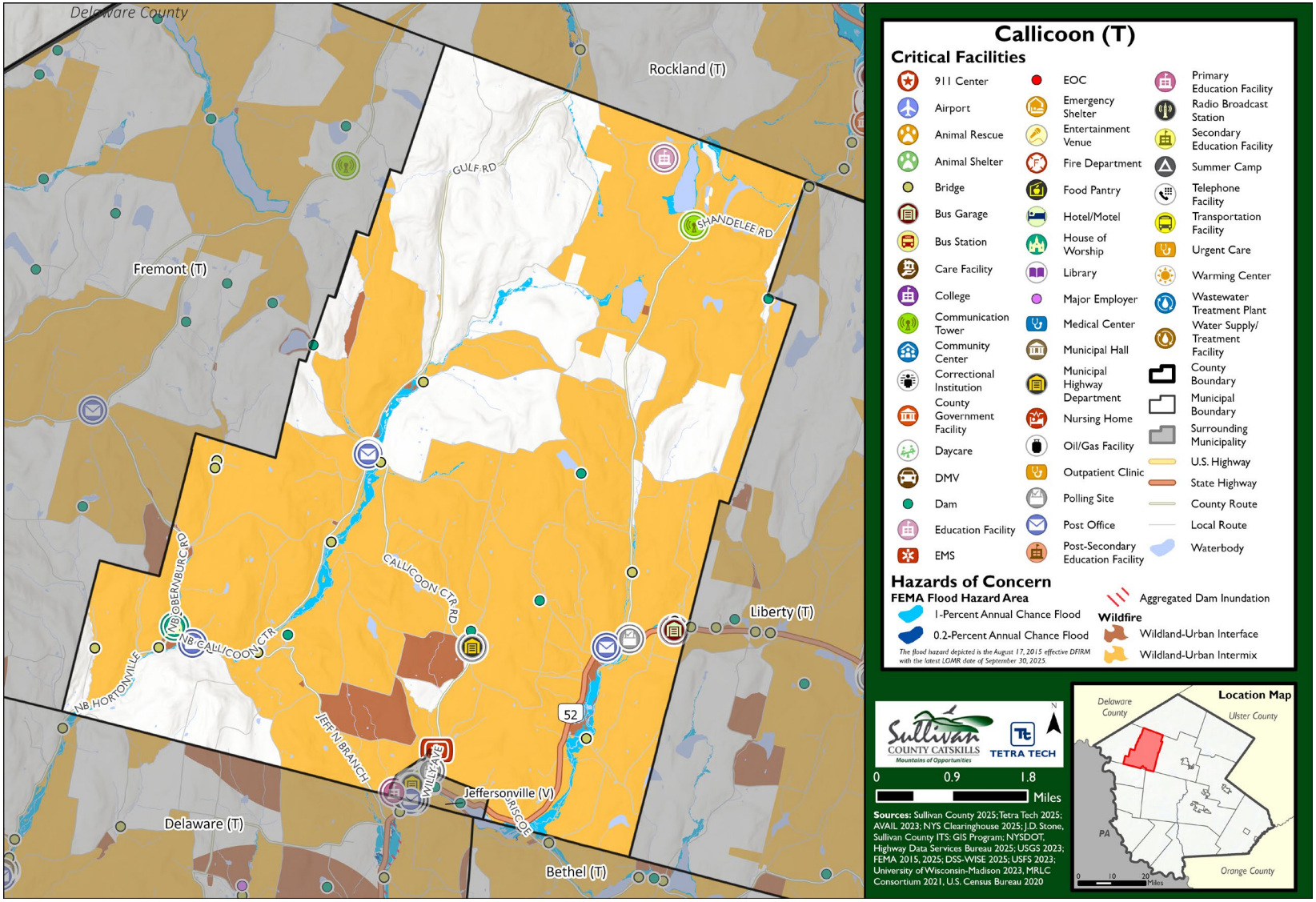
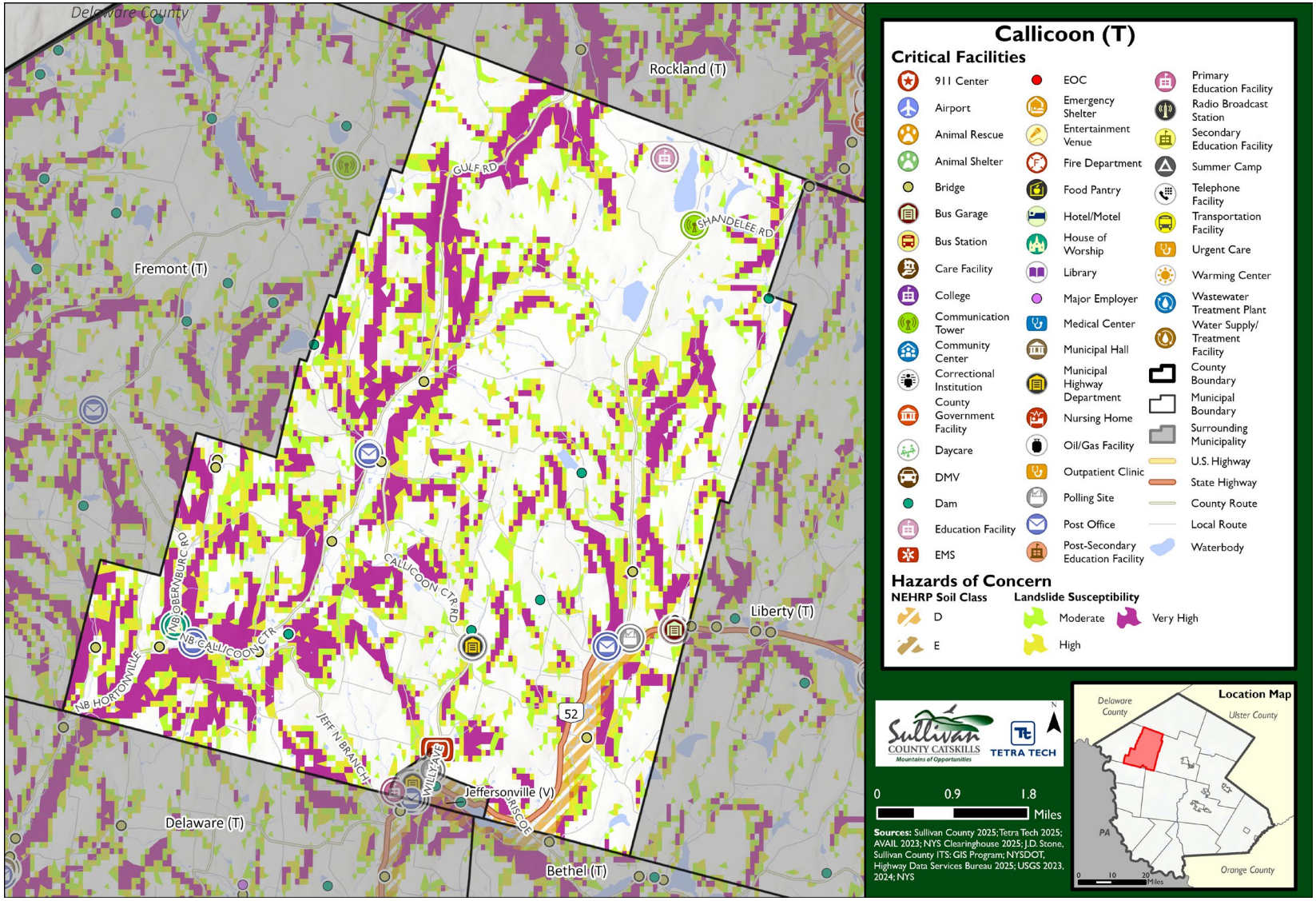


Figure 6-2. Callicoon Hazard Area Map



6.3.2 Previous Event History

The history of natural and non-natural hazard events in Callicoon is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 6-7 and Table 6-8 provide details on the loss and damage in Callicoon during hazard events since the last hazard mitigation plan update.

Table 6-7. Presidential Disaster Declarations History in Callicoon

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Callicoon
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Adhered to mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	High winds, some temporary outages
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	High winds, some temporary outages, minor flooding

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 6-8. Hazard Event History in Callicoon

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Callicoon
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Trees and wires downed, short-term power outages.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Trees and wires downed, short-term power outages.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Trees and wires downed, short-term power outages.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Trees and wires downed, short-term power outages.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Trees and wires downed, short-term power outages.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Trees and wires downed, short-term power outages.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood	Trees and wires downed, short-term power outages. Roadway damages and closed. Flash flooding occurred.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Callicoon
		stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Many trees and wires downed, short-term power outages. Old barns that were destroyed; houses damaged extensively.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Trees and wires downed, short-term power outages.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

6.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 6-9 includes an inventory of critical facilities and infrastructure for the Town of Callicoon.

Table 6-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Thirteen bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

6.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Callicoon Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 6-10.

Table 6-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Lake Jefferson Dam is an HHPD, breached in 2006 and emergency repair performed. Located just about Village. Has not produced energy in years. Private owners looking for funding but have not come across any. Looking into decommissioning and removing dam.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Drought	No immediate concerns but working with State to construct wellhead protection.
Earthquake	No known impacts
Flood	Flash flooding – lost properties and homes. Beaver dams have caused floods to impact roads – working with soil and water to address some beaver dams. Hahn/Weissmann Road culvert is undersized and has been washed out. Lake Jefferson Dam area and Youngsville are most vulnerable to flooding impacts – East Branch of Callicoon Creek bends at 90 degree at the historic school (used for storage), fire house is nearby, two apartment buildings, a church, several residencies vulnerable.
Landslide	No known impacts
Pandemic	Potential impacts, but with experience response is known.
Severe Storm	High winds for power outages and down trees.
Severe Winter Storm	Major concern is ice storms, impacting utilities, downing trees, etc.
Wildfire	Not a major concern

6.3.5 Vulnerable Community Assets

Representatives from the Town of Callicoon Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 6-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 6-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Concern with soils washed away as farmland is along riverbanks, impacting crops and yields.	**Area: Concentration of Local Businesses, Major Employers**	State Route 52 impacted heavily by flooding.
Area: Concentration of Residences	East Branch of Callicoon Creek bends at 90 degree at the historic school (used for storage); two apartment buildings and several residencies are vulnerable.	**Local Roads, Highways, Culverts, Bridges**	State Route 52 impacted heavily by flooding. Hahn/Weissmann Road culvert is undersized and has been washed out.
Municipal Buildings	Generators are needed at town facilities Town hall, highway garage, FD identified as cooling/warming centers – emergency evac.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	St. Francis in Youngsville vulnerable to East Branch of Callicoon Creek at the bend near the historic school. Jeffersonville Presbyterian Church also vulnerable to East Branch of Callicoon Creek.
Community Centers, Parks, Recreational Sites	Concern with soils washed away as farmland is along riverbanks, impacting crops and yields.	**Public Transportation including fleets, transportation**	Not applicable

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)		**infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	
Cultural/Historic Buildings/Sites	Youngsville school is a historic building. East Branch of Callicoon Creek bends at 90 degree at the historic school (used for storage). No hazard impacts, but close to the creek.	**Schools (K-12)**	Sullivan West Elementary is a shelter/relocation. It does have generators.
Elder-care Facilities	Not applicable	**Utilities**	Experienced a three-day power outage about 3 years ago. 2-3 day outage few years ago. Typically, outages won't last longer than 12 hours.
Fire/Police Stations	See above – Jeffersonville FD flooded and evacuated from East Branch of Callicoon Creek. 4 ft of water in Youngsville station.	**Wastewater Treatment Plants**	Wastewater Treatment Plant is located in a floodplain.
Gas Stations, Grocery Stores, Supermarkets	All may be impacted by flood hazard.	**Water: Drinking Water Resources**	No immediate concerns but working with State to construct wellhead protection.
Hospitals	Not applicable	**Other**	Post offices are in flood hazard area, or likely to be impacted.

6.3.6 Dams

Table 6-12 includes all dams in the Town of Callicoon. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 6-12. Dams Located in Callicoon

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-0766	Lake Jefferson Dam	East Branch Calicoon Creek	Barbara and Kevin Gref	Private	Hydroelectric, Recreation	High Hazard Dam
147-0345	Stump Pond Dam	TR-Panther Rock Brook	Adi Flesher & Leora Rachel Trub	Private	Recreation	Intermediate Hazard Dam
147-5807	Putter Pond Dam	Cattail Brook	Jo Ellen Putter	Private	Recreation	Low Hazard Dam
147-5325	Patrick Welsh Dam	-	Patrick Welsh	Private	Recreation	Low Hazard Dam
147-1068	Jeffersonville Reservoir Dam	TR-East Branch Calicoon Creek	Village of Jeffersonville	Local Government	Water Supply - Primary	Low Hazard Dam
147-4857	Mill Pond Dam	East Branch Calicoon Creek	Hilda Segar	Private	Fish and Wildlife Pond	Low Hazard Dam
147-5673	Anawanda Lake Dam	Anawanda Lake Discharge Stream	Callicoon Realty Corporation	Private	Recreation	Low Hazard Dam
147-0800	Gossweyler Pond Dam	TR- Calicoon Creek	Jacob Gossweyler	Private	Recreation	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Lake Jefferson Dam is an HHPD, breached in 2006 and emergency repair performed. Located just about Village. Has not produced energy in years. Private owners are looking for funding but have not come across any. Looking into decommissioning and removing dam. No concerns for the other dams.

6.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 6-13 identifies the preliminary hazard ranking for Callicoon, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 6-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	HHPD intown, while looking to decommission and remove, until the action is performed, the risk remains.	Medium
Drought	Medium	Disagree	Low	Risk still remains, but not medium rank	Low
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Disagree	Low	Town has implemented programs and policies and feels more capable to respond to risk.	Low
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Disagree	Low	Moreso a risk in Town for brush and structure fires, not wildfires.	Low

6.4 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 6-14 through Table 6-17.

6.4.1 Development and Permitting

Table 6-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town issues building permits
What is your process for tracking building permits?	Entered into an online system
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	Located in comprehensive plan and farmland preservation plan

Table 6-15. 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
2020				
Total Permits	-	-	-	11
Permits within SFHA	0	0	0	0
2021				
Total Permits	-	-	-	13
Permits within SFHA	0	0	0	0
2022				
Total Permits	-	-	-	8
Permits within SFHA	0	0	0	0
2023				
Total Permits	-	-	-	10
Permits within SFHA	0	0	0	0
2024				
Total Permits	-	-	-	13
Permits within SFHA	0	0	0	0
2025				
Total Permits	-	-	-	17
Permits within SFHA	0	0	0	0

SFHA = Special Flood Hazard Area (1% flood event)
Note: The Town provided total number of new permits but did not note the structure use.

Table 6-16. Recent Major Development and Infrastructure from 2020 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
No Recent Major Development and Infrastructure from 2020 to Present					

Table 6-17. 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
No Known or Anticipated Major Development and Infrastructure in the Next Five Years					

6.5 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 Table 6-1 is responsible for maintaining this information.

6.5.1 NFIP Statistics

Table 6-18 summarizes the NFIP policy and claim statistics for the Town of Callicoon.

Table 6-18. Callicoon NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360816#
# Policies	9
# Claims (Losses)	24
Total Loss Payments	$213,690.63
# Repetitive Loss Properties	6
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

6.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 6-19.

Table 6-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Near and along the East and North Branches of the Callicoon Creek
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Code Enforcement
What local department is responsible for floodplain management?	The Code Enforcement Officer of the Town of Callicoon is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 125 Flood Damage Prevention, 2011
What is the date that your flood damage prevention ordinance was last amended?	January 14, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011

NFIP Topic	Comments
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, engineering
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Will take advantage of any available trainings
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. Substantial Improvement also means "Cumulative Substantial Improvement." The term includes structures which have incurred "substantial damage", regardless of the actual repair work performed
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Yes, not many
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Refer to insurer
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Map Service Center, NY DEC resources
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, site plan review. Planning and zoning boards consider efforts to reduce flood risk.

6.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Callicoon 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 Callicoon to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

6.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 6-20 and Table 6-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 6-20. Regulatory Capabilities in Callicoon

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Callicoon, Sullivan County, New York This article is adopted pursuant to §10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this article.	Chapter 121 Fire Prevention and Building Construction, February 2022	Code Enforcement
Climate Change Ordinance	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program.	Chapter 125 Flood Damage Prevention, 2011	Code Enforcement
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	Special performance standards for areas of steep slope within any district have been included to ensure that development in these areas is done in such a way as to overcome the inherent natural hazards. The steep slope areas have been defined on a steep slopes map developed and maintained by the Planning Board as part of the Town Comprehensive Plan. They consist of those slopes in excess of a grade of 15% as depicted on said map.	Chapter 203 Zoning, February 2022	Zoning Officer
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	The Site Plan Review process recognizes that some developments and uses, even though generally suitable for location in a particular district, are, because of their design (materials, details, texture), character, nature, size, complexity or other indicia of probable impact, capable of adversely affecting the goals for which this Chapter is established unless careful consideration has been given to critical design elements.	Zoning Law	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Town in accordance with the Town of Bethel Comprehensive Plan. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Town residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Protecting the attractiveness of the Town environment by requiring effective design of all subdivisions.	Zoning Law	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	The intent of this chapter is to establish a specific and detailed plan for the orderly and desirable development and use of land in the Town of Callicoon in accordance with the authority granted to the Town under Article 16 of the New York Town Law.	Zoning Law	Code Enforcement

Planning Capabilities

Table 6-21. Planning Capabilities in Callicoon

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	This plan is designed to offer the Town a toolbox of ideas and actions that can be implemented over time to improve agricultural opportunities in Liberty, preserve important farmlands, and maintain open lands as part of the landscape.	Town of Callicoon Agriculture and Farmland Protection Plan	Farmland Protection Plan Committee
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	This comprehensive plan was developed with a long-range view and is intended to serve the needs of our residents both today and for the years into the future. Using the research conducted by the Comprehensive Plan Committee, and the public input garnered throughout the plan's development, it sets forth a framework for the development and implementation of land use regulations. However, it is important to remember that the plan itself is not legally binding. The recommendations contained herein are not binding and require separate action by the Town Board or Planning Board before becoming established as formal town laws and policies.	Comprehensive Plan Update, 2013	Comprehensive Plan Committee
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Performed annually	Annual Budgeting	Highway
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the	Comprehensive Emergency Management Plan, 2007	Sullivan County

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		jurisdiction or by agreement with other jurisdictions.		
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens in the event of an emergency of disaster.	Emergency Management Plan, 2008	Town Supervisor
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	This plan is designed to offer the Town a toolbox of ideas and actions that can be implemented over time to improve agricultural opportunities in Liberty, preserve important farmlands, and maintain open lands as part of the landscape.	Town of Callicoon Agriculture and Farmland Protection Plan	Farmland Protection Plan Committee
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

6.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 6-22 details the available administrative and technical capabilities of the Town.

Table 6-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Ward Engineering, Delaware Engineering
Construction/Building/Code Enforcement Department	Yes	Code Enforcement
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	FD, county sheriff
Environmental Commission/Specialist	No	DEC
Grant Writer	No	Can be contracted as needed
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Boat Evacuation
Open Space Board/Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Personnel skilled or trained in website development	Yes	Town Clerk
Planning Board	Yes	The planning board upholds and implements the community's development policies through the review and approval of subdivision proposals, site plans, and special use permits. The planning board also reviews any proposed amendments to the zoning laws and advises the Town Board on those matters.
Planning Department	Yes	Planning Board, ZBA
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	County
Planner or Engineer with knowledge of land development and land management practices	Yes	Ward Engineering, Delaware Engineering
Planners or engineers with an understanding of natural hazards	Yes	Ward Engineering, Delaware Engineering
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Ward Engineering, Delaware Engineering, Building Department
Professionals trained in conducting damage assessments	Yes	Ward Engineering, Delaware Engineering, Building Department
Public Works/Highway Department	Yes	The highway department responsibilities include repairing and maintaining town highways and bridges and snow removal.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Town Board
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The primary function of the Zoning Board of Appeals is to consider variance requests from the strict zoning laws when they create hardships or practical difficulties for property owners. The Zoning Board of Appeals also interprets zoning laws when in question.
Other	Yes	Town Assessor

6.6.3 Fiscal Capability

Table 6-23 summarizes financial resources available to Callicoon.

Table 6-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes - Budget
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Yes
Other State funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

6.6.4 Education and Outreach Capability

Table 6-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 6-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	No
Local News	No
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	County organizations
Public information officer or communications office	Supervisor

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	County

6.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 6-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 6-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	Moderate

6.7 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.

6.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Callicoon-1—Callicoon - Dewitt Flats Rd. Flooding at County Owned Bridge	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Sullivan County Planning Department
Supporting Agency / Department	Sullivan County Soil & Water
Action Location	Dewitt Flats Rd
Summary of Original Problem	Dewitt Flats Road and surrounding homes are experiencing flooding and erosion from a county-owned, undersized bridge.
Summary of Solution (Project)	Reduce long-term risk of property damage to new and existing development from flooding by upsizing the Dewitt Flats Road county bridge and performing bank stabilization to reduce erosion.
Action Category	-
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Still floodprone, but bridge replaced and wider. Keep bank stabilization to reduce erosion.
If discontinue, explain why	Project complete

T. Callicoon-2—Callicoon - Fire Station Flooding Issues	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Callicoon Town Supervisor
Supporting Agency / Department	DPW/Highway
Action Location	Fire Station
Summary of Original Problem	Callicoon Fire Stations, specifically Youngsville and Jefferson locations, experience flooding. The Youngsville station has experienced significant damage, with serious flooding occurring numerous times (e.g., 3 ft above freeboard during 2005, 2006, 2011, and 2014)
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water, conduct a local flood assessment (LFA) to accurately identify causes of flooding, including the appropriate bridge/culvert openings to eliminate blockage by debris.
Action Category	-
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project completed, the bridge was replaced by the state.

6.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Callicoon identified the following mitigation efforts completed since the last HMP:

- Sediment removal at State Route 52 and County 149 bridge.
- Highway has implemented a culvert inspection and maintenance program.
- Highway department will upsize culverts, as needed, when performing other infrastructure projects.
- Highway performs stormwater maintenance, including replacing gravel and rocks in retention ponds.
- Several properties have been acquired to fully reduce the flood risk.
- The Town replaced a storage water tank (125,000 gallons) for the Youngsville Water District with a new glass lined, steel “Aquastore” tank of the same capacity.

6.7.3 Identified Issues

The Town of Callicoon has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has six repetitive loss properties, but other properties may have been impacted by flooding as well, including local gas stations and grocery stores, the Town wastewater treatment plant, and federal post offices.
- Lake Jefferson Dam is a Class I High Hazard Dam that is located on the East Branch Callicoon Creek. The dam is owned by Barbara and Kevin Gref. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including East Main Street/Route 52, Lower Swiss Hill Road (Lake View Avenue), Lovett Lane, and Mill Street. The dam was last inspected in July 2025, with the results noting the structure was unsound and a deficiency having been recognized. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Water in the Town primarily comes from public and private wells; there is a need for wellhead protection to ensure groundwater is safe from contamination. A wellhead protection ordinance is designed to minimize the risk of contamination to the municipal water supply and to promote public health, safety, and general welfare.
- The East Branch of Callicoon Creek has stream bank erosion issues, threatening encroachment onto Route 52, farmland, and nearby properties including the historic school, fire department, two apartment buildings, two churches, and several residencies. Stream banks become eroded due to heavy rains from severe storms, degradation from flood waters and compacted snow and ice from severe winter storms. Stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements, should be considered to prevent flooding.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall, Highway Garage, and Fire Department, all which are identified as warming/cooling centers, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facilities. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culvert at the intersection of Hahn and

Weissmann Road is undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.

- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review of integrating floodplain management practices into zoning and building codes should be discussed.
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.

6.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Callicoon participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Callicoon 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.

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 6-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-CallicoonT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has six repetitive loss properties, but other properties may have been impacted by flooding as well, including local gas stations and grocery stores, the Town wastewater treatment plant, and federal post offices.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-CallicoonT-02. Lake Jeffersonville Dam Rehab

Lead Agency:	Dam Owners (Barbara and Kevin Gref)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer, Village of Jeffersonville	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Lake Jefferson Dam is a Class I High Hazard Dam that is located on the East Branch Callicoon Creek. The dam is owned by Barbara and Kevin Gref. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including East Main Street/Route 52, Lower Swiss Hill Road (Lake View Avenue), Lovett Lane, and Mill Street. The dam was last inspected in July 2025, with the results noting the structure was unsound and a deficiency having been recognized. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the Village of Jeffersonville and dam owners to complete an updated engineering study of Lake Jefferson Dam. The current EAP, last updated in November 2023, indicates various levels for emergency condition identification. Lake Jefferson Dam should be evaluated by the owners if the dam is in an emergency condition based upon the recent dam inspection results. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.

	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-CallicoonT-03. Wellhead Protection Ordinance

Lead Agency:	Planning Board	
Supporting Agencies:	Engineering, Town Board, NYS DEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Water in the Town primarily comes from public and private wells; there is a need for wellhead protection to ensure groundwater is safe from contamination. Pollutants can trickle into wellheads during and following severe storms, from flooding, and from snowmelt following severe winter storms. A wellhead protection ordinance is designed to minimize the risk of contamination to the municipal water supply and to promote public health, safety, and general welfare.	
Description of the Solution:	The Town will work with NYS DEC and other stakeholder agencies to develop a wellhead protection ordinance to ensure that well water has protections in place around well areas to reduce the risk of water contamination, which can assist in ensuring potable water in times of drought.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 4 years	
Goals Met:	2, 5	
Benefits:	The adoption of a wellhead protection ordinance assist in ensuring the Town, its residents, visitors, and businesses, have access to safe drinking water sources; reduces risk of environmental harm from spills or leaks which would otherwise infiltrate wells; and prevents contaminants from entering the water supply.	
Impact on At Risk Populations:	This action will take a proactive approach to safeguarding the area surrounding a water well or wellfield to prevent contamination of public water supplies.	
Impact on Future Development:	This action will ensure future developments which rely on well water has protections in place around the well area to reduce the risk of water contamination, which can assist in ensuring potable water in times of drought.	
Impact on Critical Facilities/Lifelines:	This action will take a proactive approach to safeguarding the area surrounding water wells or wellfield to prevent contamination of public water supplies.	
Impact on Capabilities:	This action will create a new regulatory capability for the Town.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Enact ordinance in rural areas of Town	Leaves the potential for contaminants to enter wells in unprotected locations
	Do not include limitations of land use surrounding wells	Potential for business or industries to use surrounding land and increase possible exposure

Action 2026-CallicoonT-04. East Branch of Callicoon Creek Erosion

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The East Branch of Callicoon Creek has erosion issues, threatening encroachment onto Route 52, farmland, and nearby properties including the historic school, fire department, two apartment buildings, two churches, and several residencies. Stream banks become eroded due to heavy rains from severe storms, degradation from flood waters and compacted snow and ice from severe winter storms. Stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements, should be considered to prevent flooding.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the East Branch of Callicoon Creek.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the West Branch of the Conewango Creek will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit Route 52 to remain open as a transportation route, will lower the risk of flood impacts to a fire department and two churches.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-CallicoonT-05. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Fire Department, Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall, Highway Garage, and Fire Department, all which are identified as warming/cooling centers, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facilities. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Fire Department	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-CallicoonT-06. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culvert at the intersection of Hahn and Weissmann Road is undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	In addition to the culvert at the intersection of Hahn and Weissmann Road, the Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-CallicoonT-07. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review of integrating floodplain management practices into zoning and building codes should be discussed.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-CallicoonT-08. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Table 6-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-CallicoonT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-CallicoonT-02	Lake Jeffersonville Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-CallicoonT-03	Wellhead Protection Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2026-CallicoonT-04	East Branch of Callicoon Creek Erosion	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-CallicoonT-05	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-CallicoonT-06	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-CallicoonT-07	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-CallicoonT-08	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

7. TOWN OF COCHECTON

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Cochecton 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 Cochecton, describes who participated in the planning process, assesses Cochecton's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

7.1 HAZARD MITIGATION PLANNING TEAM

The Town of Cochecton identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 7-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 7-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gary Maas, Town Supervisor Address: 74 Smales Road, Lake Huntington, NY 12752 Phone Number: (845) 932-8360, ext. 15 Email: supervisor@townofcochectonny.org	Name/Title: Jeff Daub, Highway Superintendent Address: 74 Smales Road, Lake Huntington, NY 12752 Phone Number: (845) 932-8737 Email: highway@townofcochectonny.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Charles Nystrom, Code Enforcement Officer and Building Inspector Address: 74 Smales Road, Lake Huntington, NY 12752 Phone Number: (845) 932-8360 ext.14 Email: codeofficer@townofcochectonny.org	
Additional Contributors	
Name/Title: Robert Smith, Planning Board Chair Method of Participation: Provided information pertinent to the development of the Town's annex.	
Name/Title: Edwin Grund, Deputy Supervisor Method of Participation: Provided information pertinent to the development of the Town's annex.	
Name/Title: Maryann Oumrim, Town Clerk Method of Participation: Provided information pertinent to the development of the Town's annex.	

7.2 COMMUNITY PROFILE

7.2.1 Community Classifications

Table 7-2 summarizes classifications for community programs available to Cochecton.

Table 7-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

7.2.2 Community Profile

Geographical Description

The Town of Cochecton is located along the western border of the county, adjacent to the Delaware River, which forms the boundary with Pennsylvania. The town features a landscape of river valleys, steep hills, and mixed forests, reflecting its position within the Upper Delaware River region. Cochecton's terrain includes areas of rugged hillsides and fertile floodplains near the river, supporting a mix of natural habitats and agricultural land. The Delaware River corridor is a significant geographic feature, offering scenic views and opportunities for recreation such as fishing, boating, and hiking. (Town of Cochecton 2017)

Government Type and Description

The Town is governed by a Town Board comprised of a Supervisor, Deputy Supervisor, and three council members.

Table 7-3 through Table 7-6 note land area, population, and building stock information for the Town of Cochecton.

Table 7-3. Total Land Area in the Town of Cochecton

Jurisdiction	Total Land Area	
	Acres	Square Miles
Cochecton (T)	22,809.6	35.6

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 7-4. Population Estimates in the Town of Cochecton

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
1,448	1.8%	1,392	1.8%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 7-5. At Risk Populations in the Town of Cochecton

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
405	29.1%	91	6.5%	10	0.7%	192	13.8%	117	8.4%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 7-6. General Building Stock in the Town of Cochecton

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,189	$1,051,465,789	1,096	$829,363,769	60	$114,996,440	4	$15,373,889	29	$91,731,691

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

7.3 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 Cochecton's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

7.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Cochecton are shown in Figure 7-1 and Figure 7-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Cochecton has significant exposure.

Figure 7-1. Cochecton Flood, Wildfire and Dam Inundation Area Map

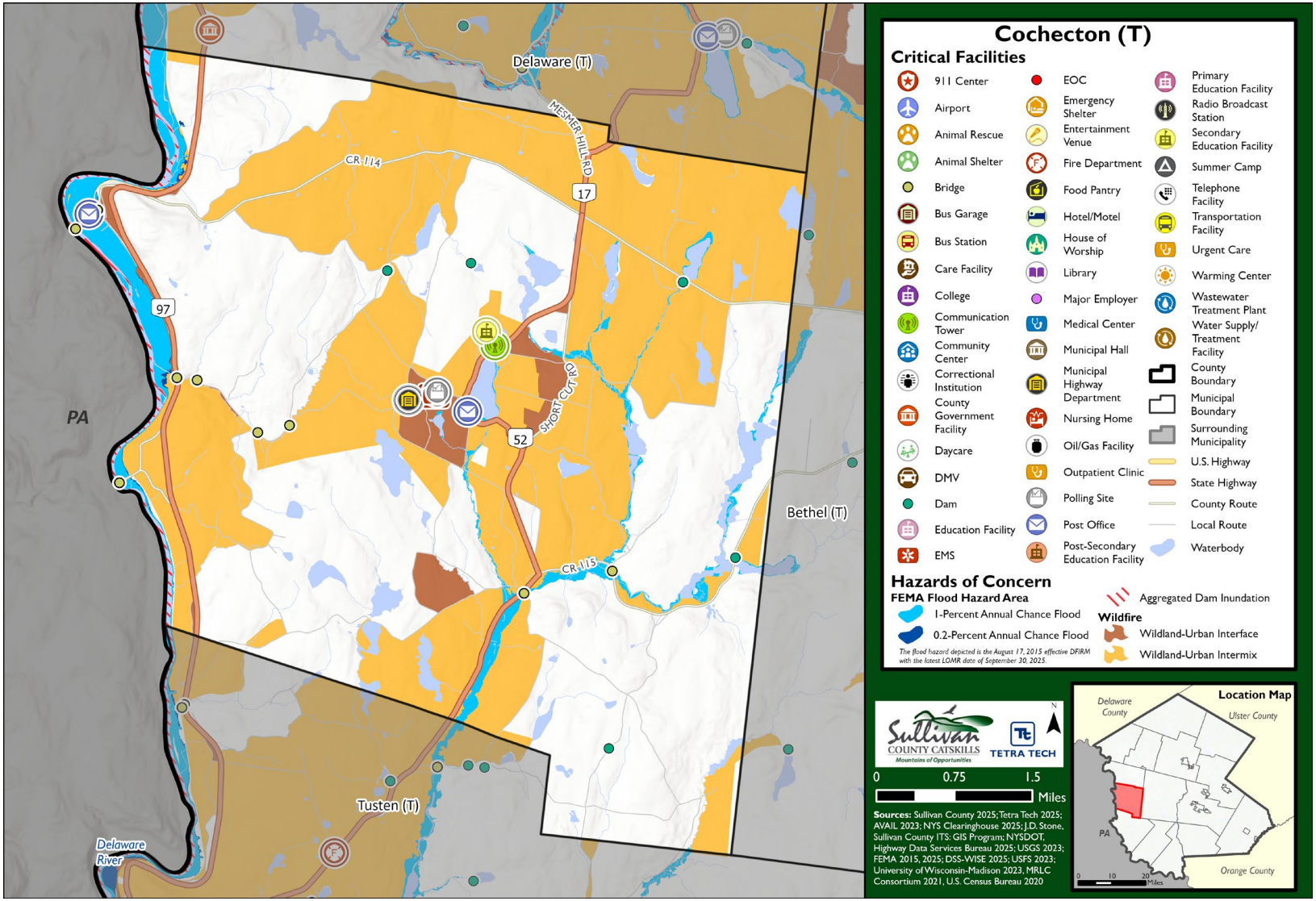
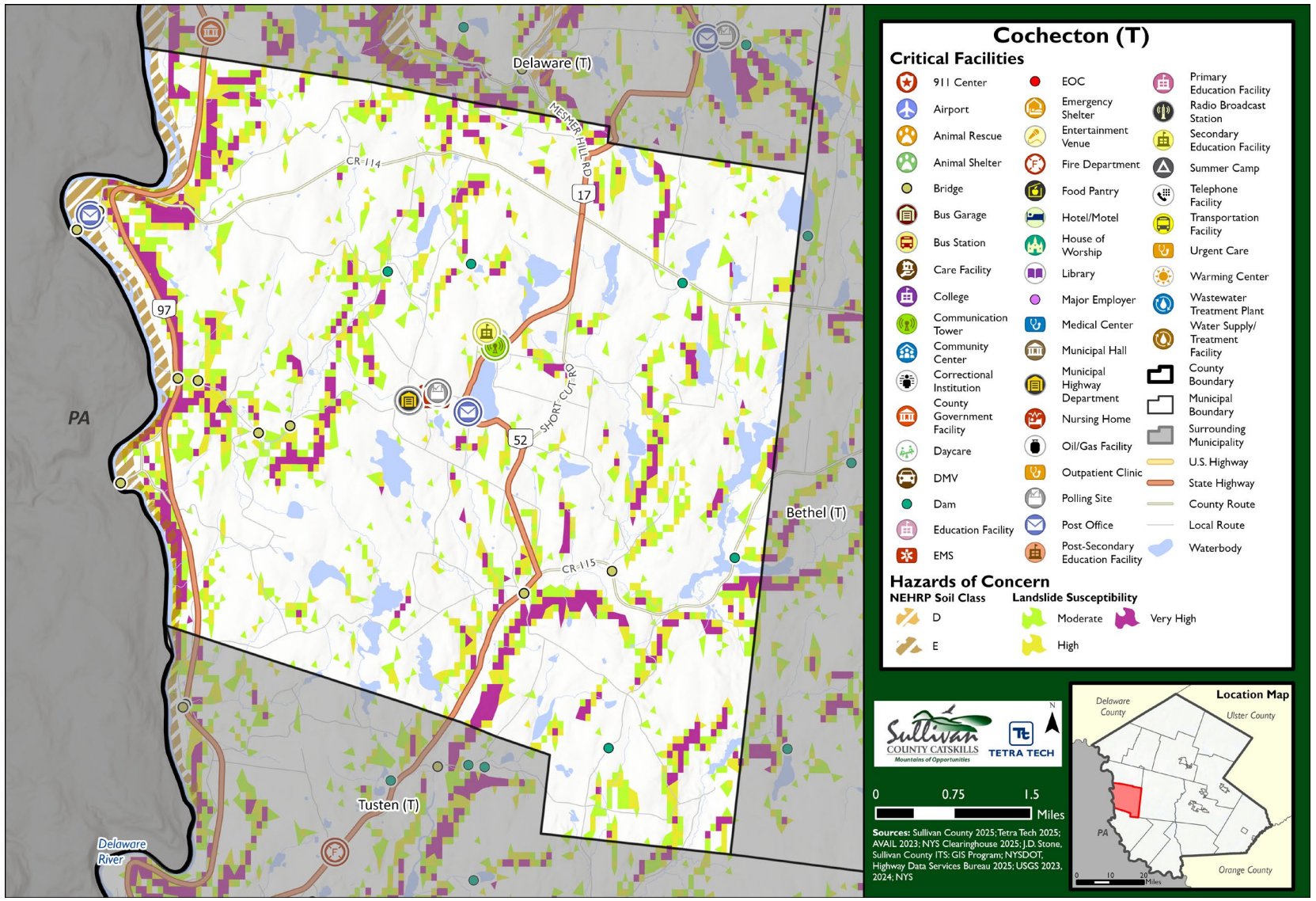


Figure 7-2. Cochecton NEHRP Soil and Landslide Area Map



7.3.2 Previous Event History

The history of natural and non-natural hazard events in Cochecton is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 7-7 and Table 7-8 provide details on the loss and damage in Cochecton during hazard events since the last hazard mitigation plan update.

Table 7-7. Presidential Disaster Declarations History in Cochecton

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Cochecton
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Adhered to necessary mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Localized road flooding. Some trees downed.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Localized road flooding. Some trees downed.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 7-8. Hazard Event History in Cochecton

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Cochecton
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Tree and wires downed, likely minor road flooding.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Tree and wires downed, likely minor road flooding.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Tree and wires downed, likely minor road flooding.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Tree and wires downed, likely minor road flooding.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Tree and wires downed, likely minor road flooding.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Tree and wires downed, likely minor road flooding.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood	Tree and wires downed, likely minor road flooding.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Cochecton
		stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Tree and wires downed, likely minor road flooding.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Tree and wires downed, likely minor road flooding.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

7.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 7-9 includes an inventory of critical facilities and infrastructure for the Town of Cochecton.

Table 7-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Cochecton Post Office	Post Office	Y	Y	2026-CochectonT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: Five bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

7.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Cochecton Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 7-10.

Table 7-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Minimal risk from dams. All dams located in the Town are low hazard.
Drought	Some concerns surrounding availability of water during times of drought.
Earthquake	Minimal earthquake risk. Only impacts from previous events include minor ground shaking.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Flood	Flood risk is primarily along the Delaware River, Tenmile River, their tributaries, and Kazens Pond.
Landslide	Minimal landslide risk.
Pandemic	Minimal pandemic risk due to policies and procedures.
Severe Storm	Cascading flooding issues from heavy rains. Some concerns regarding power outages, but outages have not lasted longer than one day, historically.
Severe Winter Storm	Primary concerns regarding ice accumulations, which cause downed trees and power lines. Ice jams may occur on the Delaware River or Tenmile River and can lead to flooding issues.
Wildfire	Lake Huntington Fire Company covers the Town under its jurisdiction. The Town does not have a large wildfire risk. Most risk is for structure or smaller brush fires.

7.3.5 Vulnerable Community Assets

Representatives from the Town of Cochecton Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 7-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 7-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No applicable assets.	**Area: Concentration of Local Businesses, Major Employers**	No known impacts.
Area: Concentration of Residences	No known impacts.	**Local Roads, Highways, Culverts, Bridges**	Route 52 near Cochecton Center and leading toward the Town of Tusten may be impacted by flooding from the Tenmile River and its tributaries.
Municipal Buildings	Town Hall, Lake Huntington Fire Department, and the Highway Department Facility may be in need of an emergency generator.	**Medical Centers (non-hospital)**	No applicable assets.
College/University	No applicable assets.	**Place of Worship**	No known impacts.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Lake Huntington has fishing access along Route 52; if a hazard impacts access to the route or parking area it could impact tourism. Skinner's Falls and Cochecton - Under the Bridge are both located along the Delaware River. Impacts at either site would not provide direct economic losses, but a decrease in visitors would impact the economy.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	No known impacts.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
	There are flooding concerns at Heinle's Field from the Tenmile River. The field is primarily a ballfield with a playground area. There are flooding concerns at the Cochecton Men's Club Field from the Delaware River. There are soccer, baseball, and softball fields and a playground at this location.		
Cultural/Historic Buildings/Sites	No known impacts.	**Schools (K-12)**	Sullivan West Central School is the Town's evacuation location and may be in need of an emergency generator.
Elder-care Facilities	No applicable assets.	**Utilities**	Some utility outages following severe storms and severe winter storms.
Fire/Police Stations	No known impacts.	**Wastewater Treatment Plants**	The Western Sullivan Transfer Station has the potential to be impact by power outages caused by severe storms and severe winter storms. The transfer station may benefit from an emergency generator.
Gas Stations, Grocery Stores, Supermarkets	No known impacts.	**Water: Drinking Water Resources**	No known impacts.
Hospitals	No applicable assets.	**Other**	No applicable assets.

7.3.6 Dams

Table 7-12 includes all dams in the Town of Cochecton. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 7-12. Dams Located in Cochecton

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-5756	GODWIN DAM	TR - Mitchell Pond brook	Ralph Godwin	Private	Recreation	Low Hazard Dam
148-1165	Kabau Lake Dam	Angel Mill Brook	Alfred Seewaldt Jr. Et Al	Private	Recreation	Low Hazard Dam
148-4485	Kazens Pond Dam	Nebraska Brook	Sally Kazen	Private	Recreation	Low Hazard Dam
134-5134	Old Mill Dam	Mitchell Pond brook	Richard Buddehagen	Private	Recreation	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

No known concerns with the dams located in the Town.

7.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 7-13 identifies the preliminary hazard ranking for Cochecton, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 7-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Disagree	Medium	The capabilities of the Town outweigh the existing risks. The Highway Department is more than sufficient at roadway preparations and clearing, and despite some power outages, none have been exceptionally long.	Medium
Wildfire	Medium	Agree	-	-	Medium

7.4 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 7-14 through Table 7-17.

7.4.1 Development and Permitting

Table 7-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Code Enforcement
What is your process for tracking building permits?	Digital spreadsheet
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, flood
Does your community have a buildable land inventory? If yes, please describe.	No

Table 7-15. 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
2020				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2021				
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2022				

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Total Permits	-	-	-	-
Permits within SFHA	-	-	-	-
2023				
Total Permits	6	11	5	22
Permits within SFHA	0	0	0	0
2024				
Total Permits	10	0	1	11
Permits within SFHA	0	0	0	0
2025				
Total Permits	12	0	0	12
Permits within SFHA	0	0	0	0

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

Table 7-16. Recent Major Development and Infrastructure from 2020 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
No Recent Major Development and Infrastructure from 2020 to Present					

Table 7-17. 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
No Known or Anticipated Major Development and Infrastructure in the Next Five Years					

7.5 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 Table 7-1 is responsible for maintaining this information.

7.5.1 NFIP Statistics

Table 7-18 summarizes the NFIP policy and claim statistics for the Town of Cochecton.

Table 7-18. Cochecton NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360817#
# Policies	0
# Claims (Losses)	9
Total Loss Payments	$294,487.56

# Repetitive Loss Properties	4
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

7.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 7-19.

Table 7-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Flood risk is primarily along the Delaware River, Tenmile River, their tributaries, and Kazens Pond.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 115: Flood Damage Prevention; Local Law #2 of 2010
What is the date that your flood damage prevention ordinance was last amended?	November 22, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, training, funding
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Yes, any trainings available would be beneficial
How do you make Substantial Damage determinations? What is the process to make	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market

NFIP Topic	Comments
sure these structures are brought into compliance?	value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Yes
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Education is left to insurer
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Map Service Center, River Gage information
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, site plan review, floodplain development standards, planning and zoning board consider efforts to reduce flood risk.

7.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Cochecton 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 Cochecton to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

7.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 7-20 and Table 7-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 7-20. Regulatory Capabilities in Cochecton

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Cochecton. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Chapter 90, 2007	Town Administration
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;	Chapter 115: Flood Damage Prevention; Local Law #2 of 2010	Code Enforcement Officer

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	Steep slope: Areas of 15% to 25% in slope as determined from the Sullivan County Soil Survey shall not be altered, regraded, cleared or built upon to an extent greater than 30% of the affected lot area, and all such development shall be subject to site plan review.	Chapter 240, 2011	Zoning Board
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	The Planning Board, in reviewing the site plan, shall consider its conformity to the Town of Cochecton Comprehensive Plan and the various other plans, laws and ordinances of the Town. Conservation features, aesthetics, landscaping and impact on surrounding development, as well as on the entire Town, shall be part of the Planning Board review. Traffic flow, circulation and parking shall be	Chapter 240, Article IV, 2011	Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		reviewed to ensure the safety of the public and of the users of the facility and to ensure that there is no unreasonable interference with traffic on surrounding streets.		
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	The Town of Cochecton Planning Board shall be authorized and empowered to approve preliminary and final plats of subdivisions showing lots, blocks or sites, with or without streets or highways, within the Town of Cochecton, pursuant to § 276 of the Town Law.	Chapter 215, 2011	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	This chapter regulates, by district, the use of land, buildings and structures in the Town of Cochecton in the County of Sullivan. It further provides for the administration and enforcement of these regulations and fixes penalties for violations. It is adopted under the authority of Article 16 of the New York State Town Law, as well as the Municipal Home Rule Law, and shall be known as the "Town of Cochecton Zoning Law."	Chapter 240, 2011	Zoning Board

Planning Capabilities

Table 7-21. Planning Capabilities in Cochecton

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The 2011 supplement further updates the Town's initial Comprehensive Plan that was prepared in 1972 and updated in 1998. The supplement includes summaries of significant changes in the Town and analyses their relevance to present day policy making and land use planning.	Comprehensive Plan Update, 2011	Planning Board
Continuity of Operations Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Capital Improvement Plan	Yes	Annual budget identifies various projects the Town would like to complete, which often includes projects (culvert upsizing, grade evaluations) which can help reduce hazard risk.	Annual Budget	Town Board
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications,	Mid-Hudson Regional Community Health Assessment Sullivan County Community	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Health Assessment Community Health Improvement Plan	Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

7.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 7-22 details the available administrative and technical capabilities of the Town.

Table 7-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	It is the responsibility of the Code Enforcement Officer to enforce the Town of Cochecton codes to ensure the health and safety of the public. When violations of the Codes are observed or reported, the Enforcement Officer will visually inspect, make contact with the property owner by letter and give instructions for eliminating the violation.
Economic Development Commission/Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Emergency Management/Public Safety Department	Yes	Fire Department and County Police
Environmental Commission/Specialist	No	-
Grant Writer	No	-
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	County
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Clerk
Planning Board	Yes	The planning board upholds and implements the community's development policies through the review and approval of subdivision proposals, site plans, and special use permits. The planning board also reviews any proposed amendments to the zoning laws and advises the Town Board on those matters.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	County
Planner or Engineer with knowledge of land development and land management practices	Yes	Contracted
Planners or engineers with an understanding of natural hazards	Yes	Contracted
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	The primary responsibility of the Highway Department is maintaining the Town roads. These responsibilities include snow removal and ice control, graveling, paving and the maintenance of roads, signage, drainage, mowing, tree and brush cutting and removal and ditch clearing within the Town's right of way. The Highway superintendent tracks and records construction, maintenance and equipment costs as well as generates a monthly expenditure report to present to the Town Board.

Capability Type	In Place in Municipality? Yes or No	Comments
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The primary function of the Zoning Board of Appeals is to consider variance requests from the strict zoning laws when they create hardships or practical difficulties for property owners. The Zoning Board of Appeals also interprets zoning laws when in question.
Other	No	-

7.6.3 Fiscal Capability

Table 7-23 summarizes financial resources available to Cochecton.

Table 7-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
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	Yes
Other Federal (non-FEMA) funding programs	Yes
FEMA funding programs	Yes
Other State funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

7.6.4 Education and Outreach Capability

Table 7-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 7-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	Yes, River Levels and Weather available on website
Local News	No
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	Youth Commission
Public information officer or communications office	Town Supervisor
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Use of County's system

7.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 7-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 7-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Strong
Wildfire	Moderate

7.7 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.

7.7.1 Past Mitigation Action Status

The Town has no previous mitigation actions.

7.7.2 Additional Mitigation Efforts

The Town of Cochecton did not identify any additional mitigation efforts completed since the last HMP.

7.7.3 Identified Issues

The Town of Cochecton has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well.
- The Cochecton Post Office is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- The availability of safe drinking water is crucial to the longevity of the Town. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.
- Flood risk in the Town is primarily along the Delaware River, Tenmile River, and their tributaries. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Route 52 near Cochecton Center and leading toward the Town of Tusten may be impacted by flooding from the Tenmile River and its tributaries.
  - Skinner's Falls and Cochecton - Under the Bridge are both located along the Delaware River. Impacts at either site would not provide direct economic losses, but a decrease in visitors may impact the economy.
  - Heinle's Field, which is primarily a ballfield with a playground area, experiences flooding from the Tenmile River.
  - There are flooding concerns at the Cochecton Men's Club Field from the Delaware River. There are soccer, baseball, and softball fields and a playground at this location.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall, Lake Huntington Fire Department, Highway Department Facility, Sullivan West Central School, and Western Sullivan Transfer Station do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms

are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.

- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.

7.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Cochecton participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Cochecton 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.

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 7-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-CochectonT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-CochectonT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Cochecton Post Office is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Town.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-CochectonT-03. Safe Drinking Water

Lead Agency:	Town Board	
Supporting Agencies:	Engineering	
Hazards of Concern:	☐Dam Failure ☒Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the Town. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.	
Description of the Solution:	The Town will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The Town may choose to reference suggested projects from the US EPA's "*Incident Action Checklists*". Potential projects may include: • Develop an emergency drinking water supply plan and establish contacts to discuss procedures. • Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first. • Monitor water supply and calculate how long water could be provided if the drought persists • Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures. • Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system. • Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies. • Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network. • Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer. • Coordinate with other neighboring water systems to develop a water use plan. • Identify generator needs at water facilities. • Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911. • Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system. • Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Town Budget	
Implementation Timeline:	5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will permit the Town to investigate various methods to provide safe drinking water to its residents.	
Impact on At Risk Populations:	Safe and predicable water supplies are foundational to supporting at risk populations.	
Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.	
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.	
Impact on Capabilities:	This action will ensure the Town is able to maintain its supply of potable water.	

Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)		☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)		☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium	☐Low
Alternative	Action		Evaluation
	No action		Current problem persists
	Rely on State to resolve problem		State does not have jurisdiction
	Rely on County to resolve problem		County does not have jurisdiction

Action 2026-CochectonT-04. Flood Mitigation Along Primary Water Ways

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along the Delaware River, Tenmile River, and their tributaries. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Route 52 near Cochecton Center and leading toward the Town of Tusten may be impacted by flooding from the Tenmile River and its tributaries. • Skinner's Falls and Cochecton - Under the Bridge are both located along the Delaware River. Impacts at either site would not provide direct economic losses, but a decrease in visitors may impact the economy. • Heinle's Field, which is primarily a ballfield with a playground area, experiences flooding from the Tenmile River. • There are flooding concerns at the Cochecton Men's Club Field from the Delaware River. There are soccer, baseball, and softball fields and a playground at this location.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Delaware River, Tenmile River, and their tributaries. The Town may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit Route 52 to remain open as a transportation route, will lower the risk of flood impacts to a fire department and two churches.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-CochectonT-05. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Fire Department, Highway Department, Sullivan West Central School, Western Sullivan Transfer Station	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall, Lake Huntington Fire Department, Highway Department Facility, Sullivan West Central School, and Western Sullivan Transfer Station do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Fire Department, School Budget, Utility Fees	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-CochectonT-06. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Table 7-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-CochectonT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-CochectonT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-CochectonT-03	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High
2026-CochectonT-04	Flood Mitigation Along Primary Water Ways	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-CochectonT-05	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-CochectonT-06	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

8. TOWN OF DELAWARE

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Delaware 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 Delaware, describes who participated in the planning process, assesses Delaware's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

8.1 HAZARD MITIGATION PLANNING TEAM

The Town of Delaware identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 8-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 8-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Scott Dubois, Town Supervisor Address: 104 Main St, Hortonville, NY 12745 Phone Number: (845) 887-5250, ext. 102 Email: supervisor@townofdelaware.org	Name/Title: Christopher Hermann, Highway Superintendent Address: 4277 State Route 17B, Callicoon, NY 12723 Phone Number: (845) 887-4660 Email: chrishermann8@gmail.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Kristopher Scullion, Code Enforcement Officer Address: 104 Main St, Hortonville, NY 12745 Phone Number: (845) 887-5250, ext. 103 Email: delawareinspector@hvc.rr.com	
Additional Contributors	
Name/Title: Tess McBeath, Town Clerk Method of Participation: Provided information pertinent to the development of the Town's annex.	

8.2 COMMUNITY PROFILE

8.2.1 Community Classifications

Table 8-2 summarizes classifications for community programs available to Delaware.

Table 8-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

8.2.2 Community Profile

Geographical Description

The Town of Delaware consists of the hamlets of Callicoon, Hortonville, Kenoza Lake and Kohlertown. Situated near the East Branch of the Delaware River, it includes forested hills, rivers, and small lakes.

Government Type and Description

The Town is governed by a Town Board comprised of four councilpersons (Town of Delaware n.d.)

Table 8-3 through Table 8-6 note land area, population, and building stock information for the Town of Delaware.

Table 8-3. Total Land Area in the Town of Delaware

Jurisdiction	Total Land Area	
	Acres	Square Miles
Delaware (T)	21,877.0	34.2

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 8-4. Population Estimates in the Town of Delaware

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
2,203	2.8%	2,301	2.9%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 8-5. At Risk Populations in the Town of Delaware

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
537	23.3%	63	2.7%	7	0.3%	296	12.9%	247	10.7%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 8-6. General Building Stock in the Town of Delaware

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,663	$1,867,149,344	1,388	$986,574,031	168	$480,144,189	22	$110,140,808	85	$290,290,315

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

8.3 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 Delaware's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

8.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Delaware are shown in Figure 8-1 and Figure 8-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Delaware has significant exposure.

Figure 8-1. Delaware Flood, Wildfire and Dam Inundation Area Map

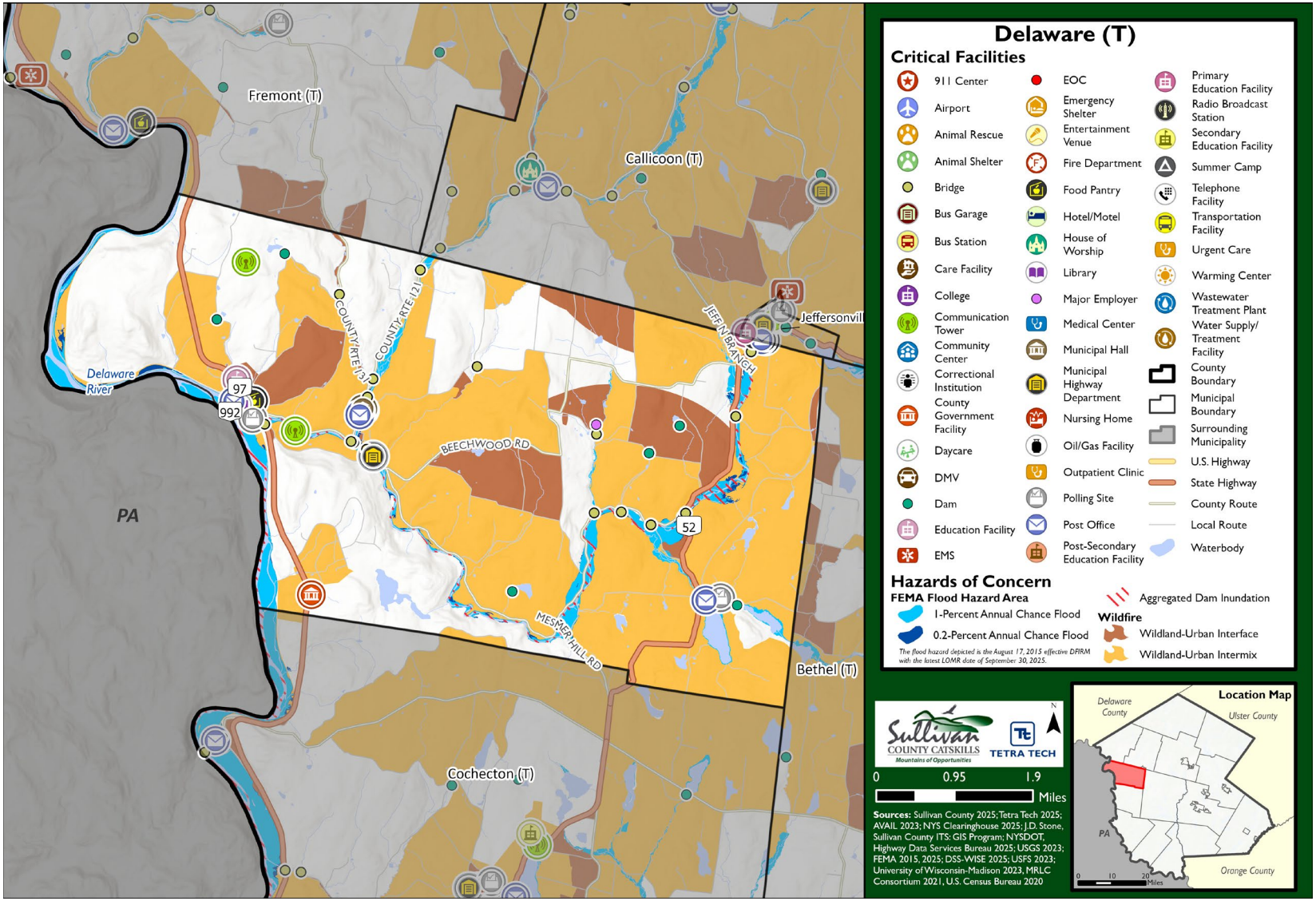
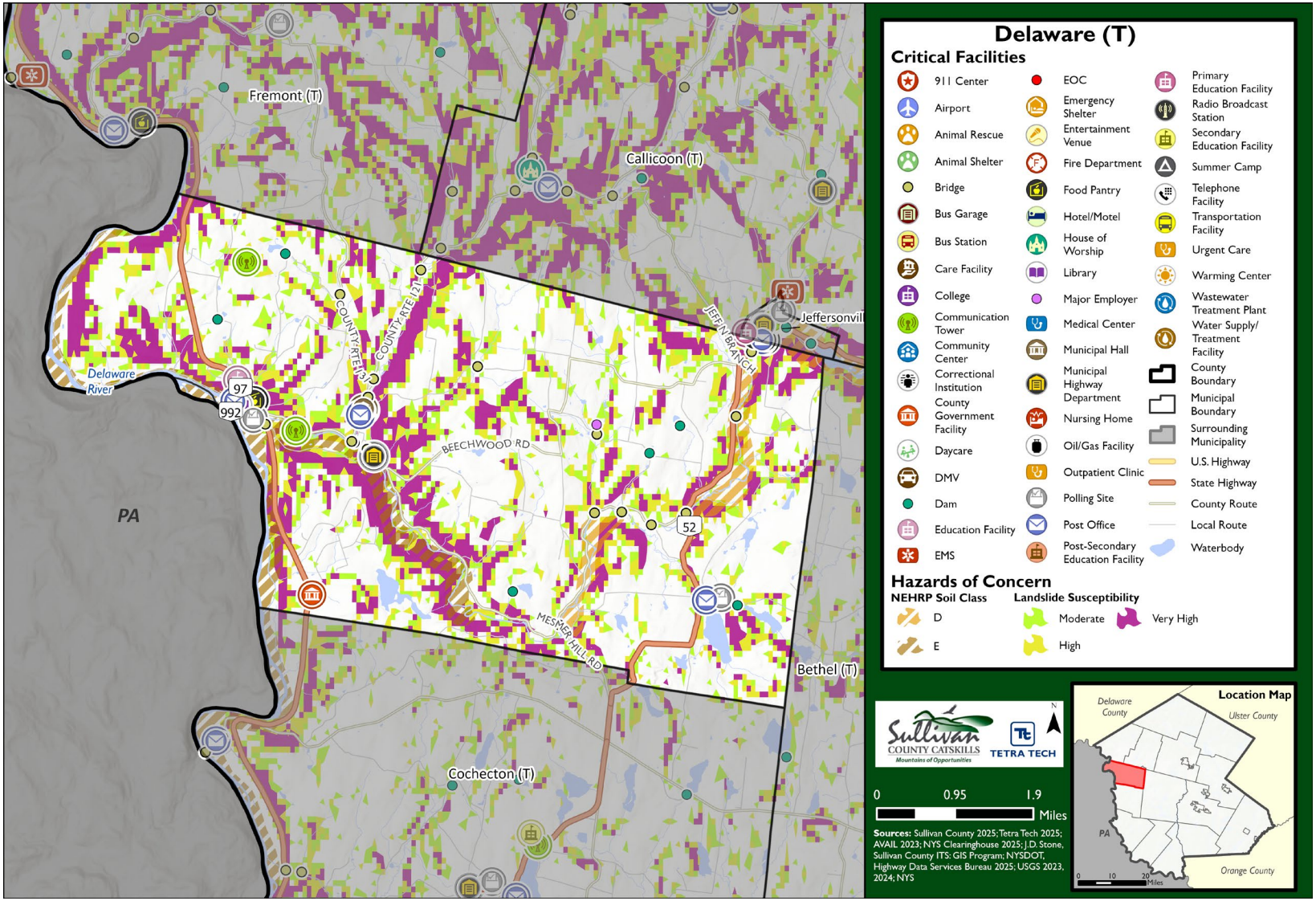


Figure 8-2. Delaware NEHRP Soil and Landslide Area Map



8.3.2 Previous Event History

The history of natural and non-natural hazard events in Delaware is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 8-7 and Table 8-8 provide details on the loss and damage in Delaware during hazard events since the last hazard mitigation plan update.

Table 8-7. Presidential Disaster Declarations History in Delaware

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Delaware
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Town abided by social distancing, work from home orders, and masking mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town did not incur any documented damage or losses
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town did not incur any documented damage or losses

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 8-8. Hazard Event History in Delaware

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Delaware
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town did not incur any documented damage or losses
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town did not incur any documented damage or losses

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Delaware
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town did not incur any documented damage or losses
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town did not incur any documented damage or losses
August 14, 2024	$22,500	A couple of severe storms became severe, producing locally damaging winds. A survey was completed in Sullivan County for a microburst that caused mainly tree damage.	The Town did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

8.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 8-9 includes an inventory of critical facilities and infrastructure for the Town of Delaware.

Table 8-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Callicoon Post Office	Post Office	Y	Y	2026-DelawareT-02	-
DELAWARE COMMUNITY CENTER	Polling Site	Y	Y	2026-DelawareT-02	-
Delaware Highway Department	Municipal Highway Department	Y	Y	2026-DelawareT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: Eighteen bridges and one dam were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

8.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Delaware Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 8-10.

Table 8-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Coon Rock Road And Gun Club Dam, and intermediate hazard dam, was found to be unsound in its last inspection (April 2025).
Drought	The Town of Delaware recently became responsible for a water district where the main wells are currently located in the floodplain.
Earthquake	No known impacts or concerns.
Flood	State Route 52 in Kohlertown and Main Street in Hortonville are known areas which flood.
Landslide	No known impacts or concerns.
Pandemic	Town abided by social distancing, work from home orders, and social distancing.
Severe Storm	Town has experienced power outages, but normally no longer than 12 hours. Homeowners also do not let the Town cut down trees which results in road blockages, power outages and other issues with emergency response.
Severe Winter Storm	Town Highway, State, and County are effective at clearing roadways. Town has experienced power outages, but normally no longer than 12 hours. Homeowners also do not let the Town cut down trees which results in road blockages, power outages and other issues with emergency response.
Wildfire	No known impacts or concerns.

8.3.5 Vulnerable Community Assets

Representatives from the Town of Delaware Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 8-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 8-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	Businesses along River and Creamery Roads may be impacted by flooding from the Callicoon Creek and Delaware River.
Area: Concentration of Residences	Main Street in Hortonville is known to flood.	**Local Roads, Highways, Culverts, Bridges**	State Route 52 in Kohlertown and Main Street in Hortonville are known areas which flood. The undersized bridge on Welch Road experiences regular flooding issues.
Municipal Buildings	Town Hall, Hortonville Fire District, Callicoon Fire District,	**Medical Centers (non-hospital)**	Not applicable

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
	Delaware Highway Department, Community Center have no back up power. Town Hall and Hortonville Fire District are located on Main Street in Hortonville which has flooded in the past. Delaware Highway Department and Community Center are located in the flood hazard area.		
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Recreational Area, which includes the Farmer's Market, on Creamery Road may be impacted by flooding from the Callicoon Creek and Delaware River.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Delaware Highway Department has no back up power and is located in the flood hazard area.
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	Not applicable
Elder-care Facilities	Not applicable	**Utilities**	Homeowners do not let the Town cut down trees which results in road blockages, power outages and other issues with emergency response.
Fire/Police Stations	Hortonville Fire District and Callicoon Fire District have no back up power.	**Wastewater Treatment Plants**	No known impacts
Gas Stations, Grocery Stores, Supermarkets	Gas Stations, Grocery Stores, Supermarkets on Creamery Road may be impacted by flooding from the Callicoon Creek and Delaware River. Gas Stations, Grocery Stores, Supermarkets on North Branch Road may be impacted by flooding from the Callicoon Creek in Hortonsville.	**Water: Drinking Water Resources**	The Town of Delaware recently became responsible for a water district where the main wells are currently located in the floodplain.
Hospitals	Not applicable	**Other**	Not applicable

8.3.6 Dams

Table 8-12 includes all dams in the Town of Delaware. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 8-12. Dams Located in Delaware

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-5425	Coon Rock Rod And Gun Club Dam	TR-East Branch Callicoon Creek	Coon Rock Rod and Gun Club	Private	Recreation	Intermediate Hazard Dam
148-0291	Kenoza Lake Dam	Jaketown Creek	5691 Route 52, LLC, 5691 Route 52, LLC	Private	Recreation	Low Hazard Dam
147-5327	Krantz Pond Dam	TR-Callicoon Creek	Harbor Watch Realty Co, LLC	Private	Recreation	Low Hazard Dam
148-0288	Hust Pond Dam	Jaketown Creek	Patricia Gluszak	Private	Recreation	Low Hazard Dam
147-3933	Joseph Maus Farm Pond Dam	TR-E. Branch Callicoon Creek	Jospeh Maus	Private	Other	Low Hazard Dam
133-4870	Howard Stewart Dam	TR-Calkins Creek	Howard Stewart	Private	Recreation	Low Hazard Dam
133-3953	Leonard Reichman Wildlife Pond Dam	TR-Delaware River	Leonard Reichman	Private	Other	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Coon Rock Rod And Gun Club Dam, and intermediate hazard dam, was found to be unsound in its last inspection (April 2025). No concerns with low hazard dams.

8.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 8-13 identifies the preliminary hazard ranking for Delaware, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 8-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Disagree	Medium	Although this hazard does occur, the Town, State, and County maintain and prepare roads appropriately. Power outages historically have not resulted in significant impacts.	Medium
Wildfire	Medium	Agree	-	-	Medium

8.4 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 8-14 through Table 8-17.

8.4.1 Development and Permitting

Table 8-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town Code Enforcement issues permits
What is your process for tracking building permits?	Town uses software for tracking permits

Topic	Comment
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, flood
Does your community have a buildable land inventory? If yes, please describe.	No

Table 8-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 8-16. Recent Major Development and Infrastructure from 2020 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
The jurisdiction did not identify any recent major development and infrastructure from 2020 to present					

Table 8-17. 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
The jurisdiction did not identify any known or anticipated major development and infrastructure in the next five years					

8.5 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 Table 8-1 is responsible for maintaining this information.

8.5.1 NFIP Statistics

Table 8-18 summarizes the NFIP policy and claim statistics for the Town of Delaware.

Table 8-18. Delaware NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360818#
# Policies	0
# Claims (Losses)	20
Total Loss Payments	$404,799.07
# Repetitive Loss Properties	9
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

8.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 8-19.

Table 8-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	State Route 52 in Kohlertown Main Street, Hortonville
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Kristopher Scullion, Building Inspector/Code Enforcement Officer.
What local department is responsible for floodplain management?	The Code Enforcement Officer of the Town of Delaware is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.

NFIP Topic	Comments
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #4 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 30, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, Inspections
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. Substantial improvement also means "cumulative substantial improvement." The term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	No
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	No
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping, NYS DEC
Are there other local ordinances, plans or programs (e.g., site plan review) that support	Yes, they consider flood risk and height restrictions. Town has Site plan review code.

NFIP Topic	Comments
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?	

8.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Delaware 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 Delaware to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

8.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 8-20 and Table 8-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 8-20. Regulatory Capabilities in Delaware

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Delaware, Sullivan County, New York. This chapter is adopted pursuant to § 10 of the	Chapter 116 Construction Codes, Uniform	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law or other section of this chapter, all buildings, structures and premises, regardless of use or occupancy, are subject to the provisions of this chapter.		
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify and maintain for participation in the National Flood Insurance Program.	Chapter 131 Flood Damage Prevention (Local Law #4 of 2010)	Code Enforcement Officer
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	In reviewing applications for use of sites partially or wholly included within an area identified as steep-sloped, the Building Inspector or Planning Board, as the case may be, shall determine that performance standards have been or will be met.	Chapter 220, 2013 (Article VI)	Building Inspector, Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Site plan review shall be required for all special uses and such other uses as specified. The Town of Delaware Planning Board is authorized to review and approve, approve with modifications, or disapprove site plans.	Chapter 220, 2013 (Article VIII)	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Town in accord with the Town of Delaware Comprehensive Plan. B. Providing for the health, safety and welfare of Town residents and preservation of the environment. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens of the land associated with development of land.	Chapter 186, 1996	Town Administration
Waterfront Consistency Review Law	Yes	The purpose of this chapter is to provide a framework for agencies of the Town of Delaware to consider the policies and purposes contained in the Town of Delaware Local Waterfront Revitalization Program when reviewing applications for actions or direct agency actions located in the coastal area and to assure that such actions and direct actions are consistent with the said policies and purposes.	Chapter 212, 1999	Town Administration
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	It is the legislative purpose of this chapter to provide for the orderly and desirable development and use of land in accordance with authority granted to Towns in §§ 261 and 266 of the New York State Town Law. This chapter is, moreover, intended to promote the	Chapter 220, 2013	Zoning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		general welfare by meeting the goals and objectives and following the recommendations set forth in the Town of Delaware Master Plan.		

Planning Capabilities

Table 8-21. Planning Capabilities in Delaware

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	The Town of Delaware sought and received a grant from the New York State Department of Agriculture and Markets to develop a town-level plan to protect and enhance agriculture. The grant tasked the Town to locate farm areas that should be protected, look at the value of farmland open space and the agricultural economy to the municipality, evaluate consequences of possible conversion, and describe activities, programs and strategies to promote continued agricultural use. A local committee was established in cooperation with the Town of Delaware to develop this Plan.	Agriculture and Farmland Protection, 2009	Farmland Protection Plan Committee
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	A comprehensive plan is never more than a starting point - a blueprint to guide the future development of the Town. It must be revised and updated periodically, as this one has been, to reflect the changing conditions, trends and goals of the community. The effectuation of the Plan is the ongoing responsibility of the Town Planning Board, and Town Board. It is an information source, policy guide and reference point for municipal action, although it carries no legal weight in its own right insofar as land use or other regulations.	Town of Delaware Comprehensive Plan, 2007	Planning Board
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		strategic plans that set priorities and measurable objectives to address the needs of a community.	Improvement Plan	
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

8.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 8-22 details the available administrative and technical capabilities of the Town.

Table 8-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Officer
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Fire Districts
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Contracted

Capability Type	In Place in Municipality? Yes or No	Comments
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire District
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Contracted
Planning Board	Yes	The planning board exists to guide and regulate the orderly growth and development of a community, ensuring public safety, welfare, and responsible land use.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	County
Planner or Engineer with knowledge of land development and land management practices	Yes	Planning Board, Engineering
Planners or engineers with an understanding of natural hazards	Yes	Planning Board, Engineering
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement, Engineering
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	Highway Department
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	Yes	Contracted
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other	No	-

8.6.3 Fiscal Capability

Table 8-23 summarizes financial resources available to Delaware.

Table 8-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

8.6.4 Education and Outreach Capability

Table 8-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 8-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	Yes – Fire Districts
Hazard mitigation information available on your website	No
Local News	No
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	No
Public information officer or communications office	Town Supervisor

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	County

8.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 8-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 8-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

8.7 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.

8.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Delaware-1— Delaware - Kohlertown Rt 52/Culvert Issues	
Hazards Addressed	Flood
Lead Agency / Department	Town of Delaware Supervisors Office
Supporting Agency / Department	-
Action Location	Rt 52
Summary of Original Problem	State Route 52 in Kohlertown, experiences severe flooding on a continuous basis and requires coordination of various agencies responsible for transportation services.
Summary of Solution (Project)	To reduce the long-term risk to flooding for existing assets and future developments, specifically along State Route 52 and adjacent roads in Kohlertown near border of Jeffersonville/Callicoon, The Town will upsize of two culverts and an associated stormwater drain to increase stormwater drainage capacity. The state Department of Transportation is currently replacing one culvert and the county Department of Public Works is working on an overflow storage or redirection solution.
Action Category	-
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Delaware-2— Delaware - Welch Rd Bridge	
Hazards Addressed	Flood
Lead Agency / Department	Delaware Town Highway Department
Supporting Agency / Department	-
Action Location	Welch Rd Bridge
Summary of Original Problem	The undersized bridge on Welch Road experiences regular flooding issues.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing the bridge on Welch Road to appropriately address site conditions as a means to increase capacity and prevent washout failure.
Action Category	-
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project completed in 2024 by County

T. Delaware-3— Delaware - New Water District/Wells	
Hazards Addressed	Flood
Lead Agency / Department	Town of Delaware
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	The Town of Delaware recently became responsible for a water district where the main wells are currently located in the floodplain.
Summary of Solution (Project)	Reduce the long-term risk of flooding for existing assets and future developments by drilling two new wells, outside the floodplain in order to provide service. An engineering consultant has been hired to address the upgrades for the new water district and negotiations are underway with two property owners to acquire the land for the two new wells.
Action Category	-
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Town received renewal for project from Delaware River Basin Commission for the two wells in September 2024.
If discontinue, explain why	Not applicable

8.7.2 Additional Mitigation Efforts

The Town of Delaware did not identify any additional mitigation efforts completed since the last HMP.

8.7.3 Identified Issues

The Town of Delaware has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has nine repetitive loss properties, but other properties may be impacted by flooding as well.
- The Callicoon Post Office, Delaware Community Center, and Delaware Highway Department are located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- State Route 52 in Kohlertown, experiences severe flooding on a continuous basis due to culvert issues and requires coordination of various agencies responsible for transportation services. Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts.
- The Town of Delaware recently became responsible for a water district where the main wells are currently located in the floodplain. In September 2024, the Town received renewal for the project from the Delaware River Basin Commission for the two wells. Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities.

- Coon Rock Rod And Gun Club Dam, and intermediate hazard dam accessed via a maintenance road off of County Road 117, was found to be unsound in its last inspection (April 2025). Although this is an intermediate hazard dam, deterioration can lead to environmental and ecological disruptions and potential impacts to a residential property.
- The Town has an established tree trimming program in place; however, there are several old or decaying trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.
- Flood risk in the Town is primarily along the Delaware River and Callicoon Creek. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Main Street in the Hamlet of Hortonville has flooded in the past, exposing the Town Hall and Hortonville Fire District to flood conditions from the Callicoon Creek.
  - Gas Stations, Grocery Stores, Supermarkets on North Branch Road in the Hamlet of Hortonsville are exposed to flood impacts from the Callicoon Creek.
  - A Recreational Area, which includes the Farmer's Market, on Creamery Road in the Hamlet of Callicoon has been impacted by flooding from the Callicoon Creek and Delaware River.
  - Gas Stations, Grocery Stores, Supermarkets on Creamery Road in the Hamlet of Callicoon have been impacted by flooding from the Callicoon Creek and Delaware River.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall, Hortonville Fire District, Callicoon Fire District, Delaware Highway Department, and Community Center do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.

8.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Delaware participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Delaware 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.

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 8-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-DelawareT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has nine repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-DelawareT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Callicoon Post Office, Delaware Community Center, and Delaware Highway Department are located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Town.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-DelawareT-03. Kohlertown Route 52, Culvert Issues

Lead Agency:	Highway Department	
Supporting Agencies:	County Public Works, NYS DOT	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	State Route 52 in Kohlertown experiences severe flooding on a continuous basis due to culvert issues and requires coordination of various agencies responsible for transportation services. Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding and impacting the integrity of the culverts.	
Description of the Solution:	To reduce the long-term risk to flooding for existing assets and future developments, specifically along State Route 52 and adjacent roads in Kohlertown near border of Jeffersonville/Callicoon, the Town Highway Department will work with County Public Works and NYS DOT to upsize of two culverts and an associated stormwater drain to increase stormwater drainage capacity. The state Department of Transportation is currently replacing one culvert, and the county Department of Public Works is working on an overflow storage or redirection solution.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, CHIPS, NYS DOT, County Budget, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate roads	Cost prohibitive
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-DelawareT-04. New Water District Well Concerns

Lead Agency:	Water Department	
Supporting Agencies:	Town Board, Engineering, NYS DEC, Delaware River Basin Commission	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town of Delaware recently became responsible for a water district where the main wells are currently located in the floodplain. In September 2024, the Town received renewal for the project from the Delaware River Basin Commission for the two wells. Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities.	
Description of the Solution:	The Town will reduce the long-term risk of flooding for existing assets and future developments by drilling two new wells, outside the floodplain in order to provide service. An engineering consultant has been hired to address the upgrades for the new water district and negotiations are underway with two property owners to acquire the land for the two new wells. The Town will work with NYS DEC and the Delaware River Basin Commission as necessary.	
Estimated Cost:	High	
Potential Funding Sources:	Town Budget, Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS) Grant Program, Water Pollution Control Grants Program, FEMA HMA, Utility Fees, NYS DEC, Delaware River Basin Commission	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities. Access to municipal water systems enhances the quality of life for residents by providing a reliable source of water for drinking, cooking, and sanitation, which are essential for daily living. Moreover, these systems support recreational activities and contribute to the aesthetic value of communities through well-maintained water bodies and parks.	
Impact on At Risk Populations:	Implementing any necessary upgrades to the water system will assist in the prevention of waterborne diseases and ensures that the water supplied is free from harmful substances such as lead and bacteria.	
Impact on Future Development:	This action will ensure water systems in the Town are working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures the water systems in the Town, which are critical pieces of infrastructure and part of the water lifeline, are working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify issues but do not implement preventative measures	Issues likely to reoccur
	Retract purchase	Costly, inefficient, could be a detriment to residents

Action 2026-DelawareT-05. Coon Rock Rod And Gun Club Dam Study

Lead Agency:	Coon Rock Rod and Gun Club	
Supporting Agencies:	Town Board, NYS DEC, Engineering	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Coon Rock Rod And Gun Club Dam, and intermediate hazard dam accessed via a maintenance road off of County Road 117, was found to be unsound in its last inspection (April 2025). Although this is an intermediate hazard dam, deterioration can lead to environmental and ecological disruptions and potential impacts to a residential property.	
Description of the Solution:	The Town will initiate contact with the dam owners (Coon Rock Rod and Gun Club) to inquire about the status of the dam, including its current structural integrity. Although the owners are ultimately responsible for the dam, the Town will work with the owners and engineers to conduct an inspection or study on the dam's integrity. The dam owners, engineers, and the Town will consult with NYS DEC as necessary.	
Estimated Cost:	TBD depending on mitigation measure(s) selected	
Potential Funding Sources:	TBD depending on mitigation measure(s) selected	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission dam without a study performed	High cost, flood risk for nearby infrastructure and the environment increased
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-DelawareT-06. Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has an established tree trimming program in place; however, there are several old or decaying trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.	
Description of the Solution:	The Town will work with a forester to assess trees on Town-owned properties; the Town will provide contact information for the tree assessors to property owners and utility companies. The Town will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Town.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-DelawareT-07. Flood Mitigation Along Water Ways

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department, NYS DOT, County Public Works	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along the Delaware River and Callicoon Creek. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Main Street in the Hamlet of Hortonville has flooded in the past, exposing the Town Hall and Hortonville Fire District to flood conditions from the Callicoon Creek. • Gas Stations, Grocery Stores, Supermarkets on North Branch Road in the Hamlet of Hortonsville are exposed to flood impacts from the Callicoon Creek. • A Recreational Area, which includes the Farmer's Market, on Creamery Road in the Hamlet of Callicoon has been impacted by flooding from the Callicoon Creek and Delaware River. • Gas Stations, Grocery Stores, Supermarkets on Creamery Road in the Hamlet of Callicoon have been impacted by flooding from the Callicoon Creek and Delaware River.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Delaware River and Callicoon Creek. The Town may also choose to look into acquiring property for open space to reduce flood risk. The Town will consult with County Public Works and NYS DOT as needed.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC, NYS DOT, County Budget, NYS DOT	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-DelawareT-08. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-DelawareT-09. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Hortonville Fire District, Callicoon Fire District, and Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall, Hortonville Fire District, Callicoon Fire District, Delaware Highway Department, and Community Center facilities do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Hortonville Fire District, Callicoon Fire District	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Table 8-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-DelawareT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-DelawareT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-DelawareT-03	Kohlertown Route 52, Culvert Issues	0	1	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2026-DelawareT-04	New Water District Well Concerns	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-DelawareT-05	Coon Rock Rod And Gun Club Dam Study	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-DelawareT-06	Tree Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-DelawareT-07	Flood Mitigation Along Water Ways	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-DelawareT-08	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-DelawareT-09	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

9. TOWN OF FALLSBURG

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Fallsburg 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 Fallsburg, describes who participated in the planning process, assesses Fallsburg's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

9.1 HAZARD MITIGATION PLANNING TEAM

The Town of Fallsburg identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 9-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 9-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Nathan Steingart, Town Supervisor Address: 19 Railroad Plaza, South Fallsburg, NY 12779 Phone Number: (845) 434-8810, ext. 5 Email: supervisorsteingart@fallsburgny.gov	Name/Title: Anthony Dworetsky, Highway Superintendent Address: 5854 State Route 42, Fallsburg, NY 12733 Phone Number: (845) 434-8810, ext. 8 Email: highwaysuper@fallsburgny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: Thomas (TJ) Brawley, Code Enforcement Officer Address: 5250 Main Street, South Fallsburg, NY 12779 Phone Number: (845) 434-8811 Email: codeofficer@fallsburgny.gov	
Additional Contributors	
Name/Title: Jen Edwards, Confidential Secretary to the Supervisor Method of Participation: Provided information pertinent to annex development	
Name/Title: Thomas (TJ) Brawley, Building Department Head Method of Participation: Provided information pertinent to annex development	
Name/Title: Scott DuBois, Comptroller Method of Participation: Provided information pertinent to annex development	

9.2 COMMUNITY PROFILE

9.2.1 Community Classifications

Table 9-2 summarizes classifications for community programs available to Fallsburg.

Table 9-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

9.2.2 Community Profile

Geographical Description

The Town of Fallsburg is known for its mixed terrain of hills and valleys, including parts of the Neversink River. It has both forested and developed areas.

Government Type and Description

The Town is governed by a Town Board comprised of the Town Supervisor (two-year term), a Deputy Supervisor, and four council members (four-year staggering terms). They uphold responsibility for the administration of all aspects of Fallsburg's government which include: finances, public buildings, grounds, parks, streets and highways (Town of Fallsburg 2025).

Table 9-3 through Table 9-6 note land area, population, and building stock information for the Town of Fallsburg.

Table 9-3. Total Land Area in the Town of Fallsburg

Jurisdiction	Total Land Area	
	Acres	Square Miles
Fallsburg (T)	47,467.6	74.2

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 9-4. Population Estimates in the Town of Fallsburg

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
13,445	17.1%	13,292	16.8%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 9-5. At Risk Populations in the Town of Fallsburg

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
1,989	15.0%	608	4.6%	573	4.3%	1,812	13.6%	2,511	18.9%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 9-6. General Building Stock in the Town of Fallsburg

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
8,114	$8,608,748,500	7,601	$6,649,631,241	351	$961,312,113	81	$513,215,822	81	$484,589,325

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

9.3 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 Fallsburg's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

9.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Fallsburg are shown in Figure 9-1 and Figure 9-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Fallsburg has significant exposure.

Figure 9-1. Fallsburg Flood, Wildfire and Dam Inundation Area Map

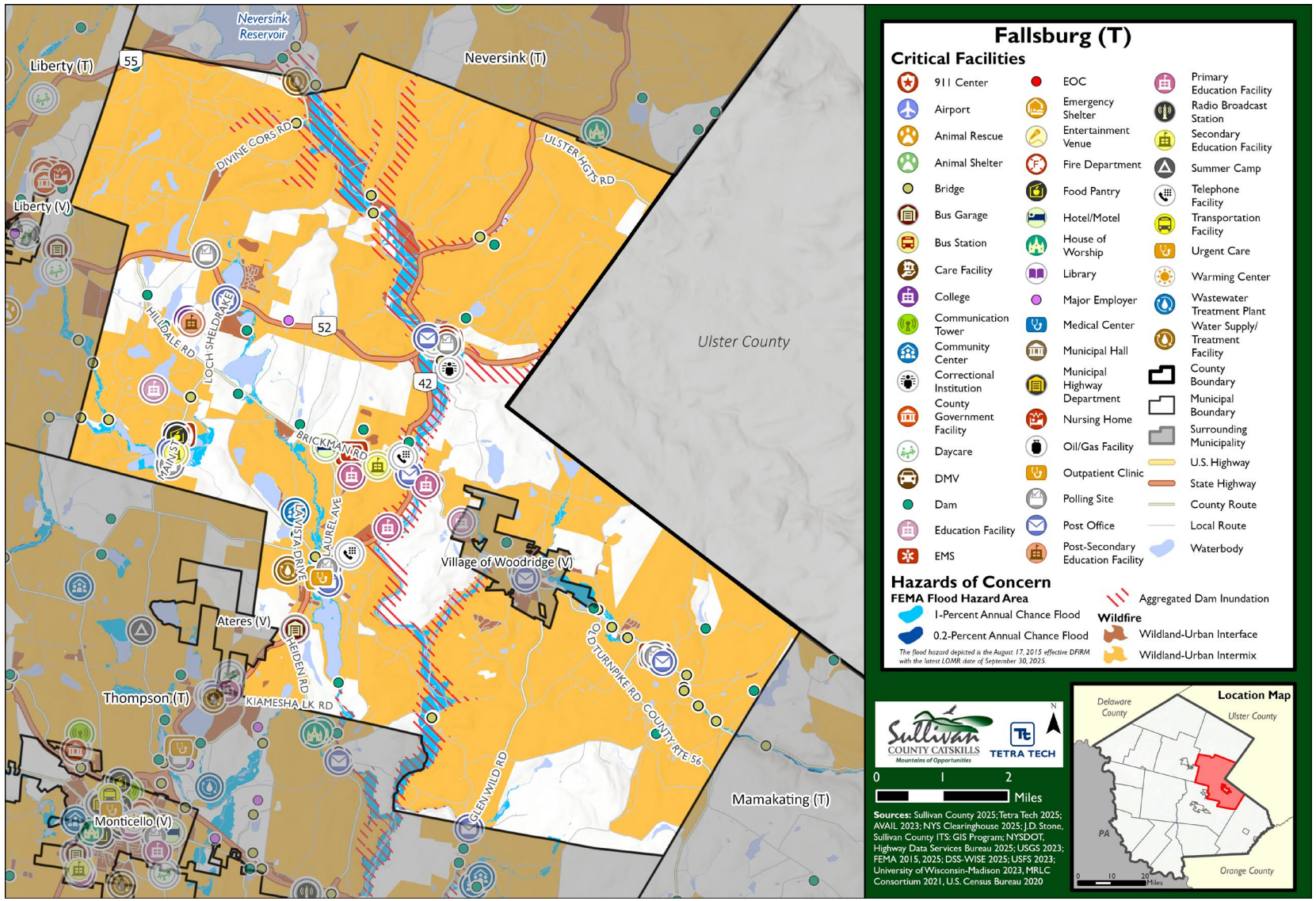
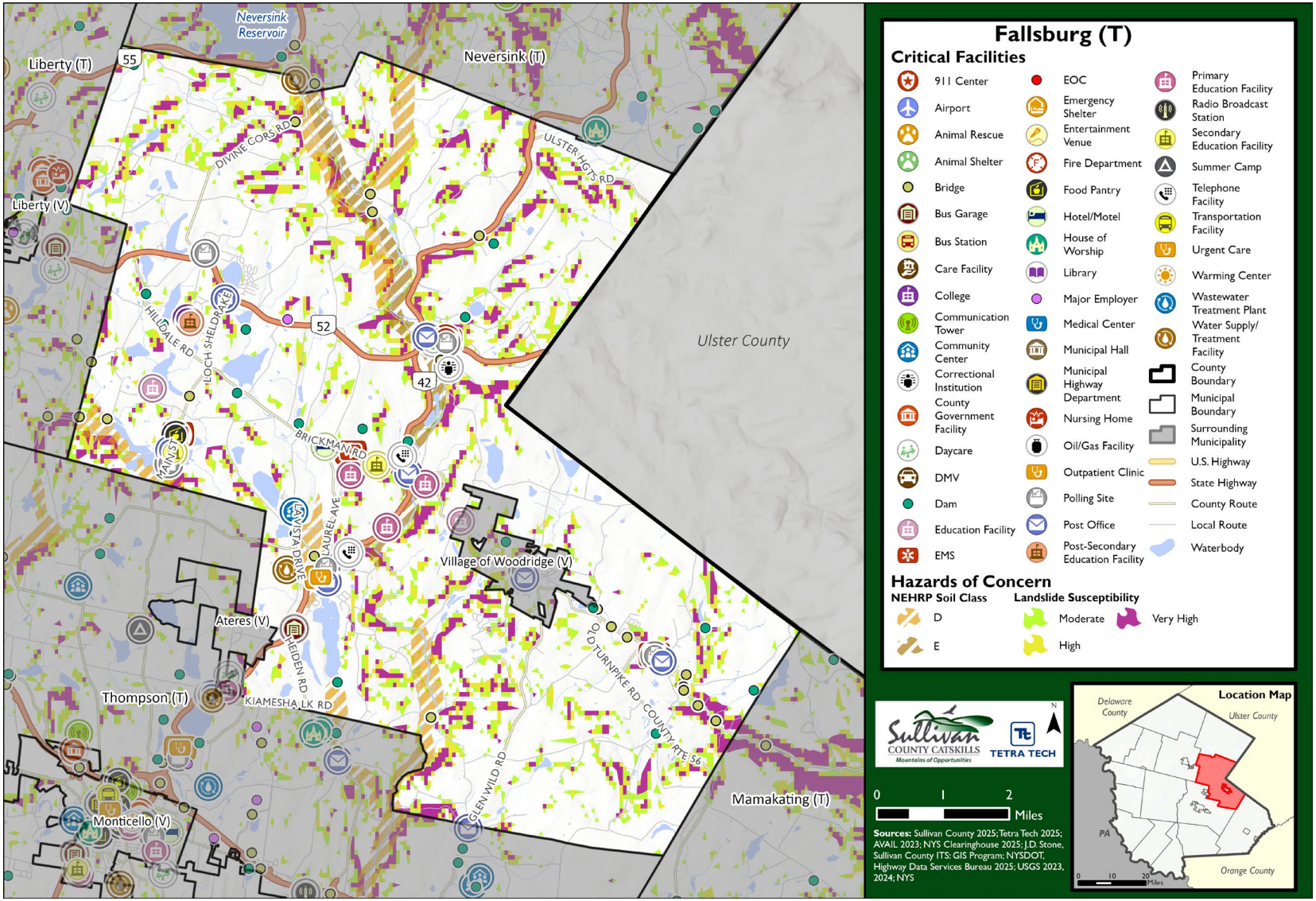


Figure 9-2. Fallsburg NEHRP Soil and Landslide Area Map



9.3.2 Previous Event History

The history of natural and non-natural hazard events in Fallsburg is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 9-7 and Table 9-8 provide details on the loss and damage in Fallsburg during hazard events since the last hazard mitigation plan update.

Table 9-7. Presidential Disaster Declarations History in Fallsburg

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Fallsburg
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Masking mandates, work from home orders and social distancing
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Town experienced some washouts and damages. Overtime was incurred.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Town experienced some washouts and damages. Overtime was incurred.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 9-8. Hazard Event History in Fallsburg

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Fallsburg
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Fallsburg
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Damage and losses unknown, as records have not been kept, and the previous Highway Superintendent is deceased.

Note: All events reported resulted in property damages incurred of 25,000 or more at the County level.
Highway Superintendent has been with the Town for three years. The previous one passed away.

9.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 9-9 includes an inventory of critical facilities and infrastructure for the Town of Fallsburg.

Table 9-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Eighteen bridges three dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

9.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Fallsburg Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 9-10.

Table 9-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Mongaup Road is impacted by Beaver Dam breaks and the beavers are there every year. A different type of culvert was put there to try and help, but there is still routine cleaning that has to be done to allow for water flow.
Drought	A mix of private well water and a municipal water system. Every year there is an issue, there is an issue with moving the water because the pipes are old and outdated.
Earthquake	No known impacts
Flood	Morning Side Lake at the park floods out and onto the road. Pleasant Valley Road flooding. Mongaup Road also incurs flooding.
Landslide	No known impacts
Pandemic	No known impacts
Severe Storm	Town power is restored within hours. Town would use the school as an emergency shelter.
Severe Winter Storm	Getting salt was difficult for the Town. Town is efficient at clearing roadways. County and state are effective at clearing roadways.
Wildfire	No known impacts

9.3.5 Vulnerable Community Assets

Representatives from the Town of Fallsburg Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 9-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 9-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	Fox Croft Village (below Neversink) is a mobile home park (no basements), and they tend to flood frequently. There are sewerage issues and water issues. Hill Dale Dorms – used to be a dorm building and is located near Luzone Lake. This facility incurs flooding. Is currently temp housing.	**Local Roads, Highways, Culverts, Bridges**	Pleasant Valley culvert Griff and Water Street culvert County is doing the one by Morningside Park (Brickman Road) County owned bridge on Riverside Drive is undersized

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Municipal Buildings	Highway needs a whole new facility. Is located in floodplain and there are holes throughout, insulation is poor, roof is leaking. Highway does not have backup power. Town Hall has generator (connected to police). Code Office, Water and Parks do not have backup power.	**Medical Centers (non-hospital)**	Refauh Health is beyond repair, it floods routinely. They are currently building a new facility.
College/University	Sullivan County Community College – No known impacts	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Community Center has some water issues in the back. Mountaindale Park access road washes out. Morningside has water issues	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Highway needs a whole new facility. Is located in floodplain and there are holes throughout, insulation is poor, roof is leaking. Highway does not have backup power. Salt storage is not adequate and is impacted by flood.
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	No known impacts
Fire/Police Stations	Five Fire Districts in the Town. No known impacts	**Wastewater Treatment Plants**	Combination of septic and plants. There are three plans, one is being upgraded currently, one is having a study done to evaluate upgrades needed, another one was upgraded six years ago. Cost is about 200 million to fix the remaining two.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See above for that. All main lines need to be replaced, they are too small and cannot move water efficiently. Wells have issues. Some wells are contaminated and cannot be used at all or have limited use.
Hospitals	Not applicable	**Other**	No known impacts

9.3.6 Dams

Table 9-12 includes all dams in the Town of Fallsburg. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 9-12. Dams Located in Fallsburg

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-1597	Pleasure Lake Dam	Sheldrake Stream	Fallsbrug Fish and Boat Club INC.	Private	Recreation	High Hazard Dam
162-0330	Badley Lake Dam	Trout Brook	James Bonnell	Private	Recreation	Low Hazard Dam
163-0734	Silver Lake Dam	Sundburg Creek	Village of Woodridge	Local Government	Water Supply - Secondary	Intermediate Hazard Dam
163-5949	Marvin Massive Pond Dam	TR - Sheldrake Stream	Marvin Massive	Private	Flood Control and Storm Water Management	Hazard Classification Not Assigned
162-3166	Evans Dam	Sheldrake Stream	Vacation Village Homeowners Association	Private	Recreation	Intermediate Hazard Dam
163-3873	Mountaindale Recreation Lake Dam	Braden Brook	Town of Fallsburg	Local Government	Recreation	Low Hazard Dam
163-4487	Groos Pond Dam	TR- Sheldrake Stream	The Center For Discovery, Forest Pond Resort	Private	Flood Control and Storm Water Management	Intermediate Hazard Dam
163-3286	Boniface Dam	Black Creek	Edward Boniface	Private	Recreation	Low Hazard Dam
162-1237	Roedy Pond Dam	TR-Neversink River	William Roedy	Private	Recreation	Low Hazard Dam
162-4477	South Wind Lake Dam	TR-Neversink River	Andrea, Marc and Teri Hurwitz	Private	Recreation	Low Hazard Dam
163-1852	Furst Lake Dam	TR-Neversink River	Harry Furst	Private	Recreation	Low Hazard Dam
163-5339	Wohl Lake Dam	TR-Neversink River	Catskill Vacation Home Builders INC.	Private	Other	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-5069	Lake Nityananda Dam	TR- Sheldrake Creek	Syda Foundation	Private	Recreation	Low Hazard Dam
163-4489	Morningside Lake Dam	Sheldrake Stream	Town of Fallsburg	Local Government	Recreation	Low Hazard Dam
162-4602	Luzon Lake Dam	TR-East Mongaup River	Jack Kramer	Private	Recreation	Low Hazard Dam
162-4478	Hilldale Pond Dam	TR-Luzon Lake	Sulco Development Corporation	Private	Recreation	Low Hazard Dam
163-2985	Fred Katz Pond Dam	TR-Taylor Brook	Idriz and Murto Musovic	Private	Recreation	Intermediate Hazard Dam

Notable comments regarding dams in the jurisdiction:

Groos Pond Dam (Corner of Lavista) – owned by Center of Discovery, but Town is taking over the property. Dam was inspected and was unsound and Town is working on a plan to repair it.

9.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 9-13 identifies the preliminary hazard ranking for Fallsburg, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 9-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	Town taking over a dam and the high hazard dam located in the Town.	Medium
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Disagree	Low	No recent wildfire occurrences	Low

9.4 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 9-14 through Table 9-17.

9.4.1 Development and Permitting

Table 9-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits
What is your process for tracking building permits?	Yes, IPS
Are permits tracked by hazard area? (For example, floodplain development permits.)	No
Does your community have a buildable land inventory? If yes, please describe.	No

Table 9-15. 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
2020				
Total Permits	271	0	10	281
Permits within SFHA	0	0	0	0
2021				
Total Permits	210	0	4	214
Permits within SFHA	0	0	0	0
2022				
Total Permits	216	0	12	228
Permits within SFHA	0	0	0	0
2023				
Total Permits	174	0	10	184

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA	0	0	0	0
2024				
Total Permits	301	0	7	308
Permits within SFHA	0	0	0	0
2025				
Total Permits	253	0	27	280
Permits within SFHA	0	0	0	0

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

Table 9-16. Recent Major Development and Infrastructure from 2020 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
Cabana Sands	Duplexes	76	NYS Route 52 Loch Sheldrake SBL: 20.-1-4.1	None	Approved in 2022 Completed in 2025
Cardinal Grove	Duplex	80	Laurel Avenue South Fallsburg SBL: 39.-1-88.6	None	Approved in 2020 Completed in 2024
Chestnut Court	Townhomes	39	Laurel Avenue South Fallsburg SBL: 39.-1-94	None	Approved in 2020 Completed in 2024
Fallsburg Holdings	Duplex	58	5499 NYS Rte 52 Fallsburg SBL: 39.-1-65.1	None	Approved in 2021 Completed in 2025
Hamlet at Loch Sheldrake	Townhomes	6	NYS Route 52 Loch Sheldrake SBL: 18.-2-12.1	Partially in FEMA Flood Hazard Zone	Approved in 2023 Completed in 2025
Zimmerman Estates	Townhomes	44	Zimmerman Road Loch Sheldrake SBL: 17.-1-14.1, 14.2 & 14.3	None	Approved in 2023 Completed in 2025
Hasbrouck Estates (Phase I)	Duplex	80	Hasbrouck A Road Loch Sheldrake SBL: 12.-1-30.1, 26	None	Approved 2022 Under construction
Perennial Park	Duplex	66	Edgewood & Ripple Rd, Loch Sheldrake SBL: 11.-1-29.1	None	Approved 2024 Under construction
Westbourne Estates	Duplexes & Single Family	134	NYS Rte 42 Woodbourne SBL: 21.1-42.1; 43.3; 42.4	None	Approved 2018 Phase I completed Phase II under construction

Table 9-17. 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
Irvington Estates Junior	Duplex	19	5389 SR 42 South Fallsburg 56-1-8.1; 9 & 13.1	None	Approved 6/12/25
KJ Estates	Duplex	52	Karmel Jacobs Rd Loch Sheldrake 12.-1-64; 17.-1-2	None	Approved 2/12/26
Luxor Junior	Condo	97	Maplewood Avenue Loch Sheldrake 12.-1-41.5	None	Approved 10/10/24
Sheldrake-Karmel MHP	Manufactured Home Park	83	Karmel Jacobs Rd Loch Sheldrake 12.-1-7; 12.-1-2.3	None	Approved 8/14/25
South Fallsburg WWTP Upgrade	Infrastructure	N/A	5410 NY-42 South Fallsburg 56.-1-13.2	Partially in FEMA Flood Hazard Zone	Final Design & Bidding Construction Start:2026 Completion: 2029

9.5 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 Table 9-1 is responsible for maintaining this information.

9.5.1 NFIP Statistics

Table 9-18 summarizes the NFIP policy and claim statistics for the Town of Fallsburg.

Table 9-18. Fallsburg NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360819B
# Policies	40
# Claims (Losses)	4
Total Loss Payments	$29,173.75
# Repetitive Loss Properties	2
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

9.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 9-19.

Table 9-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Morning Side Lake at the park floods out and onto the road. Pleasant Valley Road flooding. Mongaup Road also incurs flooding.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Thomas (TJ) Brawley, Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting of denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	Yes, Town Engineer (Keystone Engineering)
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 137 Flood Damage Prevention (Local Law #16 of 2010)
What is the date that your flood damage prevention ordinance was last amended?	December 21, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	August 17, 2015
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	No
What are the barriers to running an effective NFIP program in your community, if any?	Limitations in staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	There is limited staffing, so more localized training would be needed
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many	No

NFIP Topic	Comments
structures are in special flood hazard area (SFHA)?	
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	No
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Interested property owners express interest to insurance companies
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	Yes, Maps from DEC
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, Site Plan Review by engineer

9.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Fallsburg 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 Fallsburg to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

9.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 9-20 and Table 9-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 9-20. Regulatory Capabilities in Fallsburg

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Fallsburg. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, the Energy Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Chapter 96 Building Code Enforcement	Code Enforcement Officer
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	Yes	The purpose of this chapter is to implement for the Town of Fallsburg SEQR. The purpose of this chapter is to provide for the protection, preservation and conservation of the freshwater wetlands within the boundaries of the Town of Fallsburg, pursuant to and in accordance with all of the proceedings, concepts and definitions set forth in Article 24 of the Environmental Conservation Law and Title 23 of Article 71 of such law relating to the enforcement of Article 24, as such law may from time to time be amended.	Chapter 125 Environmental Quality Review Chapter 141 Freshwater Wetlands	Town Administration Planning Board, Zoning Board
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;	Chapter 137 Flood Damage Prevention (Local Law #16 of 2010)	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (steep slope, wildfire)	Yes	For purposes of calculating development yield, the following areas shall be subtracted from the gross acreage of a parcel to establish the minimum lot area: delineated wetlands, floodplains, steep slopes.	Chapter 310 Article V Supplementary Regulations Applying to All Uses and All Districts (310-5.4), 2018	Code Enforcement Officer
Post-Disaster Recovery/ Reconstruction Code	Yes	The purpose of this chapter is to provide for the removal or repair of buildings in business, industrial and residential sections that, from any cause, may now be or shall hereafter become dangerous or unsafe to the public.	Chapter 104 Buildings, Unsafe	Code Enforcement Officer
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Through site plan review, it is the intent of this article to promote the health, safety and general welfare of the residents of the Town and to ensure that proposed development and use of land within the Town of Fallsburg will	Chapter 310, Article VII, 2018	Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		have a harmonious relationship with the existing or permitted use of contiguous land and of adjacent neighborhoods.		
Stormwater Management Code	Yes	Stormwater other than that exempted under § 230-24, and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers or to a natural outlet approved by the Superintendent and other regulatory agencies. Unpolluted industrial cooling water or process waters may be discharged, on approval of the Superintendent, to a storm sewer, combined sewer, or natural outlet. (NOTE: If required by applicable law, a SPDES permit must be obtained prior to any such discharge.)	Chapter 230, Article V, Section 25	Town Administration
Subdivision Code	Yes	All land subdivision shall hereafter be subject to the following regulations which are adopted for the purpose of providing for the future growth and development of the Town and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health and welfare of its population.	Chapter 260, 1971	Planning Board
Water	Yes	Article I: Water Service Connections Article II: Drought Emergencies Article III: Standardization of Water Meters Article IV: Water Main Extensions	Chapter 299	Water Division
Wellhead Protection	Yes	Included throughout the Water Ordinance	Chapter 299	Water Division
Zoning/Land Use Code	Yes	The intent of this chapter is to establish a specific and detailed plan for the orderly and desirable development and use of land in the Town of Fallsburg in accordance with the authority granted to the Town under Article 16 of the New York Town Law. This chapter is, moreover, intended to protect and promote public health, safety, morals, comfort, convenience and the general welfare of the people by meeting the goals, objectives and recommendations set forth in the Comprehensive Plan and to effectuate the Comprehensive Plan.	Chapter 310, 2018	Code Enforcement Officer

Planning Capabilities

Table 9-21. Planning Capabilities in Fallsburg

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	A comprehensive plan is a document that describes a vision for a community's future and the goals and objectives that, through actions taken by a town board and other agencies, support that vision. While each citizen may have a particular vision for the Town, an adopted Comprehensive Plan reflects consensus that is achieved through a participatory public input process, and contains the land use, environmental and related policies that will guide a municipality in the actions it undertakes or reviews, until the Plan is reviewed again. Before a comprehensive plan can be adopted and implemented, the Town must carefully consider the environmental implications of adopting a plan in accordance with the regulations implementing the New York State Environmental Quality Review Act (SEQRA).	Town of Fallsburg Comprehensive Plan, 2018	Town Administration
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The plan includes the identification of essential positions, facilitation of remote work for non-essential positions, provision of personal protective equipment, and protocols for supporting contact tracing.	Comprehensive Emergency Management Plan, 2008	Town Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Water Conservation Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Other	No	-	-	-

9.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 9-22 details the available administrative and technical capabilities of the Town.

Table 9-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	No	Contract Keystone Engineering
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Officer
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Town of Fallsburg Police Department, Fallsburg Fire Company,
Environmental Commission/Specialist	No	-
Grant Writer	Yes	As needed
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Emergency Response
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Town maintains website and contracts out for changes
Planning Board	Yes	The planning board exists to guide and regulate the orderly growth and development of a community, ensuring public safety, welfare, and responsible land use.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	Yes	Town Engineer and contracted Planner

Capability Type	In Place in Municipality? Yes or No	Comments
Planners or engineers with an understanding of natural hazards	Yes	Town Engineer and contracted Planner
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Town Engineer and contracted Planner
Professionals trained in conducting damage assessments	Yes	Town Engineer and contracted Planner
Public Works/Highway Department	Yes	Highway Department
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	Contract Keystone Engineering
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other	Yes	The Water Division is responsible for 22 wells, 11 water storage tanks and over 50 miles of distribution piping which provides the residents of the town with a safe, secure and plentiful supply of potable water for consumption and fire protection.

9.6.3 Fiscal Capability

Table 9-23 summarizes financial resources available to Fallsburg.

Table 9-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No, but applied
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other Federal (non-FEMA) funding programs	Yes
FEMA funding programs	No
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	Possibly used for Rail Trail
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

9.6.4 Education and Outreach Capability

Table 9-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 9-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No, but Town is starting this
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Districts
Hazard mitigation information available on your website	Yes
Local News	Yes
Natural disaster/safety programs in place for schools	Yes, Fire and evacuation
Organizations that conduct outreach to at risk populations and underserved populations	Yes, County
Public information officer or communications office	Yes, Incorporated in Town staff
Social media for hazard mitigation education and outreach	Yes, Facebook, Instagram, and Website
Warning systems for hazard events	Yes, CodeRED

9.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 9-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*

- ***N/A:*** *This hazard is not a risk to the community.*

Table 9-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

9.7 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.

9.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Fallsburg-1—Fallsburg - Acquire generator for Mountaindale Fire District	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snowstorm
Lead Agency / Department	Fallsburg Supervisors Office
Supporting Agency / Department	-
Action Location	Fire District
Summary of Original Problem	During major storms, particularly wind storms, the Mountaindale Fire District facilities experience power outages and no back-up power generation.
Summary of Solution (Project)	Reduce long-term risks of all hazards, particularly wind storms, that impact power transmission to Mountaindale Fire District facilities by acquiring and installing a back-up power generator.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Fallsburg-2—Fallsburg - Marsh Rd. Aging Culverts/Flooding Issues	
Hazards Addressed	Flood
Lead Agency / Department	Fallsburg Highways
Supporting Agency / Department	-
Action Location	Marsh Road
Summary of Original Problem	Marsh Road is experiencing flooding due to aging and undersized culverts.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by resizing and upgrading culverts on Marsh Road, based on engineering studies that include utilization of box culverts.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Fallsburg-3—Fallsburg - Maplewood Ave Flooding/Culvert Issues	
Hazards Addressed	Flood
Lead Agency / Department	Fallsburg Highway Dept
Supporting Agency / Department	-
Action Location	Maplewood Ave
Summary of Original Problem	Maplewood Avenue experiences flooding due to aging and undersized culverts.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by resizing and upgrading culverts on Maplewood Avenue, based on engineering studies that include utilization of a box culvert.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project Complete

9.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Fallsburg identified the following mitigation efforts completed since the last HMP:

- Town recently upsized Paramont Road and Church Road.

9.7.3 Identified Issues

The Town of Fallsburg has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.
- Pleasure Lake Dam is a Class I High Hazard Dam that is located on Pleasure Lake and Sheldrake Stream. The dam is owned by Fallsburg Fish and Boat Club, Inc.. Failure of the dam could result in inundation of residential and vacation properties, woodland areas, and transportation routes including Thompsonville Road, as per the current EAP, last updated in June 2008. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times along Mongaup Road. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.
- The availability of safe drinking water is crucial to the longevity of the Town; annually, there are water supply safety issues due to old and corroded pipes and well problems. Drinking water has the potential to be

impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.

- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Pleasant Valley Road, Griff Street, Water Street, Brickman Road, and Marsh Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.
- Critical facilities require backup power to ensure continuity of operations. The Code Enforcement Office, Water Department, Highway Department, Parks Department, and Mountaindale Fire District facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- Flood risk in the Town is primarily along Morningside Lake, Sheldrake Stream, East Mongaup River, Braden Brook, Luzone Lake, and Pleasure Lake. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Morningside Lake floods onto Route 52 and Morningside Park Road.
  - Pleasant Valley Road flooding from Sheldrake Stream.
  - Mongaup Road incurs flooding from the East Mongaup River.
  - Mountaindale Park access road washes out from Braden Brook.
  - River Valley (formerly Fox Croft Village) is a mobile home park which floods frequently from a waterbody to its west.
  - Hill Dale Dorms is a temporary housing facility which incurs flooding damages from Luzone Lake.
  - Community Center has some water issues in the back due to its proximity to Pleasure Lake.
- Open air storage of salt and sand leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow.
- Groos Pond Dam is currently owned by Center of Discovery, but Town is taking over the property. The dam was inspected in August 2023 and was found to be in an unsound condition. The Town is working on a plan to repair it.

9.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Fallsburg participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Fallsburg 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.

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 9-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-FallsburgT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-FallsburgT-02. Pleasure Lake Dam Rehab

Lead Agency:	Dam Owners (Fallsburg Fish and Boat Club, Inc.)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Pleasure Lake Dam is a Class I High Hazard Dam that is located on Pleasure Lake and Sheldrake Stream. The dam is owned by Fallsburg Fish and Boat Club, Inc.. Failure of the dam could result in inundation of residential and vacation properties, woodland areas, and transportation routes including Thompsonville Road, as per the current EAP, last updated in June 2008. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Pleasure Lake Dam and encourage the dam owners to update the June 2008 EAP. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-FallsburgT-03. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times along Mongaup Road. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Action 2026-FallsburgT-04. Safe Drinking Water

Lead Agency:	Town Board	
Supporting Agencies:	Engineering	
Hazards of Concern:	☐Dam Failure ☒Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the Town; annually, there are water supply safety issues due to old and corroded pipes and well problems. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.	
Description of the Solution:	The Town will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The Town may choose to reference suggested projects from the US EPA's "*Incident Action Checklists*". Potential projects may include: • Develop an emergency drinking water supply plan and establish contacts to discuss procedures. • Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first. • Monitor water supply and calculate how long water could be provided if the drought persists • Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures. • Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system. • Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies. • Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network. • Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer. • Coordinate with other neighboring water systems to develop a water use plan. • Identify generator needs at water facilities. • Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911. • Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system. • Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Town Budget	
Implementation Timeline:	5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will permit the Town to investigate various methods to provide safe drinking water to its residents.	
Impact on At Risk Populations:	Safe and predicable water supplies are foundational to supporting at risk populations.	
Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.	
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.	
Impact on Capabilities:	This action will ensure the Town is able to maintain its supply of potable water.	

Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)		☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)		☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium	☐Low
Alternative	Action		Evaluation
	No action		Current problem persists
	Rely on State to resolve problem		State does not have jurisdiction
	Rely on County to resolve problem		County does not have jurisdiction

Action 2026-FallsburgT-05. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Pleasant Valley Road, Griff Street, Water Street, Brickman Road, and Marsh Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	In addition to the culverts on Pleasant Valley Road, Griff Street, Water Street, Brickman Road, and Marsh Road, the Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-FallsburgT-06. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Code Enforcement Office, Water Department, Highway Department, Parks Department, Mountaindale Fire District	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Code Enforcement Office, Water Department, Highway Department, Parks Department, and Mountaindale Fire District facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Fire Department, School Budget, Utility Fees	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-FallsburgT-07. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-FallsburgT-08. Flood Mitigation Along Water Ways

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along Morningside Lake, Sheldrake Stream, East Mongaup River, Braden Brook, Luzone Lake, and Pleasure Lake. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Morningside Lake floods onto Route 52 and Morningside Park Road. • Pleasant Valley Road flooding from Sheldrake Stream. • Mongaup Road incurs flooding from the East Mongaup River. • Mountaindale Park access road washes out from Braden Brook. • River Valley (formerly Fox Croft Village) is a mobile home park which floods frequently from a waterbody to its west. • Hill Dale Dorms is a temporary housing facility which incurs flooding damages from Luzone Lake. • Community Center has some water issues in the back due to its proximity to Pleasure Lake.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Delaware River, Tenmile River, and their tributaries. The Town may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-FallsburgT-09. Salt and Sand Storage Shed

Lead Agency:	Highway Department	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Open air storage of salt and sand leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow.	
Description of the Solution:	Construct a shed to house bulk salt and sand storage. The construction of this shed will reduce loss of material to erosion and leaching from rain and snow melt and ensure that there are enough critical materials for roadway treatment during storms.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Town Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	2, 3	
Benefits:	This action will support the continuity of operations for the critical services within the Town, including the Highway Department and first responders. The Highway Department will maintain its capability to provide road treatments in time of need, ensuring roads are accessible for first responders and regular travelers.	
Impact on At Risk Populations:	At risk populations will have access to maintained roads, ensuring safe travel,	
Impact on Future Development:	Individuals living within future development in the Town will have access to safe, treated roadways.	
Impact on Critical Facilities/Lifelines:	The construction of this structure will enhance the transportation lifeline by ensuring roads are safe to traverse during severe winter storms. Furthermore, it will create an additional critical facility.	
Impact on Capabilities:	This action will ensure the Highway Department is able to maintain its capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Install underground salt and sand facility	Not feasible
	Share a facility with another municipality	Administratively burdensome

Action 2026-FallsburgT-10. Groos Pond Dam Rehab

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, NYS DEC, Center For Discovery	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Groos Pond Dam is currently owned by Center of Discovery, but Town is taking over the property. The dam was inspected in August 2023 and was found to be in an unsound condition. The Town is working on a plan to repair it.	
Description of the Solution:	Utilizing the inspection report of the Groos Pond Dam, the Town will work with its engineers to identify the most cost-effective methods to repair and resolve any outstanding structural issues to the dam. The Town and engineers will consult with NYS DEC and the previous dam owners (Center For Discovery) as necessary.	
Estimated Cost:	TBD depending on mitigation measure(s) selected	
Potential Funding Sources:	Town Budget, NYS DEC, Center For Discovery	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Table 9-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-FallsburgT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-FallsburgT-02	Pleasure Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-FallsburgT-03	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium
2026-FallsburgT-04	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High
2026-FallsburgT-05	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-FallsburgT-06	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-FallsburgT-07	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-FallsburgT-08	Flood Mitigation Along Water Ways	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-FallsburgT-09	Salt and Sand Storage Shed	0	0	1	1	1	0	1	1	1	1	1	1	1	0	10	Medium
2026-FallsburgT-10	Groos Pond Dam Rehab	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

10. TOWN OF FORESTBURGH

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Forestburgh 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 Forestburgh, describes who participated in the planning process, assesses Forestburgh's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

10.1 HAZARD MITIGATION PLANNING TEAM

The Town of Forestburgh identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 10-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 10-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Daniel S. Hogue Jr., Town Supervisor Address: 332 King Rd, Forestburgh, NY 12777 Phone Number: (845) 794 0611, ext. 102 Email: forestburghsupervisor@gmail.com	Name/Title: Joseph Ruggeri, Highway Superintendent Address: 332 King Rd, Forestburgh, NY 12777 Phone Number: (845) 794-8069 Email: forestburghhighwaydepartment@gmail.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Kaitlen Castillo, Code Enforcement Address: 332 King Rd, Forestburgh, NY 12777 Phone Number: (845) 794-0611 Ext 105 Email: forestburghcodes@gmail.com	

10.2 COMMUNITY PROFILE

10.2.1 Community Classifications

Table 10-2 summarizes classifications for community programs available to Forestburgh.

Table 10-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	Not Designated	October 28, 2022
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

10.2.2 Community Profile

Geographical Description

The Town of Forestburgh is predominantly forested with rugged hilly terrain and is sparsely populated. It is situated in the southern part of the county and features a mix of dense woodlands, small bodies of water, and natural scenic areas. The town's geography includes parts of the Neversink River watershed, which contributes to its rich biodiversity and outdoor recreational opportunities. Forestburgh's terrain is marked by rolling hills and valleys, making it a largely rural and natural environment with limited development. This setting supports a peaceful, rural lifestyle and attracts visitors seeking outdoor activities such as hiking, fishing, and wildlife observation. (Town of Forestburgh 2025)

Government Type and Description

The Town is governed by the Town Board, comprised of the Town Supervisor/Member and four other board members (Town of Forestburgh 2025).

Table 10-3 through Table 10-6 note land area, population, and building stock information for the Town of Forestburgh.

Table 10-3. Total Land Area in the Town of Forestburgh

Jurisdiction	Total Land Area	
	Acres	Square Miles
Forestburgh (T)	34,366.1	53.7

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 10-4. Population Estimates in the Town of Forestburgh

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
808	1.0%	829	1.0%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 10-5. At Risk Populations in the Town of Forestburgh

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
270	32.6%	24	2.9%	5	0.6%	106	12.8%	39	4.7%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 10-6. General Building Stock in the Town of Forestburgh

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
680	$627,023,982	617	$482,071,046	50	$74,930,060	6	$25,493,347	7	$44,529,528

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

10.3 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 Forestburgh's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

10.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Forestburgh are shown in Figure 10-1 and Figure 10-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Forestburgh has significant exposure.

Figure 10-1. Forestburgh Flood, Wildfire and Dam Inundation Area Map

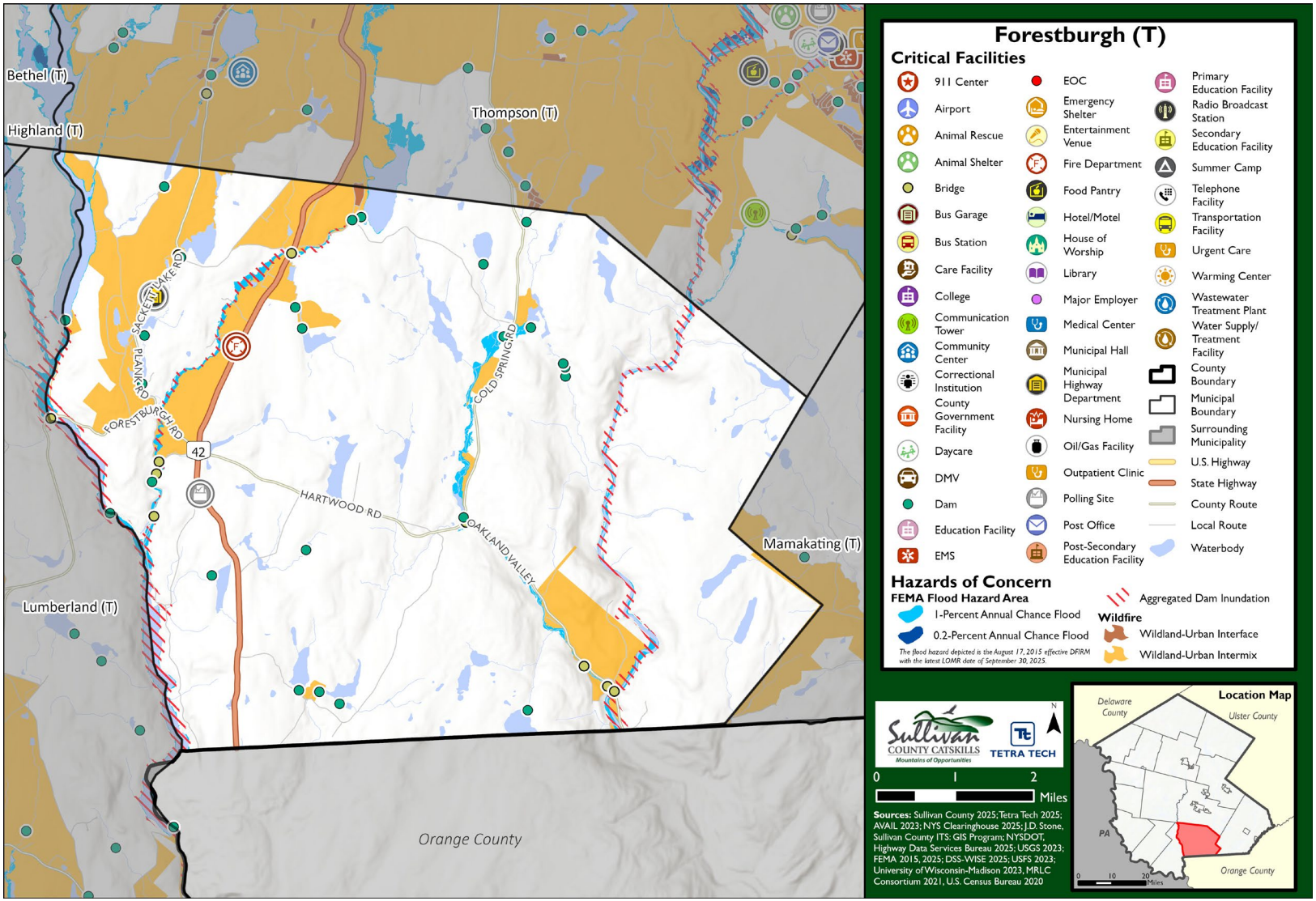
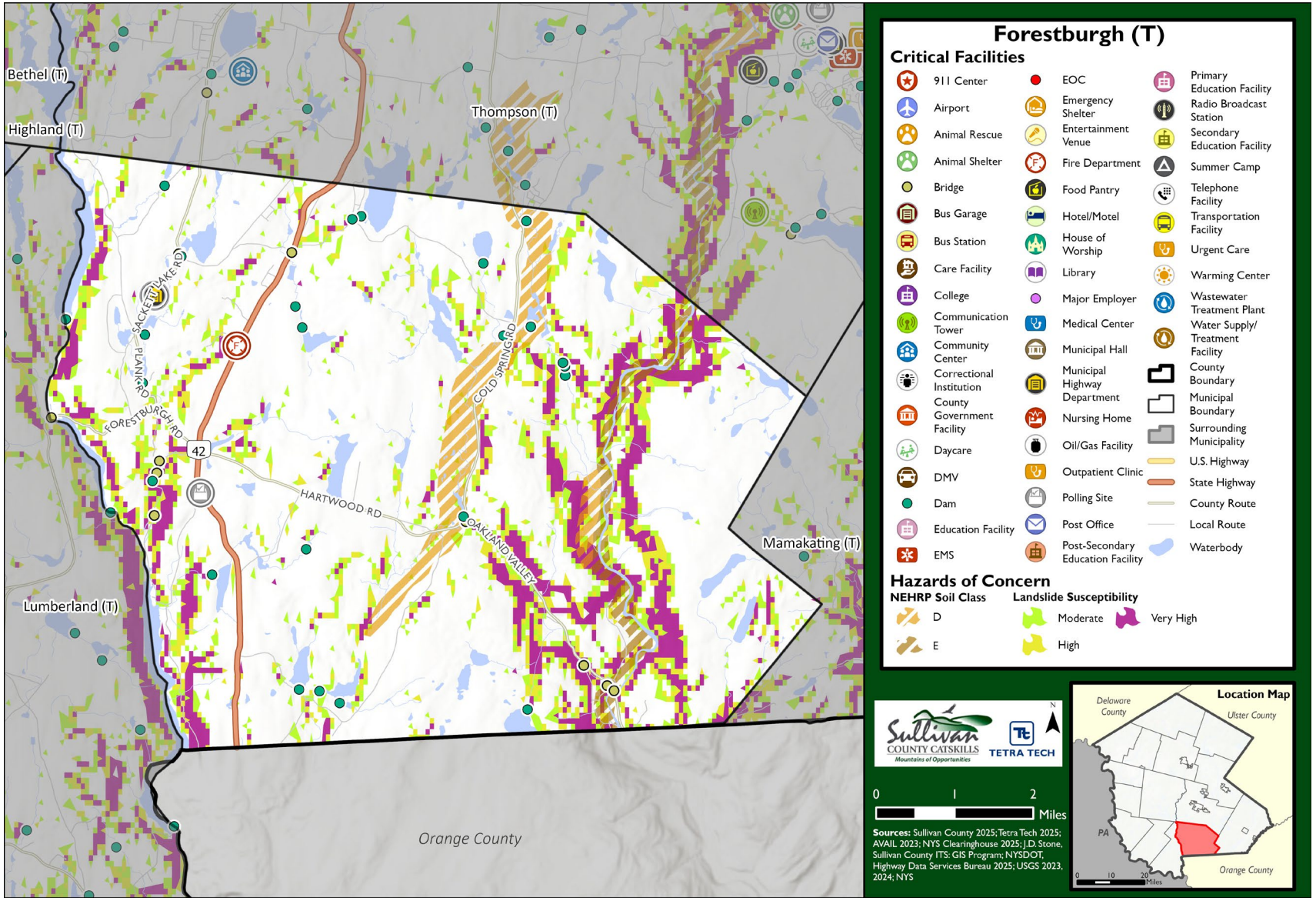


Figure 10-2. Forestburgh NEHRP Soil and Landslide Area Map



10.3.2 Previous Event History

The history of natural and non-natural hazard events in Forestburgh is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 10-7 and Table 10-8 provide details on the loss and damage in Forestburgh during hazard events since the last hazard mitigation plan update.

Table 10-7. Presidential Disaster Declarations History in Forestburgh

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Forestburgh
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Masking mandates, work from home orders
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town did not incur any documented damage or losses
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town did not incur any documented damage or losses

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 10-8. Hazard Event History in Forestburgh

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Forestburgh
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town did not incur any documented damage or losses
2020/2021			Town experienced a microbrust, power outages, trees downed on roads. Town was out of power for nearly 15 days. Major Transmission line was taken down.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Forestburgh
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town did not incur any documented damage or losses
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town did not incur any documented damage or losses
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

10.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 10-9 includes an inventory of critical facilities and infrastructure for the Town of Forestburgh.

Table 10-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Nine bridges and six dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

10.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Forestburgh Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 10-10.

Table 10-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Some beaver dam breaks, nothing impacting infrastructure. Town is proactive when beavers start building dams.
Drought	Town residents are on private well water. Some sporadic wells that run dry – individuals tend to take action themselves. Fire hazard concerns with droughts because Town is forested
Earthquake	No known impacts
Flood	Mongaup River system and associated lakes and tributaries. Black Brook all tend to contribute to flood related concerns. Issues where water ways pass under infrastructure.
Landslide	Galligan Road, Burns Road are in a valley and can experience washouts.
Pandemic	No known impacts
Severe Storm	Power outage length has improved, a big storm still will knock power out for days and weeks. Most people have standby generators.
Severe Winter Storm	Highway is effective at clearing roadways. County and State clear roads effectively too.
Wildfire	Fire Department and mutual aid works very well.

10.3.5 Vulnerable Community Assets

Representatives from the Town of Forestburgh Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 10-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 10-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	Town wide wet basements is an issue.	**Local Roads, Highways, Culverts, Bridges**	Multiple culverts have been upsized post FEMA declarations. Potential upsize opportunities: Plank A Road Plank B Road Foster Road Tannery Road Rodangun Road Plank Road A has an old hydroelectric dam that has not been used in 40-50 years which is starting to erode and the road is starting to become undermined and eroded.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Municipal Buildings	Town just put in generators in Highway, Fire Department and Town Hall in December 2025.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	No known impacts
Cultural/Historic Buildings/Sites	Not applicable	**Schools (K-12)**	Not applicable
Elder-care Facilities	Not applicable	**Utilities**	Substation feeds whole Town and is located along Mongaup River (hydro)
Fire/Police Stations	Fire has backup, State police	**Wastewater Treatment Plants**	Lake Joseph Estates has a private wastewater treatment plant. No known impacts to the Town
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See table above
Hospitals	Not applicable	**Other**	Not applicable

10.3.6 Dams

Table 10-12 includes all dams in the Town of Forestburgh. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 10-12. Dams Located in Forestburgh

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-0130	Mongaup Falls Dam	Mongaup River	Eagle Creek Hydro Power, LLC	Private	Hydroelectric	High Hazard Dam
148-0155	Swinging Bridge Dam	Mongaup River	Eagle Creek Hydro Power, LLC	Private	Hydroelectric, Recreation	High Hazard Dam
163-2772	Beaver Dam Pond Dam	TR-Bush Kill	Boy Scouts of America Northern New Jersey Council	Private	Recreation	Intermediate Hazard Dam
163-0163	St Josephs Lake Dam	Black Brook	Lake Joseph Homeowners Association	Private	Recreation	High Hazard Dam
163-2422	Burnt Hope Dam	TR-Mongaup River	Monmouth Council Boy Scouts of America	Private	Recreation	Low Hazard Dam
163-3880	Stephen Crane Dam	Bushkill	Hartwood Preserve	Private	Recreation	Low Hazard Dam
163-5215	Fish Hatchery Dam #3	Eden Brook	NYS DEC	State	Fish and Wildlife Pond	Low Hazard Dam
163-5214	Fish Hatchery Dam #2	Eden Brook	NYS DEC	State	Fish and Wildlife Pond	Low Hazard Dam
163-5213	Fish Hatchery Dam #1	Eden Brook	NYS DEC	State	Fish and Wildlife Pond	Low Hazard Dam
163-0135	Forestburg Pond Dam	TR- Black Brook	Cavallacci Foresetburg, LLC	Private	Recreation	Low Hazard Dam
148-0165	Ruddick Pond Dam	TR- Black Brook	Jacob E. Gunther	Private	Recreation	Low Hazard Dam
148-5783	Schilling Lake Dam	TR - Black Brook	Carl W. Schilling	Private	Recreation	Low Hazard Dam
148-5782	Forest Glen Lake Dam	TR - Black Brook	Forest Glen Club	Private	Recreation	Low Hazard Dam
163-5031	Forest Pond Dam	Turner Brook	Point at Forest Pond LLC	Private	Other	Low Hazard Dam
163-0162	St Josephs Lower Dam	Black Brook	Town of Forestburgh	Local Government	Other	Low Hazard Dam
163-0154	Gillman Pond Dam	BUSH KILL	Bob Wechsler	Private	Recreation	Low Hazard Dam
163-0153	Gilman Pond Dam	Litle Bush Kill	Gilman Estate	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-4491	Trout Lake Dam	TR-Bush Kill	Hartwood Club	Private	Recreation	Low Hazard Dam
163-0106	Hartwood Club Pond Dam	TR-Sturvedant Brook	Hartwood Club	Private	Recreation	Low Hazard Dam
163-5149	Hidden Pond Dam	Burnt Hope Stream	Carpenter Preserve INC.	Private	Fish and Wildlife Pond	Low Hazard Dam
163-0110	Hartwood Club Dam	TR-Bush Kill	Hartwood Club	Private	Recreation	Low Hazard Dam
163-1272	Parlow Lake Dam	TR- Black Brook	Merriewold Lake Club	Private	Recreation	Low Hazard Dam
148-5013	Crescent Lake Dam	TR- Mongaup River	Sunrise Farm Rod and Gun Club.	Private	Recreation	Low Hazard Dam
148-1183	Rockland County Power Diversion Dam	Black Brook	Rockland Light and Power Company	Public Utility	Hydroelectric	Low Hazard Dam
148-4493	Lower Lake Metaugue Dam	TR-Rio Reservoir	Mt. Hunting Club	Private	Recreation	Low Hazard Dam
163-0151	Merriewold Lake Dam	TR- Black Brook	Merriewold Lake Club	Private	Recreation	Intermediate Hazard Dam
163-0105	Hemlock Lake Dam	Bush Kill	Hartwood Club	Private	Recreation	Intermediate Hazard Dam

Notable comments regarding dams in the jurisdiction:

Town has EAP's on file and dams are inspected routinely and Town keeps info on file for High Hazards.

10.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 10-13 identifies the preliminary hazard ranking for Forestburgh, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 10-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	Three high hazard dams	Medium
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Disagree	Medium	Galligan Road, Burns Road are in a valley and can experience washouts, leading to soil movement.	Medium
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

10.4 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 10-14 through Table 10-17.

10.4.1 Development and Permitting

Table 10-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town issues permits
What is your process for tracking building permits?	Code Enforcement has a program that they use.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, Floodplain
Does your community have a buildable land inventory? If yes, please describe.	Yes, 10 percent built out

Table 10-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 10-16. Recent Major Development and Infrastructure from 2020 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
The jurisdiction did not identify any recent major development and infrastructure from 2020 to present					

Table 10-17. 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
PUD	Residential	2,700	-	-	In discussion

10.5 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 Table 10-1 is responsible for maintaining this information.

10.5.1 NFIP Statistics

Table 10-18 summarizes the NFIP policy and claim statistics for the Town of Forestburgh.

Table 10-18. Forestburgh NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360820#
# Policies	0
# Claims (Losses)	4
Total Loss Payments	$7,981.00
# Repetitive Loss Properties	1
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

10.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 10-19.

Table 10-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Mongaup River system and associated lakes and tributaries. Black Brook all tend to contribute to flood related concerns. Issues where water ways pass under infrastructure.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Kaitlen Castillo, Building Inspector Has adequate training
What local department is responsible for floodplain management?	The Building Inspector is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #2 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 15th, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in your community, if any?	Staffing
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Training is not needed
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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 perf
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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, they consider flood risk and height restrictions

10.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Forestburgh 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 Forestburgh to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

10.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 10-20 and Table 10-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 10-20. Regulatory Capabilities in Forestburgh

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.	Chapter 68 Building Code Administration, 2006	Code Enforcement and Building Inspector
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #2 of 2010	Building Inspector
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Site Plan Code	Yes	Site plan review shall consider factors reasonably related to the health, safety and general welfare of the community.	Chapter 180-35, 2023	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	It is declared to be the policy of the Town Board to consider land divisions as part of the orderly and desirable development of land. This chapter provides procedures and standards for the Planning Board in its review of subdivision and other land division plats. The intent of this chapter is to encourage the most appropriate and best development of land in order to protect and promote the general health, safety and welfare,	Chapter 148, 2019	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	There is hereby established a comprehensive zoning plan, which plan is set forth in the text and map that constitute this chapter. This plan is adopted for the purposes stated in §§ 261 and 263 of Article 16 of the New York State Town Law, and the Municipal Home Rule Law, with the objective of promoting the public health, safety, morals, comfort, general welfare, conservation of property values, the gradual elimination of nonconforming uses and the prevention of traffic congestion throughout the Town.	Chapter 180, 2023	Zoning Board

Planning Capabilities

Table 10-21. Planning Capabilities in Forestburgh

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	On July 6, 2017, the Town of Forestburgh adopted a Comprehensive Plan to provide guidelines for the future growth of the Town. This plan includes background and analysis information including demographics and	Town of Forestburgh Comprehensive Plan, 2017	Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		trends, existing zoning and land use regulations, development standards and district plans.		
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis	Mid-Hudson Regional Community Health Assessment	Mid-Hudson Region LHDs

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Sullivan County Community Health Assessment Community Health Improvement Plan	Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

10.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 10-22 details the available administrative and technical capabilities of the Town.

Table 10-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Office
Economic Development Commission/Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Emergency Management/Public Safety Department	Yes	Fire Department and County
Environmental Commission/Specialist	No	-
Grant Writer	No	-
Maintenance Programs to Reduce Risk	Yes	Debris Management
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire Department
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	No	-
Planning Board	Yes	The planning board upholds and implements the community's development policies through the review and approval of subdivision proposals, site plans, and special use permits. The planning board also reviews any proposed amendments to the zoning laws and advises the Town Board on those matters.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Engineer
Professionals trained in conducting damage assessments	Yes	Engineer
Public Works/Highway Department	Yes	The highway department responsibilities include repairing and maintaining town highways and bridges and snow removal.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Zoning Board of Appeals	Yes	The primary function of the Zoning Board of Appeals is to consider variance requests from the strict zoning laws when they create hardships or practical difficulties for property owners. The Zoning Board of Appeals also interprets zoning laws when in question.
Other	No	-

10.6.3 Fiscal Capability

Table 10-23 summarizes financial resources available to Forestburgh.

Table 10-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Yes
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, through State Senator

10.6.4 Education and Outreach Capability

Table 10-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 10-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department
Hazard mitigation information available on your website	Yes
Local News	Yes, through mass email
Natural disaster/safety programs in place for schools	Not applicable
Organizations that conduct outreach to at risk populations and underserved populations	Yes, mostly volunteer basis
Public information officer or communications office	Yes, Town staff
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Yes, mass email

10.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 10-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 10-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

10.7 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.

10.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Forestburgh-1—Forestburgh - Nord Rd Microbursts/Property Damage	
Hazards Addressed	Wind
Lead Agency / Department	Forestburgh Highway Department
Supporting Agency / Department	-
Action Location	Nord Road
Summary of Original Problem	Major storms, particularly microbursts, cause power outages on the North Road, including one microburst that damaged property and experiences a power outage lasting two (2) weeks.
Summary of Solution (Project)	To reduce long-term risk to wind for existing assets and future development, the Town will establish a vegetation maintenance program in the Town to reduce power outages due to downed trees and powerlines. The Town vegetation maintenance program will coordinate with utility company to quickly and safely get power lines cleared from roadways, and trees cleared near powerlines. The vegetation maintenance program will also inventory and evaluate trees throughout the Town. Once a vegetation maintenance program is established an inventory and evaluation will identify trees that should be removed (e.g., decayed, rotted)
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Discontinued – Ongoing Capability
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Ongoing capability

T. Forestburgh-2—Forestburgh - Gallagan Rd Flooding Issues/Washout	
Hazards Addressed	Flood
Lead Agency / Department	Forestburgh Town Supervisor
Supporting Agency / Department	Highway Superintendent
Action Location	Gallagan Rd
Summary of Original Problem	During precipitation events, due to the proximity to a mountainshide and the steep topography, Gallagan Road experiences washouts.
Summary of Solution (Project)	Reduce risk of flooding and road washout by implementing a hydrology assessment of Gallagan Road storm drainage and design a storm water management solution or redesign the road geometry.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	Discontinued – Ongoing Capability
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Ongoing capability

10.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Forestburgh identified the following mitigation efforts completed since the last HMP:

- Ongoing maintenance in relation to road and bridge mitigation, ensuring roadways are safe
- Generators installed at Town Hall, Fire Department, and Highway Department

10.7.3 Identified Issues

The Town of Forestburgh has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well.
- Mongaup Falls Dam is a Class I High Hazard Dam that is located on the Mongaup River and Mongaup Falls Reservoir. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of a residential and commercial property and woodland areas, as per the current EAP, last updated in November 2024. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- St. Josephs Lake Dam is a Class I High Hazard Dam that is located on St. Joseph's Lake and Black Brook. The dam is owned by the Lake Joseph Homeowners Association. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including St. Joseph's Road, Lake Joseph Drive, and Michael Road. The dam was last inspected in May 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.

- Swinging Bridge Dam is a Class I High Hazard Dam that is located on the Swinging Bridge Reservoir and Mongaup River. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of a commercial property, recreational areas, woodland areas, and transportation routes including the maintenance road and Forestburgh Road. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Galligan Road and Burns Road have been identified as being at risk of landslides and could result in loss of the roadway; both roads have experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.
- Flood risk in the Town is primarily along the Black Brook, Bush Kill, and the Mongaup River system (including its associated lakes and tributaries). Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Plank Road, Mill Road, and Sackett Lake Road are vulnerable to flooding from the Black Brook and several lakes along its corridor, including Forest Glen Lake, McAuleys Lake, and Schillings Lake.
  - Forestburgh Road and Plank Road are vulnerable to flooding from the Mongaup River and several lakes along its corridor, including the Swinging Bridge Reservoir, Mongaup Fall Reservoir and Rio Reservoir.
  - Cold Spring Road is vulnerable to flooding from the Bush Kill and two lakes along its corridor, including Crane Pond and Gillman Pond.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Plank Road, Foster Road, Tannery Road, and Rod and Gun Club Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.
- The Rockland County Power Diversion Dam, an old hydroelectric dam on Plank Road, has not been used in between 40 to 50 years, is starting to erode and the road is beginning to become undermined and eroded. Although this is a low hazard dam, deterioration can lead to environmental and ecological disruptions, as well as infrastructure issues with nearby roadways.
- With a mostly forested landscape, the Town is particularly vulnerable to the wildfire hazard, especially during periods of drought. Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. Private property owners and businesses may not be aware of how to protect their property from the risk of wildfire, and how drought conditions can increase risk.

10.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Forestburgh participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Forestburgh 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.

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 10-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-ForestburghT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-ForestburghT-02. Mongaup Falls Dam Rehab

Lead Agency:	Dam Owners (Eagle Creek Hydro Power, LLC)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Mongaup Falls Dam is a Class I High Hazard Dam that is located on the Mongaup River and Mongaup Falls Reservoir. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of a residential and commercial property and woodland areas, as per the current EAP, last updated in November 2024. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Mongaup Falls Dam and encourage an inspection be completed to identify any deficiencies. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-ForestburghT-03. St. Josephs Lake Dam Rehab

Lead Agency:	Dam Owners (Lake Joseph Homeowners Association)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	St. Josephs Lake Dam is a Class I High Hazard Dam that is located on St. Joseph's Lake and Black Brook. The dam is owned by the Lake Joseph Homeowners Association. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including St. Joseph's Road, Lake Joseph Drive, and Michael Road. The dam was last inspected in May 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of St. Josephs Lake Dam and encourage the dam owners to keep the dam's EAP current. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-ForestburghT-04. Swinging Bridge Dam Rehab

Lead Agency:	Dam Owners (Eagle Creek Hydro Power, LLC)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Swinging Bridge Dam is a Class I High Hazard Dam that is located on the Swinging Bridge Reservoir and Mongaup River. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of a commercial property, recreational areas, woodland areas, and transportation routes including the maintenance road and Forestburgh Road. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Swinging Bridge Dam and encourage the dam owners to keep the dam's EAP current. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-ForestburghT-05. Landslide Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Galligan Road and Burns Road have been identified as being at risk of landslides and could result in loss of the roadway; both roads have experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.	
Description of the Solution:	The Town Engineer will complete an assessment to identify an appropriate, cost-effective method to mitigation landslide risk along Galligan Road and Burns Road. Possible mitigation measures include: • Construction of retaining walls, soil nailing, ground anchor walls • Install horizontal drains to reduce soil saturation • Cut banks along water ways to prevent oversaturated soils from falling • Install netting	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by landslide along Galligan Road and Burns Road. Keeping the roadway open to traffic also permits at risk populations to travel to critical appointments.	
Impact on Future Development:	Future development in the impacted area will be less likely to be impacted by landslides.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct roadway outside of hazard area	Not feasible
	Close road and reroute traffic around hazard area	Not feasible, would cause confusion amongst travelers

Action 2026-ForestburghT-06. Flood Mitigation Along Water Ways

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along the Black Brook, Bush Kill, and the Mongaup River system (including its associated lakes and tributaries). Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Plank Road, Mill Road, and Sackett Lake Road are vulnerable to flooding from the Black Brook and several lakes along its corridor, including Forest Glen Lake, McAuleys Lake, and Schillings Lake. • Forestburgh Road and Plank Road are vulnerable to flooding from the Mongaup River and several lakes along its corridor, including the Swinging Bridge Reservoir, Mongaup Fall Reservoir and Rio Reservoir. • Cold Spring Road is vulnerable to flooding from the Bush Kill and two lakes along its corridor, including Crane Pond and Gillman Pond.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Black Brook, Bush Kill, and the Mongaup River system. The Town may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-ForestburghT-07. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Plank Road, Foster Road, Tannery Road, and Rod and Gun Club Road are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	In addition to the culverts on Plank Road, Foster Road, Tannery Road, and Rod and Gun Club Road, the Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-ForestburghT-08. Rockland County Power Diversion Dam Rehab

Lead Agency:	Rockland Light and Power Company	
Supporting Agencies:	Town Board, NYS DEC, Engineering	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Rockland County Power Diversion Dam, an old hydroelectric dam on Plank Road, has not been used in between 40 to 50 years, is starting to erode and the road is beginning to become undermined and eroded. Although this is a low hazard dam, deterioration can lead to environmental and ecological disruptions, as well as infrastructure issues with nearby roadways.	
Description of the Solution:	The Town will initiate contact with the dam owners (Rockland Light and Power Company) to inquire about the status of the dam, including its current structural integrity and if the company is seeking to abandon the dam or have it decommissioned. Although the owners are ultimately responsible for the dam, the Town will work with the owners and engineers to ensure the selected route forward will not have significant impacts to the surrounding natural and built environments. The dam owners, engineers, and the Town will consult with NYS DEC as necessary.	
Estimated Cost:	TBD depending on mitigation measure(s) selected	
Potential Funding Sources:	Town Budget, NYS DEC, Rockland Light and Power Company	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission dam without a study performed	High cost, flood risk for nearby infrastructure and the environment increased
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure

Action 2026-ForestburghT-09. Wildfire Education and Outreach

Lead Agency:	Town Supervisor	
Supporting Agencies:	Town Board, Sullivan County	
Hazards of Concern:	☐Dam Failure ☒Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	With a mostly forested landscape, the Town is particularly vulnerable to the wildfire hazard, especially during periods of drought. Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. Private property owners and businesses may not be aware of how to protect their property from the risk of wildfire, and how drought conditions can increase risk.	
Description of the Solution:	Create outreach materials, or utilize those from Sullivan County, on wildfire risks and methods of mitigation measures, including how drought can exacerbate the risk of the wildfire hazard. 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. Outreach materials will be specified with education and information for the wildfire hazard.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	1 year	
Goals Met:	2, 3	
Benefits:	This action will improve the public education and outreach capabilities in the Town by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Town.	
Impact on At Risk Populations:	At risk populations will learn how to prepare for and mitigate the wildfire hazard which may impact them in the Town.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of the wildfire hazard. With these businesses becoming more resilient, this action would contribute to their continuity of operations.	
Impact on Capabilities:	This action would build upon the County's public education and outreach capabilities and adapt it to the Town's needs.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town
	Use only a few methods for distribution	Using only a few methods of distribution may hinder at risk populations from receiving the guidance

Table 10-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-ForestburghT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-ForestburghT-02	Mongaup Falls Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-ForestburghT-03	St. Josephs Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-ForestburghT-04	Swinging Bridge Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-ForestburghT-05	Landslide Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-ForestburghT-06	Flood Mitigation Along Water Ways	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-ForestburghT-07	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-ForestburghT-08	Rockland County Power Diversion Dam Rehab	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-ForestburghT-09	Wildfire Education and Outreach	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

11. TOWN OF FREMONT

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Fremont 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 Fremont, describes who participated in the planning process, assesses Fremont's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

11.1 HAZARD MITIGATION PLANNING TEAM

The Town of Fremont identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 11-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 11-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Brian Brustman, Town Supervisor Address: 12 County Road 95, Fremont Center, NY 12736 Phone Number: (845) 887-6055, (845) 701-2903 Email: brianbrustman@gmail.com	Name/Title: George Conklin, Highway Superintendent Address: 11 County Road 95, Fremont Center, NY 12736 Phone Number: (845) 887-6055 ext. 1 Email: highway@fremontny.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: John Kline Jr., Code Enforcement Address: 12 County Road 95, Fremont Center, NY 12736 Phone Number: (845) 887-6055 Email: building@fremontny.org	

11.2 COMMUNITY PROFILE

11.2.1 Community Classifications

Table 11-2 summarizes classifications for community programs available to Fremont.

Table 11-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

11.2.2 Community Profile

Geographical Description

The Town of Fremont is characterized by hilly terrain and forest cover, with rural residential and agricultural use. Located in the northwestern part of Sullivan County, the town spans 51.2 square miles along the Upper Delaware River. Its terrain rises from 780 feet at the river to 2,400 feet near Tennanah Lake, resulting in varied elevations and cooler temperatures at higher altitudes. Most of the town drains into the Upper Delaware River, with some areas sloping toward Route 17 and the East Branch of the Delaware River. Bordered by several towns in Sullivan and Delaware Counties and by Pennsylvania's Manchester Township, Fremont includes parts of the Upper Delaware Scenic and Recreational River, a national park (Comprehensive Plan, Town of Fremont, Sullivan County, NY 2007).

Government Type and Description

The Town is governed by the Town Board, comprising of a Town Supervisor and four councilmen (Town of Fremont 2013).

Table 11-3 through Table 11-6 note land area, population, and building stock information for the Town of Fremont.

Table 11-3. Total Land Area in the Town of Fremont

Jurisdiction	Total Land Area	
	Acres	Square Miles
Fremont (T)	32,033.4	50.1

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 11-4. Population Estimates in the Town of Fremont

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
1,161	1.5%	1,204	1.5%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 11-5. At Risk Populations in the Town of Fremont

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
327	27.2%	56	4.7%	0	0.0%	226	18.8%	85	7.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 11-6. General Building Stock in the Town of Fremont

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,322	$1,156,125,779	1,188	$744,259,268	62	$159,179,246	7	$36,885,645	65	$215,801,620

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

11.3 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 Fremont's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

11.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Fremont are shown in Figure 11-1 and Figure 11-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Fremont has significant exposure.

Figure 11-1. Fremont Flood, Wildfire and Dam Inundation Area Map

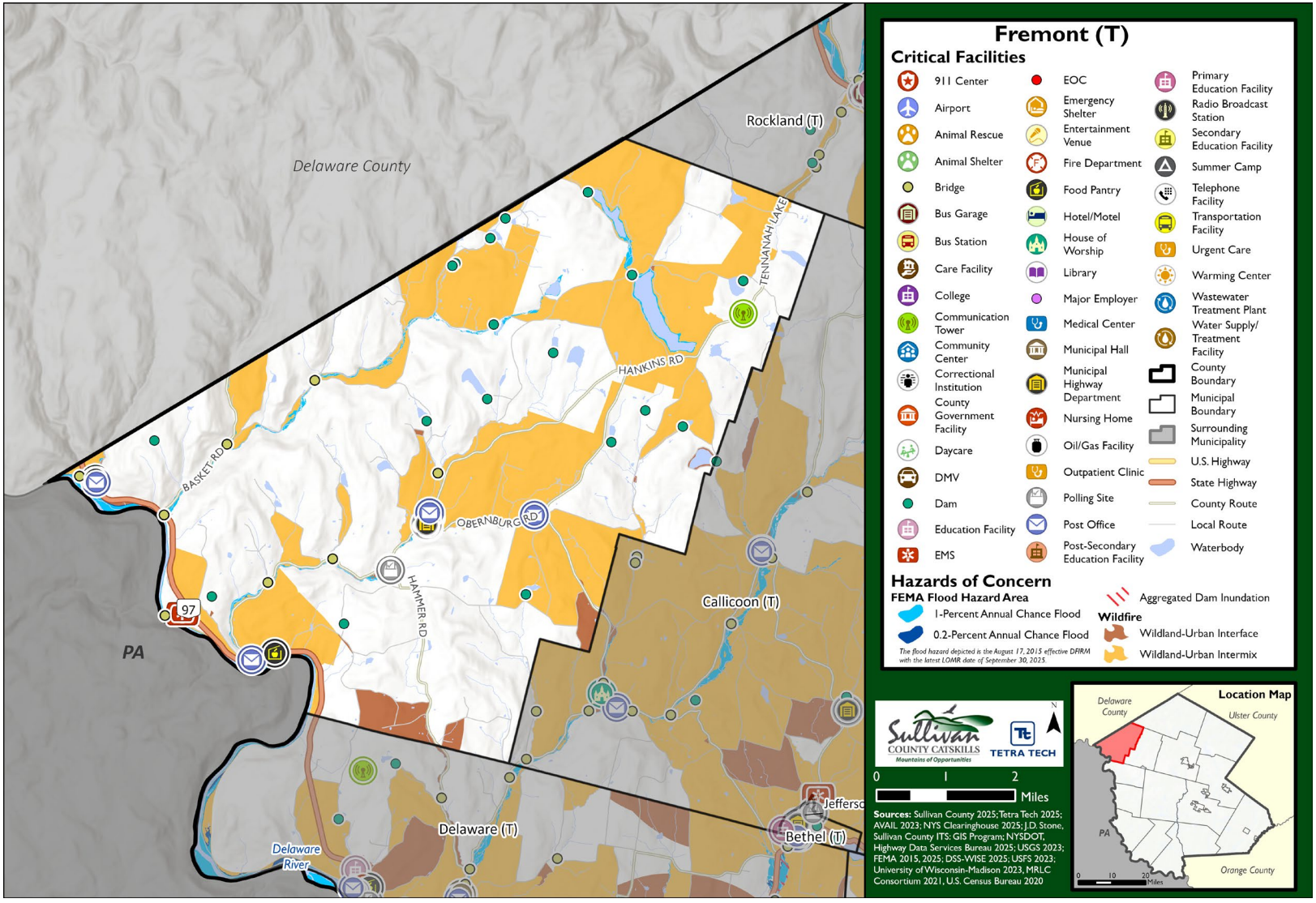
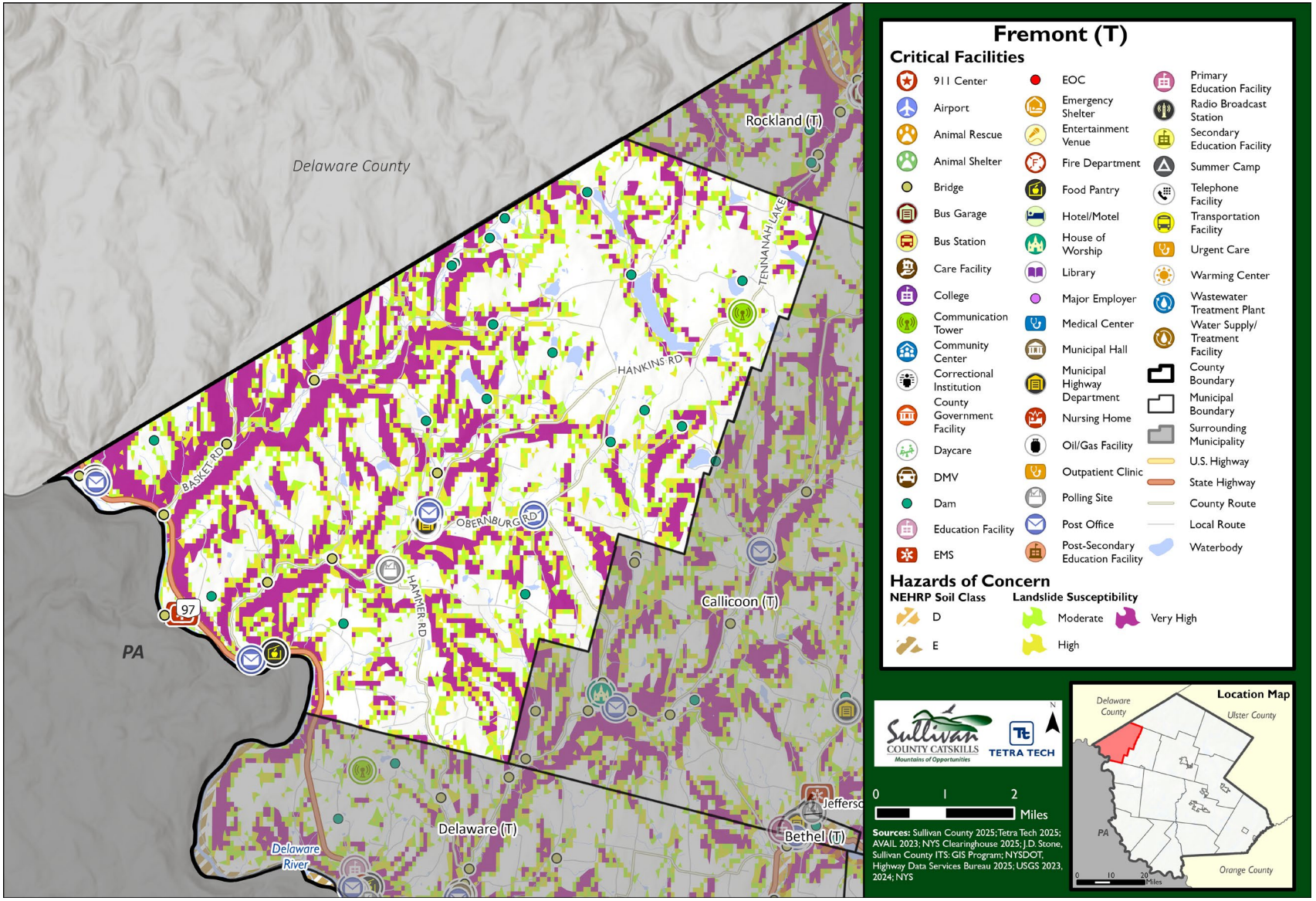


Figure 11-2. Fremont NEHRP Soil and Landslide Area Map



11.3.2 Previous Event History

The history of natural and non-natural hazard events in Fremont is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 11-7 and Table 11-8 provide details on the loss and damage in Fremont during hazard events since the last hazard mitigation plan update.

Table 11-7. Presidential Disaster Declarations History in Fremont

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Fremont
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Staggered staffing to reduce density in the work place. Adhered to necessary mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Road flooding. Cleaned roads as much as possible. Cleaned and replaced piping as needed.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Road flooding. Cleaned roads as much as possible. Cleaned and replaced piping as needed.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 11-8. Hazard Event History in Fremont

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Fremont
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Tree and wires downed, likely minor road flooding.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Tree and wires downed, likely minor road flooding.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Tree and wires downed, likely minor road flooding.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Tree and wires downed, likely minor road flooding.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Tree and wires downed, likely minor road flooding.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Tree and wires downed, likely minor road flooding.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Fremont
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	Tree and wires downed, likely minor road flooding.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Tree and wires downed, likely minor road flooding.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Tree and wires downed, likely minor road flooding.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

11.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations, and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 11-9 includes an inventory of critical facilities and infrastructure for the Town of Fremont.

Table 11-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Eleven bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

11.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Fremont Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 11-10.

Table 11-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Beaver dams are a large issue in the Town, causes flooding on surrounding roads and making them impassable. At least 6 or so known sites.
Drought	No known concerns.
Earthquake	No known concerns.
Flood	East Basket Creek and a tributary of the Creek flow parallel to Basket and Neer Roads, accordingly. The roads and waterways wind next to one another, which leads to roadway flooding during periods of heavy rain when the waterways overflow onto the roads. Neer Road is a slightly paved, but also dirt road which has been evaluated previously for roadway relocation, but it was determined to not be eligible.
Landslide	No concerns outside of Basket and Glen Ellen Roads. Heavy rain/severe storm events can cause erosion.
Pandemic	No known concerns.
Severe Storm	Cascading flooding issues from heavy rains.
Severe Winter Storm	Getting materials to respond to events is most concerning, especially in 2025-2026 winter season.
Wildfire	Have not had severe drought to cascade into wildfire concerns. Wildfire is more of a minor concern. 5 fire districts cover the Town, which decreases the overall risk.

11.3.5 Vulnerable Community Assets

Representatives from the Town of Fremont Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 11-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 11-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Flooding can impact crop yields	**Area: Concentration of Local Businesses, Major Employers**	Not applicable
Area: Concentration of Residences	Several location where a dead end road, means of egress may be a concern.	**Local Roads, Highways, Culverts, Bridges**	Culverts are evaluated on an ongoing basis.
Municipal Buildings	Town Highway Building in need of permanent standby generator. Town does have portable.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	Town has the structures, but no concerns known. Town uses St. Mary's Roman Catholic Church as an EOC when needed if Town Hall is unavailable.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers	No concerns. Any flooding impacts would be minor and manageable.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals,**	Town has the structures/infrastructure, but no concerns known.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
such as fairs, beaches, skiing, farming, fishing, etc.)		**bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	
Cultural/Historic Buildings/Sites	Town has the structures, but no concerns known.	**Schools (K-12)**	Not applicable
Elder-care Facilities	Not applicable	**Utilities**	Have had power outages, but nothing major. They do occur fairly frequently with severe storms, especially high winds.
Fire/Police Stations	Hackens-Fremont near Newman Hill Road is vulnerable to the flood hazard.	**Wastewater Treatment Plants**	Not applicable
Gas Stations, Grocery Stores, Supermarkets	Not applicable	**Water: Drinking Water Resources**	Some minor concerns regarding pumps deteriorating at pump station.
Hospitals	Not applicable	**Other**	Not applicable

11.3.6 Dams

Table 11-12 includes all dams in the Town of Fremont. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 11-12. Dams Located in Fremont

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
133-4483	Crystal Lake Dam	TR-Hankins Creek	NYS DEC	State	Flood Control and Storm Water	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
					Management, Recreation	
147-0911	Turcos Dam	Callicoon Creek	Lake Fahtinyats Corp.	Private	Recreation	Intermediate Hazard Dam
133-0877	Cramer-Reichman Dam	TR-Tyler Brook	Mona Ilene Reubenfel Sarid, MKF Group	Private	Recreation	Intermediate Hazard Dam
147-1731	Petrillo Lake Dam	Buck Brook	Buck Brook Acres, LLC	Private	Recreation	Low Hazard Dam
133-5003	Paul Kellam Pond Dam	TR-Hankins Creek	Paul Kellam	Private	Recreation	Low Hazard Dam
133-4759	Sean Lake Dam	TR-E Branch Basket Creek	Sullivan County	Local Government	Recreation	Low Hazard Dam
147-0413	Lake Muskoday Dam	Trout Brook	Lake Muskoday Associ., INC	Private	Recreation	Low Hazard Dam
133-5715	STEUBER UPPER POND DAM	TR - East Branch Basket Creek	Bill Steuber	Private	Fire Protection, Stock, Or Small Farm Pond	Low Hazard Dam
133-5716	STEUBER LOWER POND DAM	TR- East Branch Basket Creek	Bill Steuber	Private	Fire Protection, Stock, Or Small Farm Pond	Low Hazard Dam
133-4662	Herbert Dam	TR-Hankins Creek	Richard Herbert	Private	Fire Protection, Stock, Or Small Farm Pond, Recreation, Water Supply - Primary	Low Hazard Dam
147-0400	Lake Florence Dam	Abe Wood Brook	Titan Group	Private	Recreation, Water Supply - Secondary	Low Hazard Dam
147-5024	Stanley Barylski Pond Dam	TR-Buck Brook	Stanley Barylski	Private	Other	Low Hazard Dam
133-4659	Thomas Consavage Dam	E Branch Basket Creek	Thomas Consavage	Private	Recreation	Low Hazard Dam
133-5323	Leonard Bauer Dam	TR-Delaware River	Leonard G. Bauer	Private	Recreation	Low Hazard Dam
147-0407	Tennanah Lake Dam	Trout Brook	Blue Mountain Associates	Private	Recreation	Intermediate Hazard Dam
133-0980	Holcomb Pond Dam	TR-Basket Brook	Glen Lake Estates	Private	Recreation	Intermediate Hazard Dam
133-4035	East Ridge Farm Pond Dam	TR-Delaware River	East Ridge Farm	-	Fire Protection, Stock, Or Small Farm Pond	Hazard Classification Not Assigned
133-3965	Arthur Triquart Wildlife Pond Dam	TR-Basket Creek	Arthur Triquart	-	Other	Hazard Classification Not Assigned

Notable comments regarding dams in the jurisdiction:

The Holcomb Pond Dam is perpendicular and right next to Specht Road, so it is closely monitored, but has not had any negative impacts. Beaver dams are a large issue in the Town, causes flooding on surrounding roads and making them impassable. At least 6 or so known sites.

11.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 11-13 identifies the preliminary hazard ranking for Fremont, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 11-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Disagree	Medium	Lots of steep slopes in the Town with Glen Ellen and Basket Roads being a concern.	Medium
Pandemic	Medium	Disagree	Low	Low population density, not many local community gathering places which would enhance the spread of any variants.	Low
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

11.4 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 11-14 through Table 11-17.

11.4.1 Development and Permitting

Table 11-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits, Building Department
What is your process for tracking building permits?	Online system
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	Not outside of the Comprehensive Plan.

Table 11-15. 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
2020				
Total Permits	5	0	0	5
Permits within SFHA	0	0	0	
2021				
Total Permits	6	0	0	6
Permits within SFHA	0	0	0	
2022				
Total Permits	11	0	0	11
Permits within SFHA	1	0	0	1
2023				
Total Permits	9	0	0	9
Permits within SFHA	0	0	0	0
2024				
Total Permits	5	0	0	5
Permits within SFHA	0	0	0	0
2025				
Total Permits	10	0	0	10
Permits within SFHA	0	0	0	0

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

Table 11-16. Recent Major Development and Infrastructure from 2020 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
No Recent Major Development and Infrastructure from 2020 to Present					

Table 11-17. 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
No Known or Anticipated Major Development and Infrastructure in the Next Five Years					

11.5 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 Table 11-1 is responsible for maintaining this information.

11.5.1 NFIP Statistics

Table 11-18 summarizes the NFIP policy and claim statistics for the Town of Fremont.

Table 11-18. Fremont NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360821#
# Policies	35
# Claims (Losses)	10
Total Loss Payments	$267,532.00
# Repetitive Loss Properties	4
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

11.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 11-19.

Table 11-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Roads near East Basket Creek and Hankins Creek are prone to flooding.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	John Kline Jr., Code Enforcement
What local department is responsible for floodplain management?	Code Enforcement
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #2 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 31, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	No
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County

NFIP Topic	Comments
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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, they consider flood risk and height restrictions

11.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Fremont 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 Fremont to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

11.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 11-20 and Table 11-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 11-20. Regulatory Capabilities in Fremont

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This local law provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code ("the Uniform Code") and the State Energy Conservation Construction Code ("the Energy Code") in the Town of Fremont in Sullivan County, New York ("the Town"). This local law is adopted pursuant to section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, the Energy Code other state law, or other section of this local law, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this local law.	Local Law 2 of 2025	Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #2 of 2010	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	General Site Requirements aim to protect the life, health and property of the Town from fire, flood, noise and inhabitable areas.	Section 4.2 of the Subdivision Law, 2000	Code Enforcement
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	The law is adopted to promote the orderly growth and development of the Town in accordance with the Comprehensive Plan.	Subdivision Law, 2000	Code Enforcement
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	This law is intended to address the comprehensive plan of the Town of Fremont as set out herein and earlier in the Town of Fremont Zoning Laws and Ordinances, the goals of the Upper Delaware River Management Plan and the general purposes of § 263 of the Town Law.	Section 100, 2016	Code Enforcement

Planning Capabilities

Table 11-21. Planning Capabilities in Fremont

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	This Comprehensive Plan sets forth a combination of strategies to deal with the growth and future needs of the Town of Fremont. The Town is one of unusual beauty and history that connects the Upper Delaware Valley with the Catskills.	Town of Fremont Comprehensive Plan, 2007	Comprehensive Plan Committee
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Identifies various plans and projects the Town would like to complete or begin.	Annual Budget	Town Administration
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The Comprehensive Emergency Management Plan consists of the following sections, consistent with the major components of NIMS: Preparedness Resource Management Command and Management Communications and Information Management Supporting Technologies Ongoing Management and Maintenance	Comprehensive Incident Management Plan, 2006	Town Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The Comprehensive Emergency Management Plan consists of the following sections, consistent with the major components of NIMS: Preparedness Resource Management Command and Management Communications and Information Management Supporting Technologies	Comprehensive Incident Management Plan, 2006	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		Ongoing Management and Maintenance		
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Other	No	-	-	-

11.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 11-22 details the available administrative and technical capabilities of the Town.

Table 11-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	No	-
Construction/Building/Code Enforcement Department	Yes	
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	5 Fire Districts
Environmental Commission/Specialist	No	-
Grant Writer	No	-
Maintenance Programs to Reduce Risk	Yes	Highway performs culvert monitoring and maintenance, tree and vegetations maintenance as possible
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	MUA Roscoe-Hankins Fremont
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	No	Looking to contract for assistance
Planning Board	Yes	The Fremont Planning Board seeks to provide sound planning decisions and advice on matters entrusted to it by New York State Law and the Fremont Code including site plan review, subdivision review, zoning advice to the Town Board, the Zoning Board of Appeals, and all matters referred to it.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land	Yes	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments
development and land management practices		
Planners or engineers with an understanding of natural hazards	Yes	Town Supervisor
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building Department
Professionals trained in conducting damage assessments	Yes	Town Supervisor, Building Department
Public Works/Highway Department	Yes	Highway Department
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals holds meetings on an as-needed basis. Public notice is given prior to meetings being held.
Other	No	-

11.6.3 Fiscal Capability

Table 11-23 summarizes financial resources available to Fremont.

Table 11-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement 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

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Not recently
Other State funding programs	CHIPS, DOT Grants
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

11.6.4 Education and Outreach Capability

Table 11-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 11-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	No, but Town would like to complete this with an update to the website itself
Local News	Sullivan County Democrat, River Reporter for public hearings or bid opportunities
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	No
Public information officer or communications office	Town Supervisor
Social media for hazard mitigation education and outreach	No, just the Town website
Warning systems for hazard events	No, uses County's

11.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 11-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*

- ***N/A:*** *This hazard is not a risk to the community.*

Table 11-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	Moderate

11.7 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.

11.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Fremont-1—Fremont - Newman Hill Rd. Culvert Flooding Issues	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Fremont Highway Dept.
Supporting Agency / Department	-
Action Location	Newman Hill Rd
Summary of Original Problem	Fremont Newman Hill Road is experiencing flooding that reduces accessibility to the Fire Department Shelter, due to a culvert problem.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development by replacing or rehabilitating roads, bridges, and culverts associated with the flooding on Newman Hill Road, based on engineering studies for appropriate sizing for site conditions.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Change focus to reduce risk overall, not so much a focus on upsizing the culvert. Pond/Brook up the road causes pooling of water on roadway.
If discontinue, explain why	Not applicable

T. Fremont-2— Fremont - Long Eddy Crossing Flooding	
Hazards Addressed	Flood
Lead Agency / Department	Fremont Highway Department
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During severe storms, the Long Eddy crossing area experiences repetitive flood loss and property damage. This area has been designated as an NFIP problem area.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water, conduct a local flood assessment (LFA) to accurately identify causes of flooding in the Long Eddy crossing area.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Keep action, change lead to Rail company, Highway as support. Water comes under state rt 97 - as long as rail crossing is open, most flooding occurs here where debris gets stuck in the crossing, which sends the water into town. Has not been an issue the past few storms; rail has been good to get it open.
If discontinue, explain why	Not applicable

11.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Fremont identified the following mitigation efforts completed since the last HMP:

- The Town has worked with the Sullivan County Soil and Water to reduce flood risk in the jurisdiction.
- Town has a joint services agreement with the State DOT for Route 97. This is applicable to the management and any work related to the road, including the use of machinery and equipment.
- The Town Highway Department has maintenance programs in place for clearing of vegetation (other than near utility lines or poles) and for culverts.

11.7.3 Identified Issues

The Town of Fremont has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well, including the Hackens-Fremont Fire Department.
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times through the Town in at least six locations. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.
- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near East Basket Creek and Hankins Creek are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.
  - Baskett Road
  - Baskett Brook Road
  - Neer Road
  - Newman Hill Road
  - Hankins Road
- Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Baskett Road and Glen Ellen Road have been identified as being at risk of landslides and could result in loss of the roadway; both roads have experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.
- Critical facilities require backup power to ensure continuity of operations. The Town Highway Building does not have back up power, which could impact the continuity of operations at the facility in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels

from floods could impact the facility; back-up generators would permit any influx of water to be removed from the facility via pumping systems.

- The pump station has noted concerns regarding water system infrastructure. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.
- Heavy rains, snow melt, and ice jams tend to cause flooding events. The rush of flood waters, or simply fast-moving waters in rivers, creeks, and brooks, can cause erosion to nearby infrastructure, including roadways, bridges, and culverts. Degradation of infrastructure can lead to integrity problems, leaving the natural and built environments more exposed to cascading impacts from the infrastructure not working properly.
- During severe storms, the Long Eddy crossing area experiences repetitive flood loss and property damage. Water will flow rapidly during periods of heavy rain, carrying debris which gets lodged into the crossing. This debris not only closes off the route but can lead to flooding in front of the blockage, redirecting the flood waters in Town via Route 97. Waters will stem from the Hoolihan Creek, a tributary of the Delaware River.

11.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Fremont participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Fremont 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.

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 11-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-FremontT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-FremontT-02. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred multiple times through the Town in at least six locations. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Action 2026-FremontT-03. Floodprone Roads

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near East Basket Creek and Hankins Creek are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding. • Baskett Road • Baskett Brook Road • Neer Road • Newman Hill Road • Hankins Road	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-FremontT-04. Landslide Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Baskett Road and Glen Ellen Road have been identified as being at risk of landslides and could result in loss of the roadway; both roads have experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.	
Description of the Solution:	The Town Engineer will complete an assessment to identify an appropriate, cost-effective method to mitigation landslide risk along Baskett Road and Glen Ellen Road. Possible mitigation measures include: • Construction of retaining walls, soil nailing, ground anchor walls • Install horizontal drains to reduce soil saturation • Cut banks along water ways to prevent oversaturated soils from falling • Install netting	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by landslide along Baskett Road and Glen Ellen Road. Keeping the roadway open to traffic also permits at risk populations to travel to critical appointments.	
Impact on Future Development:	Future development in the impacted area will be less likely to be impacted by landslides.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct roadway outside of hazard area	Not feasible
	Close road and reroute traffic around hazard area	Not feasible, would cause confusion amongst travelers

Action 2026-FremontT-05. Highway Building Generator

Lead Agency:	Engineering		
Supporting Agencies:	Town Board, Highway Department		
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire	
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Highway Building does not have back up power, which could impact the continuity of operations at the facility in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact the facility; back-up generators would permit any influx of water to be removed from the facility via pumping systems.		
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.		
Estimated Cost:	High		
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	2, 5		
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.		
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.		
Impact on Future Development:	This action results in protection of a critical facility that could support future development.		
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	Microgrid	Costly and difficult to implement.	
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.	

Action 2026-FremontT-06. Water System Improvements

Lead Agency:	Pump Station Facility Manager	
Supporting Agencies:	Town Board, Engineer	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The pump station has noted concerns regarding water system infrastructure. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.	
Description of the Solution:	The Town Engineer will work with the pump station facility manager to review the noted concerns and identify the most cost effective and efficient solution to mitigate risks to the system infrastructure.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS) Grant Program, Water Pollution Control Grants Program, FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities. Access to municipal water systems enhances the quality of life for residents by providing a reliable source of water for drinking, cooking, and sanitation, which are essential for daily living. Moreover, these systems support recreational activities and contribute to the aesthetic value of communities through well-maintained water bodies and parks.	
Impact on At Risk Populations:	Implementing any necessary upgrades to the water system will assist in the prevention of waterborne diseases and ensures that the water supplied is free from harmful substances such as lead and bacteria.	
Impact on Future Development:	This action will ensure water systems in the Town are working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures the water systems in the Town, which are critical pieces of infrastructure and part of the water lifeline, are working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify concerns but do not implement preventative measures	Issues likely to reoccur
	Close pump stations and outsource drinking water	Costly, inefficient, could be a detriment to residents

Action 2026-FremontT-07. Infrastructure Upgrades

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Heavy rains, snow melt, and ice jams tend to cause flooding events. The rush of flood waters, or simply fast-moving waters in rivers, creeks, and brooks, can cause erosion to nearby infrastructure, including roadways, bridges, and culverts. Degradation of infrastructure can lead to integrity problems, leaving the natural and built environments more exposed to cascading impacts from the infrastructure not working properly.	
Description of the Solution:	The Town Engineer will complete an engineering survey of the existing infrastructure in Town, including roads, bridges, and culverts, to identify those that are undersized and contribute to flooding to determine the proper size necessary to mitigate flood risk.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding may be reduced, which would result in less frequency of road closures and reduced damage occurring to infrastructure during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the infrastructure that is at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove and replace all infrastructure	Costly, will contribute to transportation issues, may increase flood risk
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-FremontT-08. Long Eddy Crossing Flood Mitigation

Lead Agency:	Central New York Railroad	
Supporting Agencies:	Highway Department, Sullivan County Soil and Water	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	During severe storms, the Long Eddy crossing area experiences repetitive flood loss and property damage. Water will flow rapidly during periods of heavy rain, carrying debris which gets lodged into the crossing. This debris not only closes off the route but can lead to flooding in front of the blockage, redirecting the flood waters in Town via Route 97. Waters will stem from the Hoolihan Creek, a tributary of the Delaware River.	
Description of the Solution:	With assistance from Sullivan County Soil and Water, the Highway Department will provide support to the Central New York Railroad in conducting a local flood assessment (LFA) to accurately identify causes of flooding in the Long Eddy crossing area.	
Estimated Cost:	Medium	
Potential Funding Sources:	Central New York Railroad, Town Budget, FEMA HMA, FTA	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Close the Central New York Railroad	Not in Town's purview to decide; could reduce freight and commodities into Town
	Cut all trees and vegetation within a defined buffer area from the railroad	May reduce soil stability, leading to additional erosion and flooding concerns

Table 11-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-FremontT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-FremontT-02	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium
2026-FremontT-03	Floodprone Roads	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-FremontT-04	Landslide Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-FremontT-05	Highway Building Generator	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-FremontT-06	Water System Improvements	0	1	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2026-FremontT-07	Infrastructure Upgrades	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-FremontT-08	Long Eddy Crossing Flood Mitigation	1	1	1	1	0	0	1	1	1	1	1	1	1	0	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

12. TOWN OF HIGHLAND

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Highland 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 Highland, describes who participated in the planning process, assesses Highland's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

12.1 HAZARD MITIGATION PLANNING TEAM

The Town of Highland identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 12-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 12-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: John Pizzolato, Town Supervisor Address: 4 Proctor Road, Eldred, NY 12732 Phone Number: (845) 557-8901 Email: townsupervisor@townofhighlandny.com	Name/Title: Joe Barnes, Highway Superintendent Address: 719 Route 55, Eldred, NY 12732 Phone Number: (845) 557-6257 Email: highlandhighway@frontiernet.net
National Flood Insurance Program Floodplain Administrator	
Name/Title: Ted Nuetter, Code Enforcement Address: 4 Proctor Road, Eldred, NY 12732 Phone Number: (845) 557-8203 Email: ceo@townofhighlandny.com	
Additional Contributors	
Name/Title: Sonia Kidney, Town Clerk Method of Participation: Provided pertinent information needed to develop the Town annex.	

12.2 COMMUNITY PROFILE

12.2.1 Community Classifications

Table 12-2 summarizes classifications for community programs available to Highland.

Table 12-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	April 1, 2014
NYSERDA Clean Energy Community	Yes	1-Star	May 21, 2024
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

12.2.2 Community Profile

Geographical Description

The Town of Highland is located to the east with rolling hills, forested areas, and small bodies of water. It is comprised of five hamlets; Barryville, Eldred, Highland Lake, Minisink Ford and Yulan.

Government Type and Description

The Town is governed by a Town Board, comprised of a Supervisor, Deputy Supervisor, and four council members. Among many other functions, the Town Board fills vacancies in town offices, elective or appointive; may select a town attorney and a town engineer; appoints constables or police officers; provides for the hiring of such other employees as necessary for the conduct of the town's business; adopts a budget; fixes the salaries of officers and employees; establishes rules of its procedure; and designates the official newspaper of the town (Town of Highland 2025).

Table 12-3 through Table 12-6 note land area, population, and building stock information for the Town of Highland.

Table 12-3. Total Land Area in the Town of Highland

Jurisdiction	Total Land Area	
	Acres	Square Miles
Highland (T)	31,122.4	48.6

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 12-4. Population Estimates in the Town of Highland

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
2,196	2.8%	2,007	2.5%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 12-5. At Risk Populations in the Town of Highland

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
589	29.3%	26	1.3%	0	0.0%	565	28.2%	173	8.6%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 12-6. General Building Stock in the Town of Highland

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,853	$1,449,898,732	1,694	$943,932,037	129	$363,075,252	5	$12,849,940	25	$130,041,504

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

12.3 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 Highland's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

12.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Highland are shown in Figure 12-1 and Figure 12-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Highland has significant exposure.

Figure 12-1. Highland Flood, Wildfire and Dam Inundation Area Map

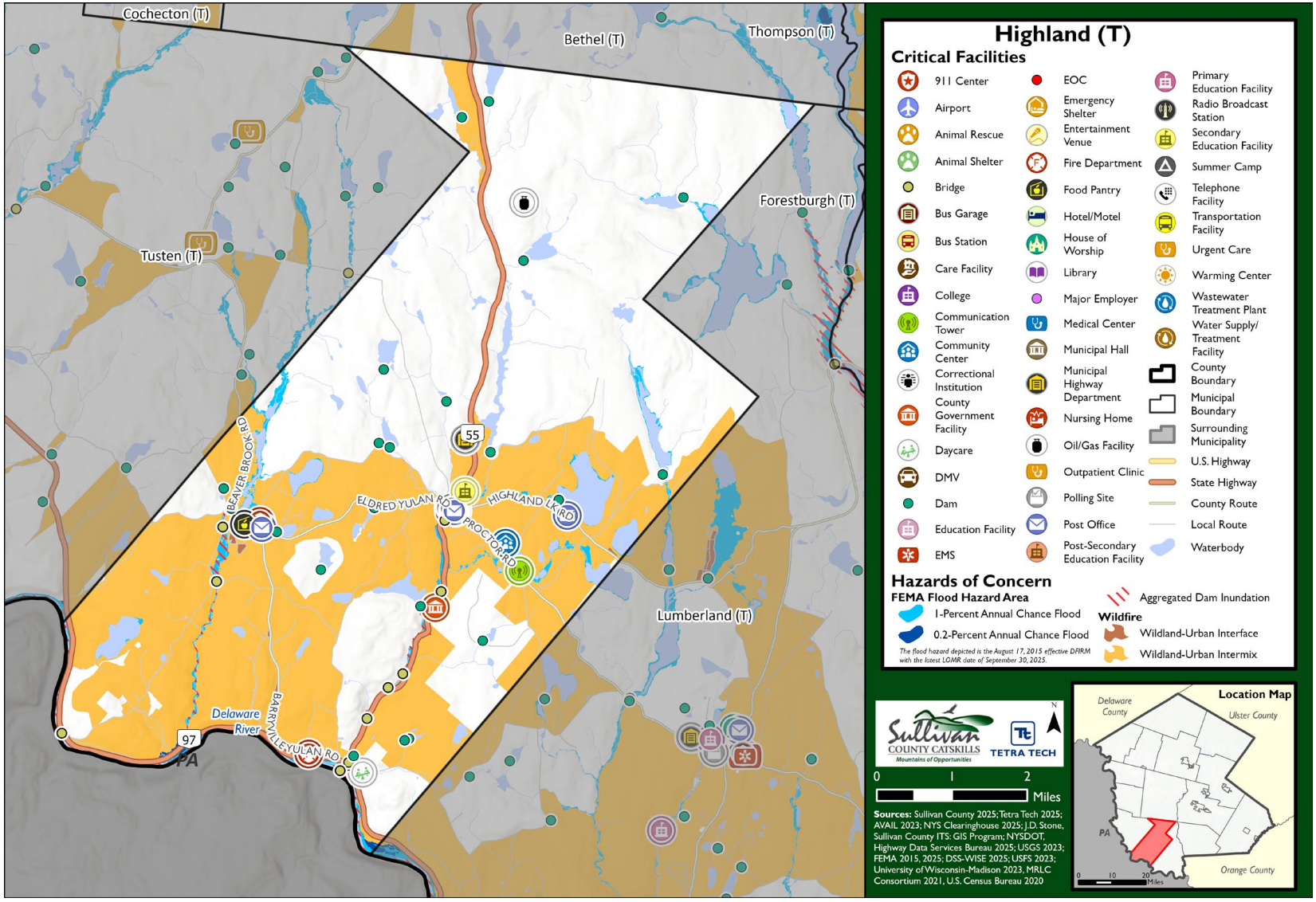
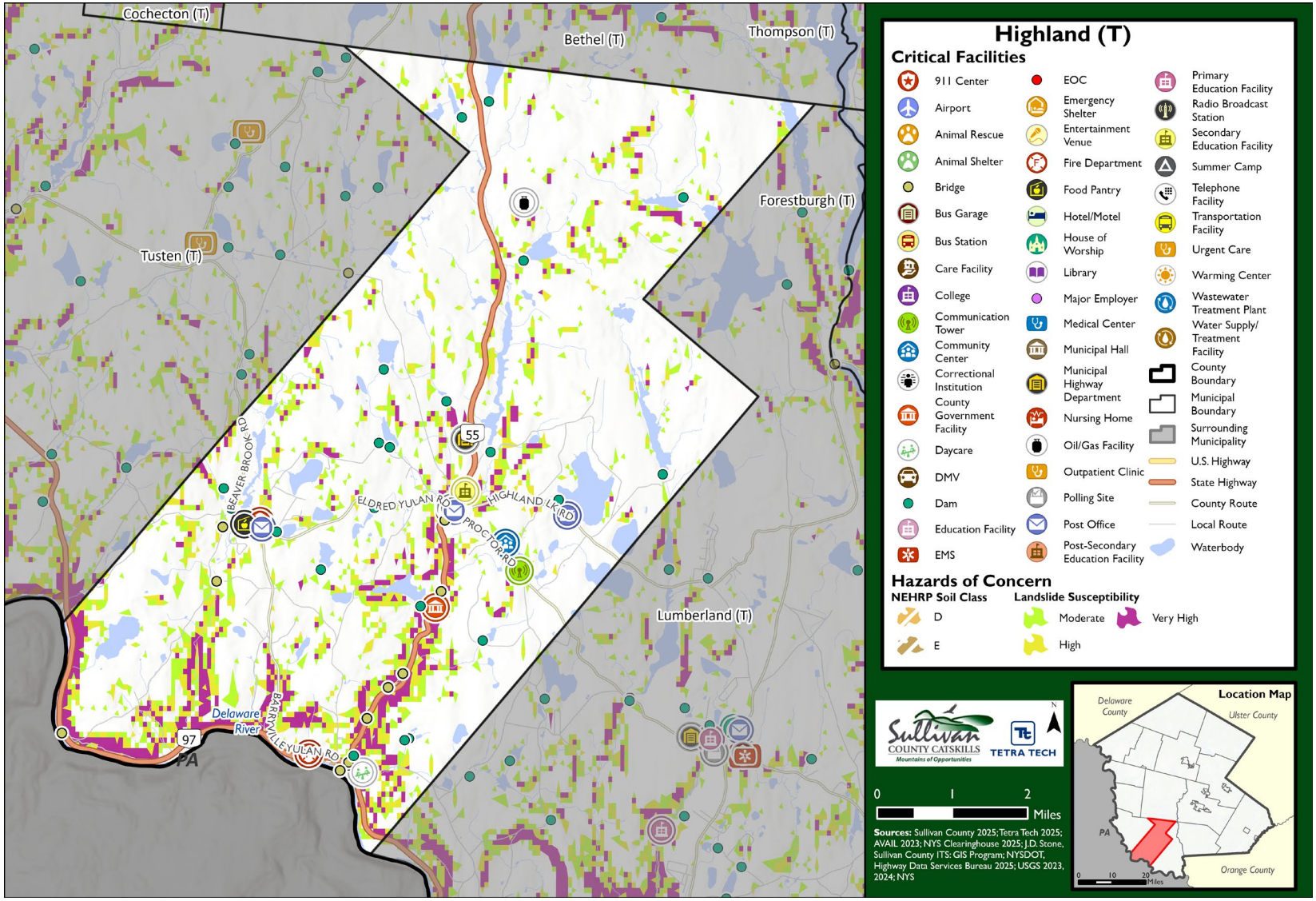


Figure 12-2. Highland NEHRP Soil and Landslide Area Map



12.3.2 Previous Event History

The history of natural and non-natural hazard events in Highland is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 12-7 and Table 12-8 provide details on the loss and damage in Highland during hazard events since the last hazard mitigation plan update.

Table 12-7. Presidential Disaster Declarations History in Highland

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Highland
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Masking mandates, work from homes, glass barriers for public facing, social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town did not incur any documented damage or losses
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town did not incur any documented damage or losses

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 12-8. Hazard Event History in Highland

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Highland
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town did not incur any documented damage or losses
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town did not incur any documented damage or losses

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Highland
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town did not incur any documented damage or losses
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

12.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 12-9 includes an inventory of critical facilities and infrastructure for the Town of Highland.

Table 12-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Twelve bridges and three dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

12.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Highland Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 12-10.

Table 12-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Town has never had a dam failure. Beaver dam concerns on Route 97. Town would get in contact with a trapper if there was an issue. Metal grates are put across the culvert pipes.
Drought	No municipal water system, everyone on private well water. No mass impact on wells running dry. Summer 2025 had some drier periods.
Earthquake	No known impacts
Flood	Limited issues in conjunction with flood prone areas.
Landslide	No steep areas that lead to washouts.
Pandemic	No known impacts
Severe Storm	NYSEG rates and power outages will last multiple days. NYSEG started ramping up tree trimming.
Severe Winter Storm	Salt was difficult to get the 2025/2026 season. Highway is efficient at clearing roadways, No concerns with County. Town will plow some of the County roads/salts them. County tends to use a lot less salt and they can set their trucks to a setting.
Wildfire	No known impacts, drier periods would be fuel for wildfire

12.3.5 Vulnerable Community Assets

Representatives from the Town of Highland Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 12-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 12-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	Town has a pending project with RV company – proposed camping area is partially in the floodplain. Proposed floodprone study on area.	**Local Roads, Highways, Culverts, Bridges**	No known impacts
Municipal Buildings	Leaky roof in Town Hall and in the Senior and Community Center. These facilities are critical facilities and need to remain open.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals,**	95% of equipment is under a cover. Highway facility is new (2019).

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
such as fairs, beaches, skiing, farming, fishing, etc.)		**bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Salt was difficult to get the 2025/2026 season.
Cultural/Historic Buildings/Sites	Redoing historic courthouse in Town. Replacing the stucco on the outside	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	No known impacts
Fire/Police Stations	See above	**Wastewater Treatment Plants**	Private septic systems – met with Hudson Valley River Commission about a water study on Upper Delaware Scenic Byway. The RV park that is proposed would be along this area. A water study is needed to ensure the water table is not greatly impacted.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See above
Hospitals	Not applicable	**Other**	No known impacts

12.3.6 Dams

Table 12-12 includes all dams in the Town of Highland. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 12-12. Dams Located in Highland

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-1130	Gordon Dam	HICKOK BROOK	NYS DEC DIVISION OF LANDS & FORESTS	State	Recreation	Intermediate Hazard Dam
148-4498	Toasperns Pond Dam	BEAVER BROOK	SULLIVAN COUNTY	Local Government	Recreation	High Hazard Dam
148-5418	White Crane Lake Dam	TR-HALFWAY BROOK	James A. Grundy - Irrevocable Trust	Private	Recreation	High Hazard Dam
148-3464	Sunrise Lake Dam	TR-HALFWAY BROOK	Amytra Development LLC, The Eldred Preserve	Private	Recreation	Intermediate Hazard Dam
148-4401	Sidwell Lake Dam	HALFWAY BROOK	Steges Road Development LLC	Private	Recreation	Intermediate Hazard Dam
148-0837	Wells Pond Dam	TR-HALFWAY BROOK	EXCELSIOR SPORTSMAN CLUB	Private	Recreation	Low Hazard Dam
148-5270	Rudy's Pond Dam	DUNN BROOK	BEAVER BROOK ROD & GUN CLUB INC	Private	Recreation	Low Hazard Dam
148-5870	Halfway Brook Dam	Halfway Brook	EXCELSIOR SPORTSMAN CLUB	Private	Recreation	Low Hazard Dam
148-0172	Hull Pond Dam	TR-LEBANON LAKE BROOK	ROCKLAND LIGHT & POWER COMPANY	Public Utility	Recreation	Low Hazard Dam
148-5770	Givones Dam	Trib - Halfway Brook	Thomas Givone	Private	Recreation	Low Hazard Dam
148-4400	Beaver Pond Dam	MILL BROOK	MARTIN LUTHER CAMP COPR.	Private	Recreation	Low Hazard Dam
148-0134	Highland Lake Dam	TR-HALFWAY BROOK	ERNEST E & MARCEL C FOUR	Private	Recreation	Low Hazard Dam
148-4885	Highland Field And Stream Club Inc Dam	TR-HALFWAY BROOK	JOHN F VOGT	Private	Other	Low Hazard Dam
149-5079	Pine Ayre Dam #2	TR-DELAWARE RIVER	JOHN VOGT	Private	Recreation	Low Hazard Dam
149-4969	Pine Ayre Dam	TR-DELAWARE RIVER	JOHN VOGT	Private	Recreation	Low Hazard Dam
148-4592	Eldred Dam	TR-HALEWAY BROOK	LAWRENCE & PATRICIA CHRISTEN	Private	Flood Control and Storm Water Management	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-4497	Blind Pond Dam	TR-HALFWAY BROOK	HIGHLAND FIELD AND STREAM	Private	Recreation	Low Hazard Dam
148-4934	Gordon White Pond Dam	TR-HALWAY BROOK	GORDON WHITE	Private	Recreation	Low Hazard Dam
149-0137	Krantz & Sell Dam	HALFWAY BROOK	KRANTZ & SELL COMPANY	Private	Hydroelectric	Low Hazard Dam
148-4906	Timber Estates Dam	TR-DELAWARE RIVER	TIMBER LAKES OWNERS ASSOCIATION	Private	Recreation	Low Hazard Dam
148-5428	Sherwood Pond Dam	DEEP HOLLOWBROOK	HELEN & MICHAEL SHERWOOD	Private	Recreation	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Toasperns Pond Dam – bridge was fixed here by the County. Dam was also remediated.

12.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 12-13 identifies the preliminary hazard ranking for Highland, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 12-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Severe Storm	Medium	Disagree	High	Concern relating to power outages	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

12.4 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 12-14 through Table 12-17.

12.4.1 Development and Permitting

Table 12-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits
What is your process for tracking building permits?	IPS system
Are permits tracked by hazard area? (For example, floodplain development permits.)	No, but permitting is evaluated
Does your community have a buildable land inventory? If yes, please describe.	No buildable land inventory

Table 12-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 12-16. Recent Major Development and Infrastructure from 2020 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
Eldred Preserve Spa	Addition to Hotel/Resort Complex	-	State Route 55	-	Currently being built

Table 12-17. 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
FIMFO	Water Park, RV Park, Primitive Campground	-	Minisink Ford	Floodplain	In discussion for renovations

12.5 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 Table 12-1 is responsible for maintaining this information.

12.5.1 NFIP Statistics

Table 12-18 summarizes the NFIP policy and claim statistics for the Town of Highland.

Table 12-18. Highland NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360822#
# Policies	0
# Claims (Losses)	6
Total Loss Payments	$479,147.71
# Repetitive Loss Properties	2

# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

12.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 12-19.

Table 12-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Limited issues in conjunction with flood prone areas.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Ted Knuetter
What local department is responsible for floodplain management?	The building inspector is hereby appointed to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 70 Flood Damage Prevention (Local Law #1 of 2011)
What is the date that your flood damage prevention ordinance was last amended?	January 19, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	The Town performs permit review, inspections and engineering as needed
What are the barriers to running an effective NFIP program in your community, if any?	Limit in staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred

NFIP Topic	Comments
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Yes, two campgrounds (New proposed site is also in the floodplain)
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Interested property owners seek this information
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	Yes, Flood Maps are used
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, SEQR process

12.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Highland 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 Highland to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

12.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 12-20 and Table 12-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 12-20. Regulatory Capabilities in Highland

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Chapter 34 Building and Energy Code Administration and Enforcement, 2021	Code Enforcement Officer
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;	Chapter 70 Flood Damage Prevention, 2011	Building Inspector

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	All principal uses except single-family homes shall require site plan approval before the issuance of a permit, and no building development or site work of any sort shall be conducted prior to or shall be carried out except in conformity with such approval and its conditions.	Chapter 190, Article VIII Special Uses and Site Plan Approvals, 2021	Planning Board
Stormwater Management Code	Yes	Land development activities as defined by this chapter require a stormwater pollution prevention plan (SWPPP). In the Designated Delaware River Corridor, land development activities that exceed an area of 10,000 square feet of construction activity or disturbance for any principal or accessory use shall be required to prepare a SWPPP. In accordance	Chapter 190-54 Stormwater Pollution Prevention Plan	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		with state laws, a SWPPP shall not be caused for uses which the State of New York exempts from this requirement such as agricultural projects, silvicultural projects, and other routine maintenance activities.		
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. To promote the orderly, efficient, aesthetic and economic growth and development of the Town. B. To provide for the health, safety and welfare of Town residents and preservation of the environment. C. To minimize foreseeable maintenance and improvement problems, as well as economic burdens associated with subdivision of land.	Chapter 160 Subdivisions, 1997	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	It is hereby established a revised comprehensive zoning plan for the Town of Highland, which plan is set forth in the text and maps that constitute this chapter. Said plan is adopted for the purposes set forth in Article 16, § 261, of the Town Law which is in the interest of the protection and promotion of the public health, safety and welfare	Chapter 190 Zoning, 2021	Planning Board

Planning Capabilities

Table 12-21. Planning Capabilities in Highland

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Business / Downtown Revitalization / Development Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Climate Adaptation / Resilience Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and	Comprehensive Plan Task Force

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
			updated in 2019	
Comprehensive Plan	Yes	The purpose of this comprehensive plan is to identify the Town of Highland's principles, goals, policies and strategies for growth and development, and to provide a coherent basis for the Town's zoning regulations, building code, and policies relating to land use.	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	Yes	The debris management plan outlines the strategies and procedures for effectively managing debris generated during and after a disaster, ensuring a coordinated response to minimize environmental and economic impacts.	Debris Management Plan	Emergency Services Committee
Economic Development Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Emergency Operations Plan	Yes	The plan identifies a command center, respective officials, telephone roster and general emergency procedures.	Town of Highland Emergency Plan, 2005	Town Administration
Floodplain Management or Watershed Plan	Yes	The River Management Plan provides the direction and parameters for implementing the legislation and all actions of the participating organizations.	Upper Delaware River Management Plan, 1986	National Park Service

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Habitat Conservation / Wildlife Management Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Local Waterfront Revitalization Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Open Space Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	Yes	The sheltering plan ensures that individuals affected by disasters receive safe, sanitary, and secure environments. It provides a framework for the provision of life-sustaining services, including comfort, food, water, information, and accommodations.	Sheltering Plan	Emergency Services Committee
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	Yes	Element of Comprehensive Plan	Town of Highland Comprehensive Plan, 2012 and updated in 2019	Comprehensive Plan Task Force
Watershed Management of Protection Plan	Yes	The Conference of Upper Delaware Townships, in cooperation with the Commonwealth of Pennsylvania, State of New York, the Delaware River Basin Commission, and the National Park Service has coordinated the preparation of this management plan to conserve, protect, maintain and enhance the river corridor's unique resource values and social and economic vitality.	River Management Plan	Conference of Upper Delaware River Townships
Other	Yes	In 2017, Highland's Town Board adopted a resolution to benchmark energy use at town facilities, and to publish energy use data annually. Benchmarking involves collecting and analyzing each building's energy use data for all energy fuels and sources, calculating the dollar costs and GHG emissions associated with each particular fuel or source, and comparing the resulting data with information from other buildings of similar size and functionality.	Baseline Data Report, 2017	Town of Highland Energy Committee

12.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 12-22 details the available administrative and technical capabilities of the Town.

Table 12-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	No	Contracted with Keystone and FUSCO Engineering
Construction/Building/Code Enforcement Department	Yes	Code Enforcement
Economic Development Commission/Committee	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Emergency Management/Public Safety Department	Yes	Fire Department
Environmental Commission/Specialist	Yes	NYSERDA Committee
Grant Writer	Yes	Contracted as needed
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	Yes	Emergency Services Committee
Mutual Aid Agreements	Yes	Highway Department
Open Space Board/Committee	Yes	Comprehensive Plan Committee
Personnel skilled or trained in website development	Yes	Committee
Planning Board	Yes	The planning board exists to guide and regulate the orderly growth and development of a community, ensuring public safety, welfare, and responsible land use.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Code Enforcement
Planner or Engineer with knowledge of land development and land management practices	Yes	Planning Board, Contracted Engineers
Planners or engineers with an understanding of natural hazards	Yes	Planning Board, Contracted Engineers
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Civil Engineer
Professionals trained in conducting damage assessments	Yes	Civil Engineer
Public Works/Highway Department	Yes	The primary responsibility of the Highway Department is maintaining the Town roads. These responsibilities include snow removal and ice control, graveling, paving and the maintenance of roads, signage, drainage, mowing, tree and brush cutting and removal and ditch clearing within the Town's right of way.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Town Board

Capability Type	In Place in Municipality? Yes or No	Comments
Surveyor(s)	No	Contract
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other		

12.6.3 Fiscal Capability

Table 12-23 summarizes financial resources available to Highland.

Table 12-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No, Town did apply in 2024, but was unsuccessful
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes, Lighting District
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	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes, AARPA
FEMA funding programs	No
Other State funding programs	Yes, CHIPS, EWR, POP
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

12.6.4 Education and Outreach Capability

Table 12-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 12-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, Town engages with public via surveys
Hazard awareness campaigns, such as school and community programs and events	Yes, Homeland Safety
Hazard mitigation information available on your website	Yes
Local News	Yes, Town has two radio stations and a news station and two papers
Natural disaster/safety programs in place for schools	Yes, Fire Drills and evacuation
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Office of the Aging in the County. Very active senior group. Registered RN Committee that checks on people post hazard events
Public information officer or communications office	Yes, Town Administration
Social media for hazard mitigation education and outreach	Yes, Facebook pages
Warning systems for hazard events	Yes

12.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 12-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 12-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

12.7 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.

12.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Highland-1— Acquire emergency generators for multiple critical facilities	
Hazards Addressed	Avalanche, Coastal Hazards, Cold wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Highland Town Board
Supporting Agency / Department	Town of Highland
Action Location	
Summary of Original Problem	During all hazards, particularly wind, the area experiences power outages and the new Town shop does not have emergency backup power generator.
Summary of Solution (Project)	Reduce long-term risk to all hazards for existing assets and future development by acquiring and installing a generator for the Town shop.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	One facility the Town wants to make a shelter, Nature Preserve, would like to apply for grants. They have showers and adequate sheltering facility.
If discontinue, explain why	Not applicable

T. Highland-2— Storm drain cleaning and maintenance	
Hazards Addressed	Landslides, Flooding, Wind
Lead Agency / Department	Town of Highland Highway Department
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During severe storm events, storm drains accumulate debris and become clogged, leading to additional flooding.
Summary of Solution (Project)	Reduce long-term risk of flooding and wind for existing assets and future development by implementing a site-specific, debris management plan and monitoring system.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Plan developed

12.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Highland identified the following mitigation efforts completed since the last HMP:

- Highway conducts routine maintenance and drainage upsizing

12.7.3 Identified Issues

The Town of Highland has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.
- Toasperns Pond Dam is a Class I High Hazard Dam that is located on Toasperns Pond and Beaver Brook. The dam is owned by Sullivan County. Failure of the dam could result in inundation of residential and vacation properties, a campground, woodland and forested areas, and transportation routes including Eldred-Yulan Road, Woods Road, Irishtown Road, and three bridges, as per the current EAP, last updated in November 2023. The dam was last inspected in May 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- White Crane Lake Dam is a Class I High Hazard Dam that is located on White Crane Lake and a tributary of Halfway Brook. The dam is owned by James A. Grundy - Irrevocable Trust. Failure of the dam could result in inundation of woodland and forested areas and transportation routes including the maintenance road and Route 55. The dam was last inspected in August 2023. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Following emergency events, individuals may be unable to stay in their places of residence due to storm damages. Flooding can cause residences to become uninhabitable; wildfires and landslides can compromise the integrity of the structure; and severe storms and severe winter storms can lead to utility

failures. The Town is seeking to utilize the Nature Preserve as a sheltering facility. The facility has adequate room to perform sheltering functions, including showering areas.

- Camp FIMFO Catskills is proposed a camping area in the Town in the Minisink Ford hamlet. This location is located partially in the floodplain; the application has not yet been approved for development, as discussions regarding the property are still ongoing.
- The roofs of the Town Hall and Senior Community Center have been repeatedly and overly exposed to adverse weather conditions from severe storms and severe winter storms. These critical facilities provide governmental and community services which, if impeded upon, would be a detriment to the Town.
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred along Route 97. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review of integrating floodplain management practices into zoning and building codes should be discussed.

12.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Highland participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Highland 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.

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 12-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-Highland-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At riskpopulations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-Highland-02. Toasperns Pond Dam Rehab

Lead Agency:	Dam Owners (Sullivan County)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Toasperns Pond Dam is a Class I High Hazard Dam that is located on Toasperns Pond and Beaver Brook. The dam is owned by Sullivan County. Failure of the dam could result in inundation of residential and vacation properties, a campground, woodland and forested areas, and transportation routes including Eldred-Yulan Road, Woods Road, Irishtown Road, and three bridges, as per the current EAP, last updated in November 2023. The dam was last inspected in May 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Toasperns Pond Dam and encourage the dam owners to keep the EAP current. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-Highland-03. White Crane Lake Dam Rehab

Lead Agency:	Dam Owners (James A. Grundy - Irrevocable Trust)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	White Crane Lake Dam is a Class I High Hazard Dam that is located on White Crane Lake and a tributary of Halfway Brook. The dam is owned by James A. Grundy - Irrevocable Trust. Failure of the dam could result in inundation of woodland and forested areas and transportation routes including the maintenance road and Route 55. The dam was last inspected in August 2023. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of White Crane Lake Dam and encourage the dam owners to keep the EAP current. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-Highland-04. Sheltering Facility

Lead Agency:	Town Supervisor	
Supporting Agencies:	Town Board, Sullivan County OMHS, Neighboring Jurisdictions, FEMA	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☒Wildfire
Description of the Problem:	Following emergency events, individuals may be unable to stay in their places of residence due to storm damages. Flooding can cause residences to become uninhabitable; wildfires, earthquakes, and landslides can compromise the integrity of the structure; and severe storms and severe winter storms can lead to extended utility failures. The Town is seeking to utilize the Nature Preserve as a sheltering facility. The facility has adequate room to perform sheltering functions, including showering areas.	
Description of the Solution:	The Town will work with County OMHS and FEMA to identify what upgrades are needed to the facility to meet sheltering guidelines. The Town will consider options to partner with neighboring jurisdictions for a regional location.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, County Budget, Neighboring Jurisdictions, HSGP	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2	
Benefits:	Providing a safe, climate-controlled location for individuals in need following an emergency can provide a sense of gratitude and normalcy to an otherwise negative event. Removing individuals from at-risk locations and offering a location for impacted persons to gather, increases the safety of the overall community.	
Impact on At Risk Populations:	At risk populations are often the most exposed during emergencies and disaster events. Offering a safe location for these populations can ensure their health is looked after and they are removed from harm's way.	
Impact on Future Development:	The temporary housing or sheltering facility will be able to support population increases brought in from potential future development.	
Impact on Critical Facilities/Lifelines:	This action would create, or expand on already existing, critical facilities, as sheltering locations are critical facilities.	
Impact on Capabilities:	This action will create a new capability of the Town by offering a resource for its visitors and residents to utilize should they be in need of sheltering.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Utilize County facilities	May require signed agreements; reliant on County opening facilities
	Utilize American Red Cross facilities	Reliant on American Red Cross opening a facility

Action 2026-Highland-05. Camp FIMFO Catskills Flood Study

Lead Agency:	Northgate Resorts	
Supporting Agencies:	Town Board, Planning Board, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Camp FIMFO Catskills, owned by Northgate Resorts, is proposed a camping area in the Town in the Minisink Ford hamlet. This location is located partially in the floodplain; the application has not yet been approved for development, as discussions regarding the property are still ongoing.	
Description of the Solution:	The Town Board will request Northgate Resorts to conduct a flood study of the proposed area for development. This study will identify the primary cause of flooding for the location and mitigation measures which can be taken to reduce flood risk.	
Estimated Cost:	Low	
Potential Funding Sources:	Northgate Resorts, Town Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	2, 4	
Benefits:	The flood study will identify the primary cause of flooding for the location and mitigation measures which can be taken to reduce flood risk.	
Impact on At Risk Populations:	Not applicable	
Impact on Future Development:	This action will result in a new study to inform development in the Town. The study could assist in guiding future development in the vicinity as well.	
Impact on Critical Facilities/Lifelines:	Outcomes of the flood study may suggest introducing additional stormwater management infrastructure to reduce flood risk to the proposed property.	
Impact on Capabilities:	This action will result in a new study (planning capability) to inform development in the Town. The study could assist in guiding future development in the vicinity as well.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate proposed property to be above BFE	Costly; may not fully remove flood risk
	Deny the application	Camp Fimfo will need to submit a new application for a new location in the Town or elsewhere in the County or State; if the Camp chooses a location outside the Town, it could lead to an economic loss

Action 2026-Highland-06. Critical Facility Improvements

Lead Agency:	Engineering	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The roofs of the Town Hall and Senior Community Center have been repeatedly and overly exposed to adverse weather conditions from severe storms and severe winter storms. These critical facilities provide governmental and community services which, if impeded upon, would be a detriment to the Town.	
Description of the Solution:	The Town Engineer will provide guidance on the retrofit of the Town Hall and Senior Community Center. Retrofits should seek to adhere or exceed building codes to ensure the integrity of the structures will withstand any future impacts from natural hazards.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will protect the Town Hall and Senior Community Center from heavy snow loads associated with severe winter storms and strong winds from both severe storms and severe winter storms.	
Impact on At Risk Populations:	The Town Hall and Senior Community Center provided public services, which may be geared toward at risk populations. This action will protect the individuals and groups within this structure from outside impacts and ensure programs are able to be accessed.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action will protect the Town Hall and Senior Community Center from potential roof collapse, which would cause both critical facilities to close for an extended period of time..	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Build new structures	Costly, unnecessary
	Replace roof without referencing changes in building standards	May result in same issue

Action 2026-Highland-07. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow; this has occurred along Route 97. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Action 2026-Highland-08. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials. Review of integrating floodplain management practices into zoning and building codes should be discussed.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Table 12-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-Highland-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2026-Highland-02	Toasperns Pond Dam	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-Highland-03	White Crane Lake Dam	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-Highland-04	Sheltering Facility	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2026-Highland-05	Camp FIMFO Catskills Flood Study	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2026-Highland-06	Critical Facility Improvements	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2026-Highland-07	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium
2026-Highland-08	Floodplain Management Training	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

13. VILLAGE OF JEFFERSONVILLE

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Jeffersonville 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 Jeffersonville, describes who participated in the planning process, assesses Jeffersonville's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

13.1 HAZARD MITIGATION PLANNING TEAM

The Village of Jeffersonville identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 13-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 13-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: William Chellis, Village Mayor Address: 17 Center St, Jeffersonville, NY 12748 Phone Number: (845) 482-4275 Email: whchellis@gmail.com	Name/Title: William Chellis, Acting Highway Superintendent Address: 17 Center St, Jeffersonville, NY 12748 Phone Number: (845) 482-4275 Email: whchellis@gmail.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Kristopher Scullion, Code Enforcement Officer Address: 17 Center St, Jeffersonville, NY 12748 Phone Number: (845) 482-5390 ext. 308 Email: delawareinspector@hvc.rr.com	
Additional Contributors	
Name/Title: Kristen Kitson, Deputy Clerk Method of Participation: Provided information pertinent to the development of this annex,	

13.2 COMMUNITY PROFILE

13.2.1 Community Classifications

Table 13-2 summarizes classifications for community programs available to Jeffersonville.

Table 13-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

13.2.2 Community Profile

Geographical Description

The Village of Jeffersonville is situated within the Town of Callicoon, in a valley area with nearby hills, lakes, and forest. It encompasses 1.5 square miles, with 4.23 miles of streets, including State Route 52, and the 23-acre Lake Jefferson (Village of Jeffersonville 2025).

Government Type and Description

The Village is governed by a Village Board, consisting of a Mayor, Deputy Mayor, and five trustees.

Table 13-3 through Table 13-6 note land area, population, and building stock information for the Village of Jeffersonville.

Table 13-3. Total Land Area in the Village of Jeffersonville

Jurisdiction	Total Land Area	
	Acres	Square Miles
Jeffersonville (V)	254.9	0.4

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 13-4. Population Estimates in the Village of Jeffersonville

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
368	0.5%	417	0.5%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 13-5. At Risk Populations in the Village of Jeffersonville

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
80	19.2%	9	2.2%	0	0.0%	85	20.4%	88	21.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 13-6. General Building Stock in the Village of Jeffersonville

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
201	$275,534,732	152	$137,817,411	39	$107,178,748	0	$0	10	$30,538,573

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

13.3 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 Jeffersonville's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

13.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Jeffersonville are shown in Figure 13-1 and Figure 13-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Jeffersonville has significant exposure.

Figure 13-1. Jeffersonville Flood, Wildfire and Dam Inundation Area Map

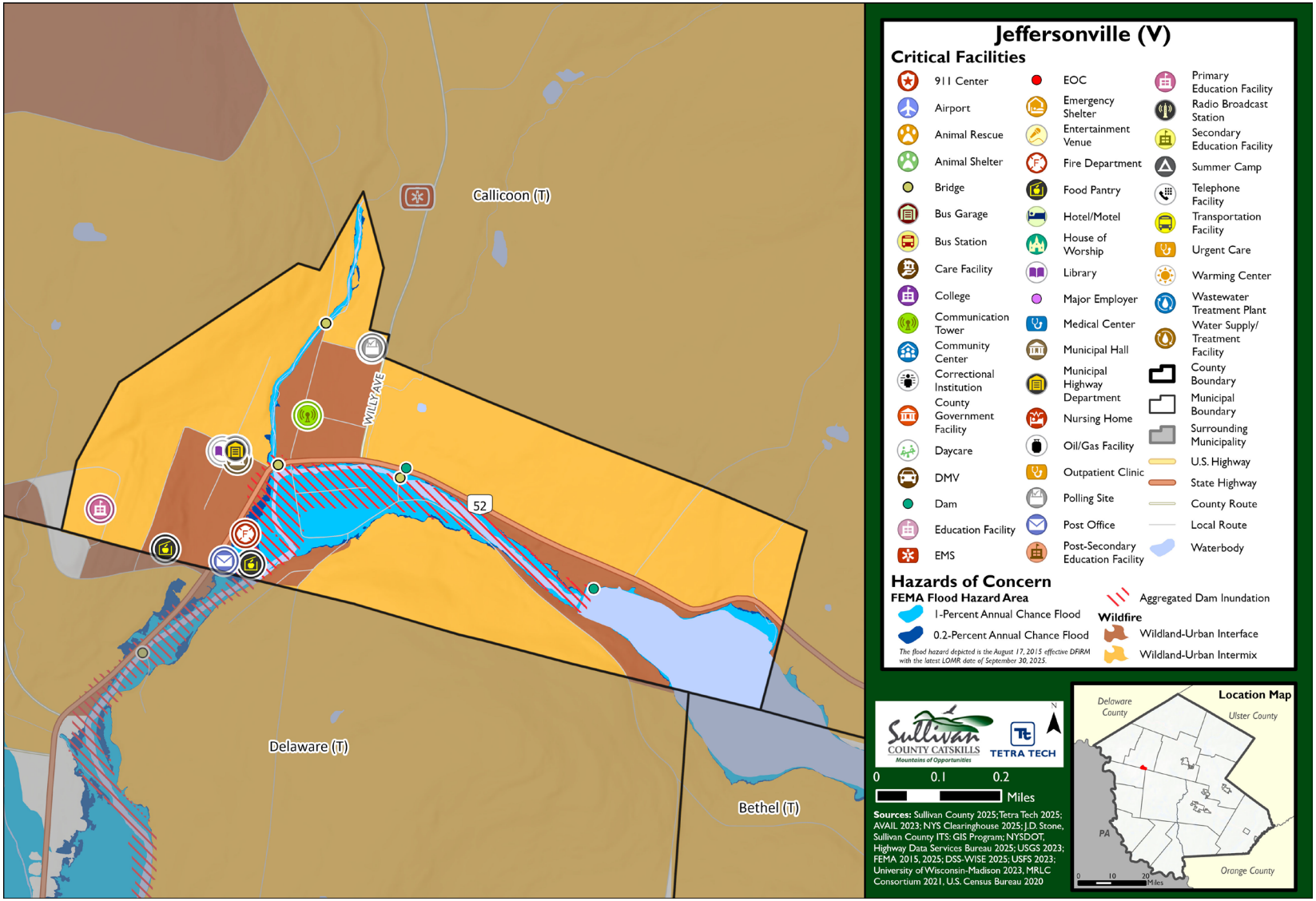
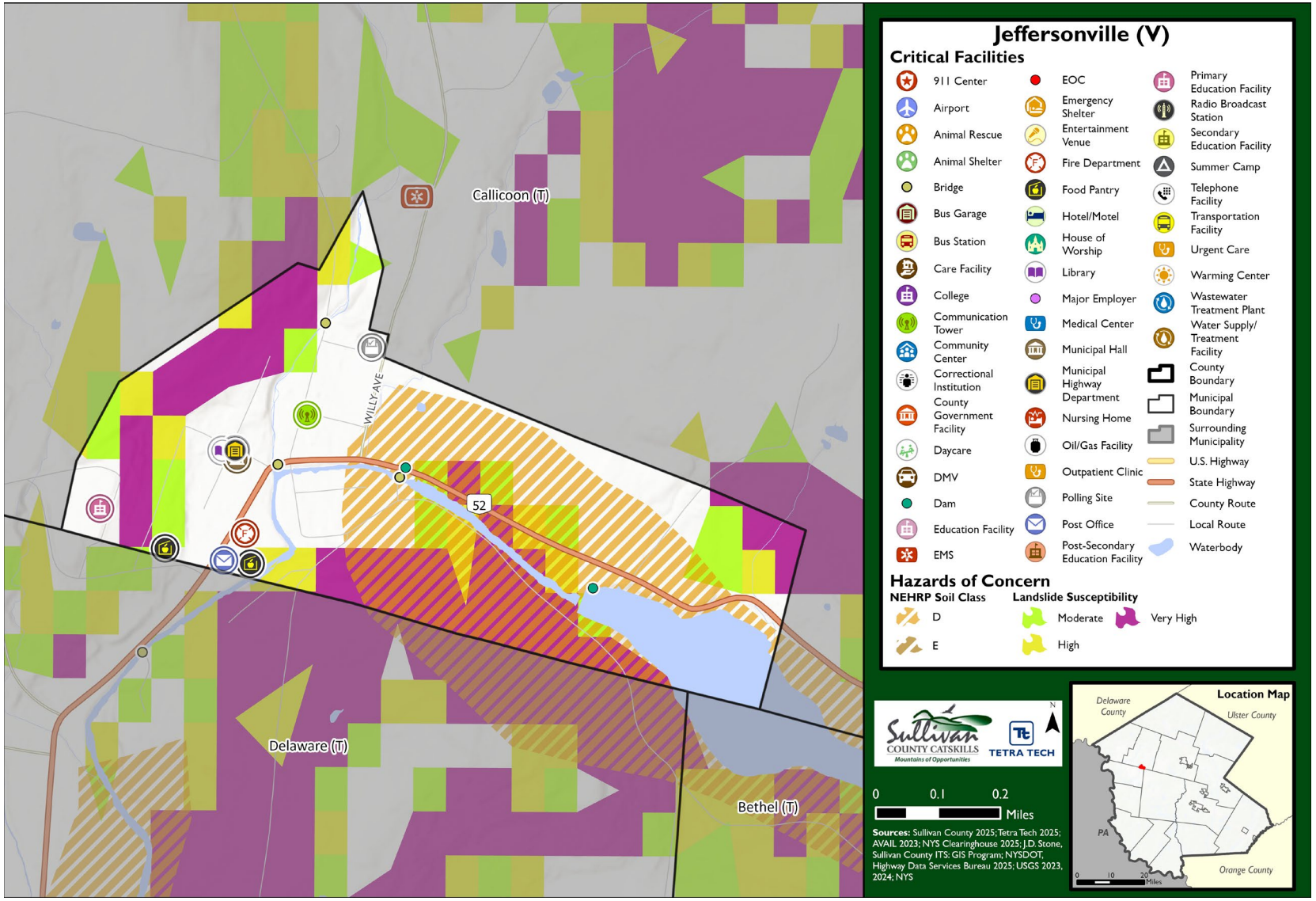


Figure 13-2. Jeffersonville NEHRP Soil and Landslide Area Map



13.3.2 Previous Event History

The history of natural and non-natural hazard events in Jeffersonville is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 13-7 and Table 13-8 provide details on the loss and damage in Jeffersonville during hazard events since the last hazard mitigation plan update.

Table 13-7. Presidential Disaster Declarations History in Jeffersonville

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Jeffersonville
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Adhered to necessary mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Localized road flooding. Some trees downed.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Localized road flooding. Some trees downed.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 13-8. Hazard Event History in Jeffersonville

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Jeffersonville
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	No damages or losses incurred.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	No damages or losses incurred.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	No damages or losses incurred.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	No damages or losses incurred.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	No damages or losses incurred.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	No damages or losses incurred.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding	No damages or losses incurred.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Jeffersonville
		reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	No damages or losses incurred.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	No damages or losses incurred.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

13.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 13-9 includes an inventory of critical facilities and infrastructure for the Village of Jeffersonville.

Table 13-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
First Presbyterian Church	Food Pantry	Y	Y	2026-JeffersonvilleV-01	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: Two bridges and one dam were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Village were constructed to required standards, protecting the structure(s) to the required flood level(s).

13.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Jeffersonville Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 13-10.

Table 13-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Lake Jefferson Dam is a high hazard potential dam which was identified as having major issues. An EAP is in place, but due to the structure's integrity this ranking was increased. Island neighborhood properties are flood-prone and have experienced significant flooding numerous times.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Drought	No impacts.
Earthquake	No impacts.
Flood	Risk of flooding in the center of the Village is high due to proximity of roads and development to Callicoon Creek and Laundry Brook. A food pantry/market is located in the flood hazard area, and the Post Office and Fire Department are located just outside the hazard area but have the possibility of being impacted.
Landslide	No impacts.
Pandemic	Minimal pandemic risk due to policies and procedures.
Severe Storm	Cascading flooding issues from heavy rains. Some concerns regarding power outages, but outages have not lasted longer than one day, historically.
Severe Winter Storm	Primary concerns regarding ice accumulations, which cause downed trees and power lines.
Wildfire	Jeffersonville Fire District covers the Village under its jurisdiction. The Village does not have a large wildfire risk, despite the WUI evaluation. Most risk is for structure or smaller brush fires.

13.3.5 Vulnerable Community Assets

Representatives from the Village of Jeffersonville Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 13-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 13-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not applicable, no assets in Village.	**Area: Concentration of Local Businesses, Major Employers**	East Main Street/Route 52 is primarily in the flood hazard area.
Area: Concentration of Residences	Lovett Lane and Mill Street have residencies which are located in the flood hazard area. Island neighborhood properties are flood-prone and have experienced significant flooding numerous times.	**Local Roads, Highways, Culverts, Bridges**	East Main Street/Route 52, Lovett Lane, and Mill Street are located in the flood hazard area and border Callicoon Creek.
Municipal Buildings	The Post Office is located just outside the hazard area but has the possibility of being impacted. Jeffersonville Municipal Hall/Highway Garage may not have emergency back-up power.	**Medical Centers (non-hospital)**	Not applicable, no assets in Village.
College/University	Not applicable, no assets in Village.	**Place of Worship**	The First Presbyterian Church is located on East Main Street/Route 52 close to the flood hazard area and may be impacted.
Community Centers, Parks, Recreational Sites	No known impacts.	**Public Transportation including fleets, transportation**	Jeffersonville Municipal Hall/Highway Garage may not have emergency back-up power.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)		**infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	
Cultural/Historic Buildings/Sites	No known impacts.	**Schools (K-12)**	Sullivan West Central School is used as an evacuation location and may not have emergency back-up power.
Elder-care Facilities	Not applicable, no assets in Village.	**Utilities**	Some concerns regarding power outages, but outages have not lasted longer than one day, historically.
Fire/Police Stations	Jeffersonville Fire Department is located just outside the hazard area but has the possibility of being impacted.	**Wastewater Treatment Plants**	Not applicable, no assets in Village.
Gas Stations, Grocery Stores, Supermarkets	A food pantry/market is located in the flood hazard area.	**Water: Drinking Water Resources**	Not applicable, no assets in Village.
Hospitals	Not applicable, no assets in Village.	**Other**	No known impacts.

13.3.6 Dams

Table 13-12 includes all dams in the Village of Jeffersonville. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 13-12. Dams Located in Jeffersonville

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-0766	Lake Jefferson Dam	East Branch Callicoon Creek	Barbara and Kevin Gref	Private	Hydroelectric, Recreation	High Hazard Dam
147-4857	Mill Pond Dam	East Branch Callicoon Creek	Hilda Segar	Private	Fish and Wildlife Pond	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Lake Jefferson Dam is a high hazard potential dam which was identified as having major issues. An EAP is in place, but due to the structure's integrity this ranking was increased. Island neighborhood properties are flood-prone and have experienced significant flooding numerous times.

13.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 13-13 identifies the preliminary hazard ranking for Jeffersonville, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 13-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	Lake Jefferson Dam is a high hazard potential dam which was identified as having major issues. An EAP is in place, but due to the structure's integrity this ranking was increased. Island neighborhood properties are flood-prone and have experienced significant flooding numerous times.	Medium
Drought	Medium	Disagree	Low	Minimal impacts for the Village.	Low
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Disagree	Medium	The Village is capable of responding to severe winter storms adequately. The primary risk with this hazard is in regard to power outages, which have not exceeded more than a few hours in the Village.	Medium
Wildfire	Medium	Agree	-	-	Medium

13.4 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 13-14 through Table 13-17.

13.4.1 Development and Permitting

Table 13-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Municipality, Code Enforcement/Building
What is your process for tracking building permits?	Computer software
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	No

Table 13-15. 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
2020				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2021				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2022				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2023				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2024				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2025				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

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

Table 13-16. Recent Major Development and Infrastructure from 2020 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
No Recent Major Development and Infrastructure from 2020 to Present					

Table 13-17. 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
No Known or Anticipated Major Development and Infrastructure in the Next Five Years					

13.5 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 Table 13-1 is responsible for maintaining this information.

13.5.1 NFIP Statistics

Table 13-18 summarizes the NFIP policy and claim statistics for the Village of Jeffersonville.

Table 13-18. Jeffersonville NFIP Summary of Policy and Claim Statistics

NFIP Community Number	361474#
# Policies	1
# Claims (Losses)	43

Total Loss Payments	$764,017.05
# Repetitive Loss Properties	12
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

13.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 13-19.

Table 13-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Risk of flooding in the center of the Village is high due to proximity of roads and development to Callicoon Creek and Laundry Brook. A food pantry/market is located in the flood hazard area, and the Post Office and Fire Department are located just outside the hazard area but have the possibility of being impacted.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer of the Village of Jeffersonville is hereby appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 21, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, training, funding
Does your floodplain management staff need any assistance or training to support its	Yes, any trainings available would be beneficial

NFIP Topic	Comments
floodplain management program? If yes, what type of assistance/training is needed?	
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Yes
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Education is left to insurer
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Map Service Center, River Gage information
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, site plan review, floodplain development standards, planning and zoning board consider efforts to reduce flood risk.

13.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Jeffersonville 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 Jeffersonville to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

13.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 13-20 and Table 13-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 13-20. Regulatory Capabilities in Jeffersonville

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	It is the purpose of this article to promote the health, safety, morals and welfare of the inhabitants of the Village of Jefferson by providing herein for the regulation of the establishment of new dwellings and buildings or additions or revisions to those existing within said Village of Jeffersonville.	Chapter 118	Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	Yes	The purpose of this code is to require an emergency preparedness plan. This plan's purpose is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens within the Village of Jeffersonville in the event of a disaster.	Chapter 19	Mayor, Village Clerk
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:	Chapter 122; Local Law #1 of 2011	Code Enforcement Officer

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		• 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 flood waters; • Control fillings, grading, dredging and other development which may increase erosion or flood damages; • Regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and; • Qualify and maintain for participation in the National Flood Insurance Program		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	Areas of 15% to 25% in average slope as determined from the Sullivan County Soil Survey or topographic mapping shall not be altered, regraded, cleared or built upon as to an extent greater than 30% of the total lot area and all such development shall be subject to Special Use approval and site plan review. No more than 20% of the mature woodlands located in a floodplain, wetland, wetland margin, steep slope, or lake or pond shoreline area shall be altered, regraded, cleared or built upon.	Chapter 190; Local Law 1 of 2012 (80-28)	Code Enforcement
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		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.		
Site Plan Code	Yes	The Planning Board, in reviewing the site plan, shall consider its conformity to the Village of Jeffersonville Comprehensive Plan and the various other plans, laws and ordinances in the Village. Conservation features, aesthetics, landscaping and impact on surrounding development as well as on the entire Village shall be part of the Planning Board review.	Chapter 190; Local Law 1 of 2012 (80-20)	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	The Village of Jeffersonville Planning Board shall be authorized and empowered to approve preliminary and final plats of subdivisions showing lots, blocks, or sites, with or without streets or highways, within the Village of Jeffersonville.	Chapter 190; Local Law 1 of 2012 (80-33)	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	This law is intended to implement the recommendations and fulfill the goals and objectives of the Village of Jeffersonville Comprehensive Plan, as amended. Specific purposes of this law include those contained in 7-704 of the Village Law and the following: • Preserving and enhancing the Village's open space, small-town character, aesthetics and general living environment by providing for the proper relationships between man, building and open space in all site planning. • Designing appropriate districts in the Village for various land uses at densities which will conserve and enhance the value of property while meeting the community development needs of the Village. • Providing for a variety of housing units, in compatible residential environments, to address the full range of needs in terms of incomes, ages and family sizes. • Prohibiting uses or structures which are incompatible with the character or development or the permitted uses within specified zoning districts. • Establishing reasonable standards of development to which uses, buildings or structures shall conform so as to provide	Chapter 190; Local Law 1 of 2012	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		for the health, safety and general welfare of residents and reduce future costs to the community. • Promoting orderly development to protect the character and maintain the stability of residential, business and agricultural areas.		

Planning Capabilities

Table 13-21. Planning Capabilities in Jeffersonville

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	No	-	-	-
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens withing the Village in the event of an emergency or disaster.	Emergency Management Plan, 2007	Village Board
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation /	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Wildlife Management Plan				
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

13.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 13-22 details the available administrative and technical capabilities of the Village.

Table 13-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Planning Board Engineer
Construction/Building/Code Enforcement Department	Yes	Code Enforcement
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	No	-
Environmental Commission/Specialist	No	-
Grant Writer	No	-
Maintenance Programs to Reduce Risk	No	-
Mitigation Planning Committee	No	-
Mutual Aid Agreements	No	-
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	No	-
Planning Board	Yes	The Planning Board seeks to provide sound planning decisions and advice on matters entrusted to it by New York State Law and the Village Code including site plan review, subdivision review, zoning advice to the Village Board, the Zoning Board of Appeals, and all matters referred to it.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	Yes	Planning Board
Planners or engineers with an understanding of natural hazards	Yes	Planning Board
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Professionals trained in conducting damage assessments	No	-

Capability Type	In Place in Municipality? Yes or No	Comments
Public Works/Highway Department	Yes	Highway, Water and Sewer
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals holds meetings on an as-needed basis. Public notice is given prior to meetings being held.
Other	No	-

13.6.3 Fiscal Capability

Table 13-23 summarizes financial resources available to Jeffersonville.

Table 13-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

13.6.4 Education and Outreach Capability

Table 13-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 13-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	No
Local News	No
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	No
Public information officer or communications office	No
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Yes: Phone list, Website, Facebook

13.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 13-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 13-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate

Hazard	Strong, Moderate, Weak, None, N/A
Severe Winter Storm	Moderate
Wildfire	Moderate

13.7 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.

13.7.1 Past Mitigation Action Status

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Jeffersonville-1—Jeffersonville - "The Island" Flood Prone Properties	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Sullivan County Soil & Water
Supporting Agency / Department	Sullivan County Planning Department
Action Location	-
Summary of Original Problem	The Island properties are flood-prone and have experienced significant flooding on numerous times. Some of the property owners have opted to join the FEMA buyout program.
Summary of Solution (Project)	Reduce long-term risk of all hazards by conducting a traffic study for Route 55 and Stanton Corner to identify traffic congestion management measures that emergency response times, loss of continuity of operations, and improve pedestrian safety during emergencies.
Action Category	Education/Outreach
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	The solution for this problem should be in regard to FEMA HMA program for elevations, acquisition, or relocation. Create a new action for a traffic study to inform an evacuation plan for the "island' properties. In this new action, Route 55 should be Route 52 and Stanton Corner should be Mill Street as Route 55 and Stanton Road are located in the Town of Liberty.
If discontinue, explain why	Not applicable

T. Jeffersonville-2—Jeffersonville - Lake Jeffersonville Dam Assessment	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Jeffersonville Supervisor
Supporting Agency / Department	DPW/Highway
Action Location	Lake Jeffersonville Dam
Summary of Original Problem	Village and town have concern about Lake Jefferson Dam as potential failure would be catastrophic. The Island properties are flood-prone and have experienced significant flooding numerous times. Some of the property owners have opted to join the FEMA buyout program.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by implementing an education/outreach program to educate property owners about FEMA's buyout program, the Lake Jefferson Dam emergency action plan, mitigation opportunities, and by identifying opportunities to utilize open space to appropriately manage storm water.
Action Category	Education/Outreach
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Jeffersonville-3— Jeffersonville - Laundry Brook and Callicoon Creek Intersection Flooding Issues	
Hazards Addressed	Flood
Lead Agency / Department	Jeffersonville Mayor's Office
Supporting Agency / Department	-
Action Location	Laundry Brook and Callicoon Creek
Summary of Original Problem	During severe storms, the Route 52 Bridge, Lovett Lane and Main Street experience significant flooding at the confluence of Laundry Brook and Callicoon Creek.
Summary of Solution (Project)	In collaboration with Sullivan County Soil and Water and Sullivan County Planning, conduct an LFA of the Laundry Brook and Callicoon Creek to determine causes, risks and potential mitigation strategies.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

13.7.2 Additional Mitigation Efforts

The Village of Jeffersonville did not identify any additional mitigation efforts completed since the last HMP.

13.7.3 Identified Issues

The Village of Jeffersonville has identified the following vulnerabilities within their community for mitigation strategy development:

- The First Presbyterian Church is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- During severe storms, the Route 52 Bridge, Lovett Lane and Main Street experience significant flooding at the confluence of Laundry Brook and Callicoon Creek.
- Village and town have concern about Lake Jefferson Dam as potential failure would be catastrophic. The Island properties (properties on Lovett Lane and Main Street) are flood-prone and have experienced significant flooding numerous times. Some of the property owners have opted to join the FEMA buyout program.
- The Island properties (properties on Lovett Lane and Main Street) are flood-prone and have experienced significant flooding on numerous times. Some of the property owners have opted to join the FEMA buyout program.
- Several properties are at risk to the flood hazard in the Village; The First Presbyterian Church is located in the flood hazard area, the Post Office and Fire Department are located just outside the hazard area but have the possibility of being impacted, and residencies on and near East Main Street/Route 52, Lovett Lane, and Mill Street are either in or significantly close to the flood hazard area. Further, the Village has 12 repetitive loss properties.
- Backup power sources are necessary to maintain critical services for critical facilities. The Post Office, the Municipal Hall/Highway Garage, Sullivan West Central School and lack a permanent emergency power source. Sullivan West Central School is also an evacuation location in times of need.
- High hazard trees pose a risk for falling on private property and utilities during severe storm and severe winter storm events. The Village does not have a program in place to monitor and inspect trees and identify ones that need to be trimmed or removed.
- Lake Jefferson Dam is a Class I High Hazard Dam that is located on the Elm Creek. The dam is owned by Barbara and Kevin Gref. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including East Main Street/Route 52, Lower Swiss Hill Road (Lake View Avenue), Lovett Lane, and Mill Street. The dam was last inspected in July 2025, with the results noting the structure was unsound and a deficiency having been recognized. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.

13.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Jeffersonville participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Jeffersonville 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 Village priorities.

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 13-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-JeffersonvilleV-01. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The First Presbyterian Church, identified as a food pantry facility, is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Village will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Village.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-JeffersonvilleV-02. Laundry Brook and Callicoon Creek Intersection Flooding

Lead Agency:	Municipal Engineer	
Supporting Agencies:	Jeffersonville Mayor's Office, Sullivan County Soil and Water, Sullivan County Planning	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	During severe storms, the Route 52 Bridge, Lovett Lane and Main Street experience significant flooding at the confluence of Laundry Brook and Callicoon Creek.	
Description of the Solution:	In collaboration with Sullivan County Soil and Water and Sullivan County Planning, conduct a local flood analysis of the Laundry Brook and Callicoon Creek to determine causes, risks and potential mitigation strategies.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Village Budget, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1	
Benefits:	The local flood analysis will identify areas subject to flooding and accurately define the flood-frequency relation within those flood-prone areas. The analysis will support flood insurance decisions and sound floodplain management.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties may be impacted by flooding from the Laundry Brook and Callicoon Creek.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will provide data and analyses results with maps, graphs, tables, and explanatory narratives to support flood insurance decisions and sound floodplain management, which will allow the Village to identify mitigation measures to protect its critical facilities.	
Impact on Capabilities:	This action will create a new planning capability, which could lead to strengthening regulatory capabilities. The action will also benefit the Village's NFIP capabilities and inform any updates to future FIRMs and FIS reports.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate all impacted properties	Cost prohibitive. Property owners may not want to elevate structures on the properties.
	Redirect the Laundry Brook and Callicoon Creek	Cost prohibitive. Would disrupt the ecology of the waterbodies and waterbeds, potentially leading to additional flooding problems.

Action 2026-JeffersonvilleV-03. Lake Jeffersonville Dam Analysis

Lead Agency:	Village Board	
Supporting Agencies:	Highway Department, Dam Owners	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Village and town have concern about Lake Jefferson Dam as potential failure would be catastrophic. The Island properties (properties on Lovett Lane and Main Street) are flood-prone and have experienced significant flooding numerous times. Some of the property owners have opted to join the FEMA buyout program.	
Description of the Solution:	Reduce long-term risk of flooding for existing assets and future development by implementing an education/outreach program to educate property owners about FEMA's buyout program, the Lake Jefferson Dam emergency action plan, mitigation opportunities, and by identifying opportunities to utilize open space to appropriately manage storm water.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget, Dam Owners	
Implementation Timeline:	1 year	
Goals Met:	1, 2, 3	
Benefits:	This action will improve the public education and outreach capabilities in the Village by including discussions on disaster preparedness and hazard mitigation for residents and business owners, which will contribute to the resiliency of the Village.	
Impact on At Risk Populations:	At risk populations will learn how to prepare for and mitigate the dam failure and flood hazards which may impact them in the Village.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of the dam failure and flood hazards, associated with the Lake Jefferson Dam. With these businesses becoming more resilient, this action would contribute to their continuity of operations.	
Impact on Capabilities:	This action would build upon the existing public education and outreach capabilities and adapt it to the Village's needs.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Village
	Use only a few methods for distribution	Using only a few methods of distribution may hinder at risk populations from receiving the guidance

Action 2026-JeffersonvilleV-04. "The Island" Evacuation Route Evaluation

Lead Agency:	Village Board	
Supporting Agencies:	Surrounding Jurisdictions, County Planning Department, County OEM/HS, NYDOT	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Island properties (properties on Lovett Lane and Main Street) are flood-prone and have experienced significant flooding on numerous times. These properties are located within both the flood hazard area and the dam inundation area for Lake Jefferson Dam. There are two direct routes out to Route 52 should residents need to evacuate their property due to dam failure or flooding from severe storms.	
Description of the Solution:	Reduce long-term risk by conducting a study to evaluate and identify appropriate evacuations routes for the Island properties. Routes of interest include Mill Street to Route 52, Swiss Hill Road to Route 52, and Eggler Road to Sickmiller Road which leads to Route 52. This study will identify traffic congestion management measures to reduce emergency evacuation times and potential loss of life.	
Estimated Cost:	Medium	
Potential Funding Sources:	Village Budget, EMGP, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 6	
Benefits:	Evaluating evacuation routes with surrounding jurisdictions ensures continuity during implementation. Furthermore, identifying routes which are not impacted, or have limited impact, to hazards, such as flood, prevent additional loss or damages.	
Impact on At Risk Populations:	Having pre-determined evacuation routes can assist at risk populations in preparing themselves and those within their community to evacuate in a safe, timely fashion.	
Impact on Future Development:	Future development would need to be built with access to the identified evacuation routes.	
Impact on Critical Facilities/Lifelines:	Identifying evacuation routes can assist in smooth transportation operations across multiple jurisdictions.	
Impact on Capabilities:	This action will produce a planning capability for the Village, making it more resilient.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not consult surrounding municipalities	Evacuation routes may go against one another
	Do not publicize routes	Residents will not be aware of the evacuation routes

Action 2026-JeffersonvilleV-05. Nonstructural Flood Mitigation

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Board, Property Owners, County Planning Department, County OEM/HS	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Several properties are at risk to the flood hazard in the Village; The First Presbyterian Church is located in the flood hazard area, the Post Office and Fire Department are located just outside the hazard area but have the possibility of being impacted, and residencies on and near East Main Street/Route 52, Lovett Lane, and Mill Street are either in or significantly close to the flood hazard area. Further, the Village has 12 repetitive loss properties.	
Description of the Solution:	The Village will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Village will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Village Budget, County Budget, Property Owners	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 3, 5	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Village's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-JeffersonvilleV-06. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Village Board, Highway Department, Sullivan West Central School	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Post Office, the Municipal Hall/Highway Garage, Sullivan West Central School and lack a permanent emergency power source. Sullivan West Central School is also an evacuation location in times of need.	
Description of the Solution:	The Village Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Village will then purchase and install the generator and all necessary electrical hookup components. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Village Budget, School Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-JeffersonvilleV-07. Tree Maintenance Program

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	High hazard trees pose a risk for falling on private property and utilities during severe storm and severe winter storm events. The Village does not have a program in place to monitor and inspect trees and identify ones that need to be trimmed or removed.	
Description of the Solution:	The Village will pursue funding support to have a forester assess trees, complete deed searches to verify Village right of way in targeted areas and then have the tree removal completed by qualified personnel. Implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	The creation of a tree maintenance program would be a new capability for the Village.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-JeffersonvilleV-08. Lake Jeffersonville Dam Rehab

Lead Agency:	Dam Owners (Barbara and Kevin Gref)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer, Town of Callicoon	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Lake Jefferson Dam is a Class I High Hazard Dam that is located on the East Branch Callicoon Creek. The dam is owned by Barbara and Kevin Gref. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including East Main Street/Route 52, Lower Swiss Hill Road (Lake View Avenue), Lovett Lane, and Mill Street. The dam was last inspected in July 2025, with the results noting the structure was unsound and a deficiency having been recognized. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the Town of Callicoon and dam owners to complete an updated engineering study of Lake Jefferson Dam. The current EAP, last updated in November 2023, indicates various levels for emergency condition identification. Lake Jefferson Dam should be evaluated by the owners if the dam is in an emergency condition based upon the recent dam inspection results. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Village, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.

	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Table 13-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-JeffersonvilleV-01	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-JeffersonvilleV-02	Laundry Brook and Callicoon Creek Intersection Flooding	1	1	1	1	1	1	1	1	0	1	1	1	0	0	11	High
2026-JeffersonvilleV-03	Lake Jeffersonville Dam Analysis	1	1	1	1	1	1	1	1	1	0	1	1	1	0	12	High
2026-JeffersonvilleV-04	"The Island" Evacuation Route Evaluation	1	0	1	1	1	0	0	1	1	1	1	1	0	1	10	Medium
2026-JeffersonvilleV-05	Nonstructural Flood Mitigation	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-JeffersonvilleV-06	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-JeffersonvilleV-07	Tree Maintenance Program	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2026-JeffersonvilleV-08	Lake Jeffersonville Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

14. TOWN OF LIBERTY

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Liberty 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 Liberty, describes who participated in the planning process, assesses Liberty's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

14.1 HAZARD MITIGATION PLANNING TEAM

The Town of Liberty identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 14-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 14-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Frank DeMayo, Town Supervisor Address: 120 N Main St, Liberty, NY 12754 Phone Number: (845) 292-5111 Email: supervisordemayo@townofliberty.org	Name/Title: Matt Dewitt, Highway Superintendent Address: 120 N Main St, Liberty, NY 12754 Phone Number: (845) 292-4172 Email: libertydpw@hvc.rr.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Al Fusco, Code Enforcement Officer Address: 120 N Main St, Liberty, NY 12754 Phone Number: (845) 292-8511 Email: code@townofliberty.org, t.wilson@townofliberty.org	

14.2 COMMUNITY PROFILE

14.2.1 Community Classifications

Table 14-2 summarizes classifications for community programs available to Liberty.

Table 14-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	July 16, 2025

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

14.2.2 Community Profile

Geographical Description

Just 90 minutes from New York City, the Town of Liberty is at the crossroads of the Catskill Mountains and Hudson Valley region. It includes the Village of Liberty and is known for its rural character (Town of Liberty 2025).

Government Type and Description

The Town is governed by a Town Board comprised of a Town Supervisor and four councilpersons.

Table 14-3 through Table 14-6 note land area, population, and building stock information for the Town of Liberty.

Table 14-3. Total Land Area in the Town of Liberty

Jurisdiction	Total Land Area	
	Acres	Square Miles
Liberty (T)	47,916.8	74.9

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 14-4. Population Estimates in the Town of Liberty

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
5,459	6.9%	5,196	6.6%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 14-5. At Risk Populations in the Town of Liberty

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
863	16.6%	454	8.7%	200	3.9%	950	18.3%	416	8.0%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 14-6. General Building Stock in the Town of Liberty

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
4,041	$3,988,125,428	3,358	$2,053,059,198	369	$883,578,884	33	$204,162,321	281	$847,325,026

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

14.3 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 Liberty's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

14.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Liberty are shown in Figure 14-1 and Figure 14-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Liberty has significant exposure.

Figure 14-1. Liberty Flood, Wildfire and Dam Inundation Area Map

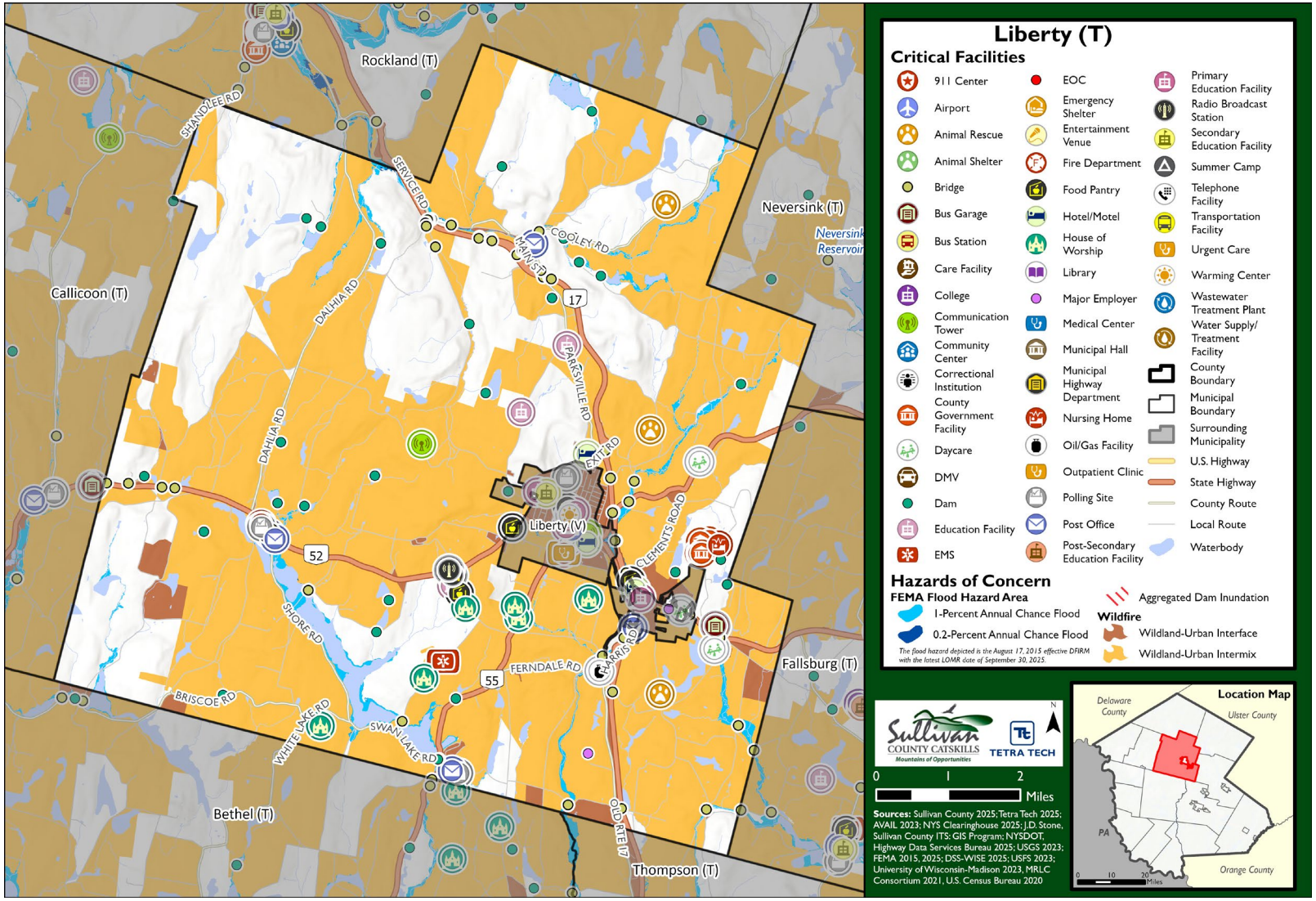
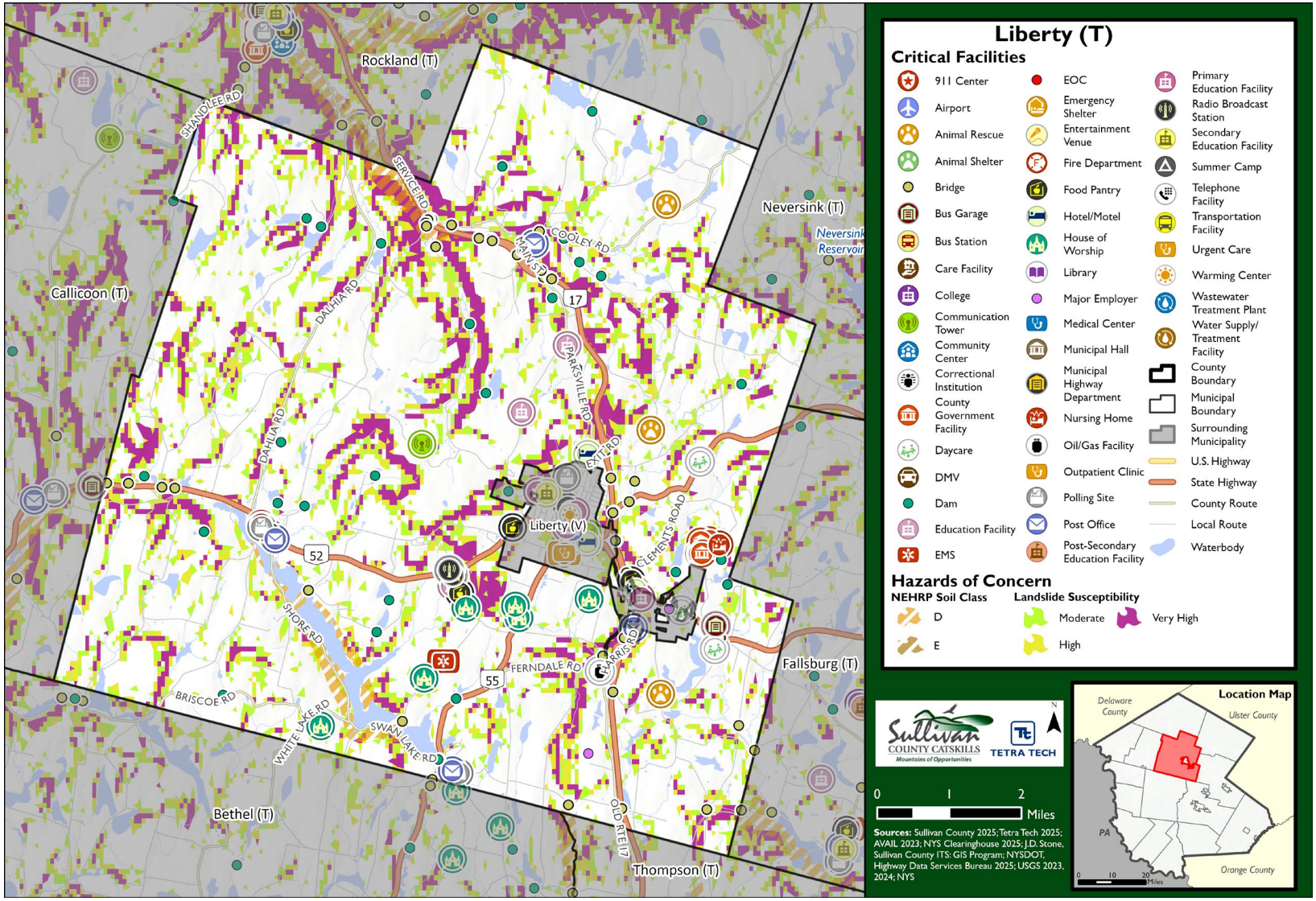


Figure 14-2. Liberty NEHRP Soil and Landslide Area Map



14.3.2 Previous Event History

The history of natural and non-natural hazard events in Liberty is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 14-7 and Table 14-8 provide details on the loss and damage in Liberty during hazard events since the last hazard mitigation plan update.

Table 14-7. Presidential Disaster Declarations History in Liberty

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Liberty
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Town abided by social distancing, work from home orders, and social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town did not incur any documented damage or losses
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town did not incur any documented damage or losses

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 14-8. Hazard Event History in Liberty

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Liberty
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town did not incur any documented damage or losses
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town did not incur any documented damage or losses
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being	The Town did not incur any documented damage or losses

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Liberty
		blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

14.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 14-9 includes an inventory of critical facilities and infrastructure for the Town of Liberty.

Table 14-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Twenty five bridges and eight dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

14.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Liberty Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 14-10.

Table 14-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Swan lake dam has some compromised areas, not an imminent danger.
Drought	3 potable water sources, never had any issues w/ the sources even during hot summers.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Earthquake	No concerns
Flood	Shore road in white sulfur springs; flash flooding on roads north end of town (village had incident early 2000s). Brisco rd and murphy rd in swan lake – if boards are in lake in the summer, lake has more of a tendency to flood. Rt 55 sometimes (county/state maintained). Aiden and mulig rd have brooks flowing nearby.
Landslide	No known impacts or occurrences.
Pandemic	No too many concerns any longer. Worked with organizations to implement work from home, received grant funding to implement safety procedures.
Severe Storm	Dead ash trees are impacted by high winds – concern for the Town and across the county.
Severe Winter Storm	Highway responsive to winter storms; main concern is w/ wind. Dead ash trees are impacted by high winds – concern for the Town and across the county. Ice storms weighing on roads and utility lines.
Wildfire	Not big concern, maybe some brush fires.

14.3.5 Vulnerable Community Assets

Representatives from the Town of Liberty Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 14-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 14-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not applicable	**Area: Concentration of Local Businesses, Major Employers**	Structural fires with grandfathered structures
Area: Concentration of Residences	Wind and trees could impact residences.	**Local Roads, Highways, Culverts, Bridges**	White sulfur springs bridge, some concerns – just old structurally. Kelly bridge, single lane – traffic has multiplied in recent years.
Municipal Buildings	Backup power exists at the town barn, pump stations, sewerage sites (have portable). Town hall and senior center emergency generator – backups for computers, not full structure.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	Not applicable
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing,	Wind and trees could impact egress into parks.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage,**	Not applicable

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
farming, fishing, etc.)		**critical public transit routes, Airport(s)**	
Cultural/Historic Buildings/Sites	Asset exists, but no concerns.	**Schools (K-12)**	Asset exists, but no concerns.
Elder-care Facilities	Pandemic introduced many new SOPs. No concerns about these assets.	**Utilities**	Not since hurricane sandy, most outages are quick, longest a few hours. Aging infrastructure – ½ million tank concern Ferndale and White sulfur springs both aged, need replacement. Water breaks in distribution line.
Fire/Police Stations	Not applicable	**Wastewater Treatment Plants**	40k update for swan lake sewer plant – part is to take headworks out of the floodplain.
Gas Stations, Grocery Stores, Supermarkets	Not applicable	**Water: Drinking Water Resources**	Not applicable
Hospitals	Not applicable	**Other**	Trees to be taken down around town hall. Tree inventory and maintenance program in place. Japanese knot weed becoming a problem on trails.

14.3.6 Dams

Table 14-12 includes all dams in the Town of Liberty. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 14-12. Dams Located in Liberty

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-3545	Triple L Lake Dam	TR-Swan Lake	Oliveria Farms Inc.	Private	Recreation	Intermediate Hazard Dam
147-1617	Camp Gan Israel Pond Dam	TR-Little Beaver Kill	Camp Gan Israel	Private	Recreation	Intermediate Hazard Dam
162-1290	Melody Country Club Dam	TR-Mongaup River	Melody County Club	Private	Recreation	Low Hazard Dam
147-0279	Swan Lake Dam	West Branch Mongaup River	Swan Lake Commons LLC	Private	Recreation	Intermediate Hazard Dam
162-4481	Tanzman Lake Dam	TR-Little Beaver Kill	The Legends of Tanzman Lake Homeowners Association	Private	Recreation	Intermediate Hazard Dam
162-0364	Lilly Pond Dam	TR-Little Beaver Kill	Village of Liberty	Local Government	Water Supply - Secondary	Low Hazard Dam
147-2800	Philip Emden Pond Dam	TR-Swan Lake	Iris A. Karp	Private	Recreation	Low Hazard Dam
147-5430	Joseph Grieble Park Dam	TR-Mongaup River	Village of Liberty	Local Government	Recreation	Low Hazard Dam
162-1325	Tanzville Dam	TR-Little Beaver Kill	Gan Acres Inc..	Private	Recreation	Low Hazard Dam
147-4206	Lake Marie Dam	TR-Swan Lake	Aly Dadras	Private	Recreation	Low Hazard Dam
162-3080	Vincent Desantis Pond Dam	Little Beaver Kill Creek	Syed A. Nayeem	Private	Recreation	Low Hazard Dam
162-4480	Grossingers Lake Dam	TR-East Mongaup River	Cappelli Organization	Private	Recreation	Intermediate Hazard Dam
162-4479	Dixie Lake Dam	East Mongaup River	Town of Liberty	Local Government	Recreation	Low Hazard Dam
162-4128	Sunset Lake Dam	East Mongaup River	Sullivan County	Local Government	Recreation	Low Hazard Dam
162-1383	Levitt Brothers Pond Dam	TR-Parkersville Brook	Levitt Brothers	Private	Recreation	Low Hazard Dam
147-1520	Pearl Lake Dam	TR-Little Beaver Kill	Westside Community Alliance	Private	Recreation	Low Hazard Dam
147-1083	Lake Barnabee Dam	TR-W Branch Mongaup River	SWAN LAKE COLONY CORPORATION	Private	Recreation	Low Hazard Dam
147-4599	Revonah Lake Dam	TR-Little Beaver Kill	Village of Liberty	Local Government	Flood Control and Storm Water Management	Low Hazard Dam
147-4210	Spring Lake Dam	Benton Hollow Creek	Anna Georgiou	Private	Recreation	Low Hazard Dam
147-0864	Fieldston Lake Dam	TR-Swan Lake	Max Levine	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-4139	Camp Shomria Dam	TR-Swan Lake	Camp Shomria	Private	Recreation	Low Hazard Dam
147-2207	Fred Denman Lake Dam	TR-Little Beaver Kill	Denman Family	Private	Recreation	Low Hazard Dam
147-5118	Perkovic Pond Dam	TR-Krom Hollow Brook	Frank Perkovic	Private	Recreation	Low Hazard Dam
147-1327	Matawa Lake Dam	TR-Little Beaver Kill	Livingston Manor Water District	Local Government	Water Supply - Primary	Low Hazard Dam
147-4482	Lenape Lake Dam	TR-Matawa Lake	Lenape Lake INC.	Private	Flood Control and Storm Water Management, Recreation	Low Hazard Dam
147-4101	Goldberg Pond Dam	Hall Brook	Dr. Arthur Goldberg	Private	Recreation	Low Hazard Dam
147-1234	Tuttle Pond Dam	TR- Segar Pond	Samuel J Tuttle	Private	Recreation	Low Hazard Dam
147-2722	Rainbow Lodge Wildlife Marsh Dam	TR-Callicoon Creek	Jospeh and Frances Bertha Krajicek	Private	Recreation	Low Hazard Dam
147-0873	Kramer Pond Dam	Callicoon Creek	Buckaroo LLC	Private	Recreation	Low Hazard Dam
162-1283	Paramount Pond Dam	TR-Little Beaver Kill	Paramount Realty Associates LLC	Private	Recreation	Intermediate Hazard Dam

Notable comments regarding dams in the jurisdiction:

Swan lake dam has some compromised areas, not an imminent danger.

14.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 14-13 identifies the preliminary hazard ranking for Liberty, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 14-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Disagree	No Risk	There has never been any recorded impacts from the Earthquake hazard in the Town.	No Risk
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

14.4 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 14-14 through Table 14-17.

14.4.1 Development and Permitting

Table 14-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Building department
What is your process for tracking building permits?	Spreadsheets, but implementing a new system
Are permits tracked by hazard area? (For example, floodplain development permits.)	No
Does your community have a buildable land inventory? If yes, please describe.	Buildable lands exist within the swan lake sewer district

Table 14-15. 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
2020				
Total Permits	19	23	2	46

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA	-	-	-	-
2021				
Total Permits	24	10	0	34
Permits within SFHA	-	-	-	-
2022				
Total Permits	25	1	1	27
Permits within SFHA	-	-	-	-
2023				
Total Permits	14	18	13	35
Permits within SFHA				
2024				
Total Permits	16	2	8	26
Permits within SFHA	-	-	-	-
2025				
Total Permits	30	0	4	34
Permits within SFHA	-	-	-	-

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

Table 14-16. Recent Major Development and Infrastructure from 2020 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
Swan Manor	-	11	-	None	Complete
Green Hills 2	-	17	-	None	Complete
Green Hills 3	-	34	-	None	Under Construction

Table 14-17. 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
Devany Estates	-	68	-	-	Approved by Planning Board

14.5 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 Table 14-1 is responsible for maintaining this information.

14.5.1 NFIP Statistics

Table 14-18 summarizes the NFIP policy and claim statistics for the Town of Liberty.

Table 14-18. Liberty NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360823B
# Policies	24
# Claims (Losses)	4
Total Loss Payments	$24,787.39
# Repetitive Loss Properties	2
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

14.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 14-19.

Table 14-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Roads near Little Beaver Kill, Brisco Lake and its tributaries, Swan Lake and its tributaries, and Middle Mongaup River are prone to flooding.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Al Fusco, Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer of the Town of Liberty is hereby appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #2 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 31, 2010

NFIP Topic	Comments
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	August 17, 2015
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	No
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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, they consider flood risk and height restrictions

14.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Liberty 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 Liberty to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

14.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 14-20 and Table 14-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 14-20. Regulatory Capabilities in Liberty

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	No person, firm or corporation shall commence the erection, construction, enlargement, alteration, improvement, conversion or change in the nature of the occupancy of any building or structure, or cause the same to be done, without first obtaining a separate building permit from the Code Enforcement Officer for each such building or structure.	Chapter 60, 2007	Code Enforcement Officer
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #2 of 2010	Code Enforcement Officer
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Site Plan Code	Yes	Site plan review by the Planning Board is also required for all special uses and such other uses as specified in the Supplementary Regulations. The Planning Board, approving the establishment of special uses and/or site plans, shall first determine compliance with the standards and criteria set forth below and elsewhere within this chapter. No building permit will be issued for any structure covered by this article until an approved site plan or approved amendment of any such plan has been secured by the applicant and presented to the Code Enforcement Officer. No certificate of occupancy will be issued for any structure or use of land covered by this article unless the structure is completed or the land developed or used in accordance with an approved site plan or approved amendment of any such plan.	Chapter 147, Article VIII, 2018	Planning Board and Code Enforcement
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the purpose of providing for the future growth and development of the Town and affording adequate facilities for the housing, transportation, distribution, comfort, convenience, safety, health and welfare of its population.	Chapter 130, 1997	Planning Board and Code Enforcement
Wellhead Protection	Yes	Located in Article IV (District Regulations) of the Zoning Code. The purpose of the Public Wellhead Protection Overlay District is to minimize the potential for harmful or unwanted contaminants to enter the municipal water supply at wellheads within the Town from nearby activities.	Chapter 147-8.1, 1987	Planning Board and Code Enforcement
Zoning/Land Use Code	Yes	This chapter is intended to implement the recommendations and fulfill the goals and objectives of the Town of Liberty Comprehensive Plan, as amended. Specific purposes of this chapter include those contained in § 263 of the Town Law.	Chapter 147, 1987	Planning Board and Code Enforcement

Planning Capabilities

Table 14-21. Planning Capabilities in Liberty

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	The Plan documents changes in farming over time and offers information about the	Agriculture and Farmland	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		economic and development pressures facing area farmers. A buildout analysis was done to illustrate the potential non-farm development capacity and building levels were analyzed to determine the conversion pressures on farmland. The Plan outlines issues facing farms including the milk price crisis, low profitability, and high production costs.	Protection Plan, 2009	
Business / Downtown Revitalization / Development Plan	Yes	The RESTORE NY V Project in the Town of Liberty - Parksville Hamlet aims to revitalize the hamlet by rehabilitating vacant buildings and creating new businesses. The project involves the renovation of a vacant building to be developed into a multi-use building, with a total project cost expected to be approximately $190,800. The Town of Liberty is set to receive a $157,000 grant to assist in the financing of the project, with the remainder to be contributed by other sources. The project is part of the Empire State Development Corporation's Restore NY initiative, which supports community revitalization efforts across New York State.	Town of Liberty – Parksville Hamlet Revitalization, 2020	Empire State Development Corporation
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	This plan continues to look to the future vision for the town that was established in the 2008 plan and provides refinement to the future land use plan and zoning recommendations. Where the recommendations differ in this update from the 2008 plan, then this updated plan shall take precedence	Joint Comprehensive Plan, 2025	Comprehensive Plan Committee
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Identifies various programs and projects to implement and/or complete.	Town of Liberty Capital Improvement Plan/Budget	Town Administration
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and	Comprehensive Emergency Management Plan, 2007	Sullivan County

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.		
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	Yes	The Town of Liberty and the Village of Liberty collaborated to prepare this planning study of public infrastructure serving existing developed portions of both municipalities as well as in anticipation of demands placed on these systems as a result of economic development activities and other investments in their communities. This study is focused on an identified Study Area that comprises most of the Village and extending north along Parksville Road and south to Loomis-Ferndale Road.	Economic Development Infrastructure Capacity Planning Study, June 2024	Town Administration
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	Yes	The Water Management Plan consists of a structured program to identify hazardous conditions, minimize waterborne pathogens, and improve water efficiency. Annual water quality reports are released as a part of this program.	Liberty Water Management Plan	Highway Department
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	Located within the Liberty Joint Comprehensive Plan, 2008	Liberty Joint Comprehensive Plan, 2008	Comprehensive Plan Committee
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Community Health Improvement Plan	Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	Yes	The Town of Liberty's water management plan is focused on ensuring safe, reliable, and cost-effective water services. The plan includes investments in infrastructure improvements, such as the replacement of water mains, service connections, meters, and fire hydrants. Liberty has also invested in new treatment facilities to improve water quality and ensure compliance with new and emerging water quality standards.	Liberty Water Management Plan	Highway Department
Other	No	-	-	-

14.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 14-22 details the available administrative and technical capabilities of the Town.

Table 14-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Delaware Engineering
Construction/Building/Code Enforcement Department	Yes	The Building Department reviews and approves Building Permits for various types of construction, including but not limited to: houses, mobile homes, businesses, and signs/billboards.

Capability Type	In Place in Municipality? Yes or No	Comments
Economic Development Commission/Committee	Yes	Through ED
Emergency Management/Public Safety Department	Yes	FD, Village Police, County Sheriff
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Contracted as needed
Maintenance Programs to Reduce Risk	Yes	Parks Rec, Highway, Water/sewer, working on building maintenance
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Town of Liberty Emergency Services and Highway Department
Open Space Board/Committee	Yes	Parks and Recreation Department
Personnel skilled or trained in website development	Yes	Maintain town website, Nick
Planning Board	Yes	The Planning Board is responsible for reviewing site plan applications for residential and commercial developments and subdivision applications. The Planning Board is assisted in its work by several consultants
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	County, engineering, Town is familiar but does not have the staffing
Planner or Engineer with knowledge of land development and land management practices	Yes	Delaware engineering, friends of the Delaware river
Planners or engineers with an understanding of natural hazards	Yes	DPW Engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building Department
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	Highway Department
Resilience Officer	No	Working on it through climate smart
Staff with expertise/training in benefit/cost analysis	Yes	finance
Surveyor(s)	Yes	Fusco

Capability Type	In Place in Municipality? Yes or No	Comments
Zoning Board of Appeals	Yes	The Zoning Board of Appeals is responsible for approval of interpretation of the Zoning Law and hears applications for variances. The Board acts in a quasi-judicial capacity. It will give notice and hear evidence of the need for a variance. The law fixes certain criteria that the board must consider before it can grant a variance.
Other	Yes	Water and Waste Water Department

14.6.3 Fiscal Capability

Table 14-23 summarizes financial resources available to Liberty.

Table 14-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
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	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Yes
Other State funding programs	Yes – DEC, SFS, ESD, EFS, NYS Parks,
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Sullivan 180

14.6.4 Education and Outreach Capability

Table 14-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 14-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	In school
Hazard mitigation information available on your website	No
Local News	Yes, radio stations
Natural disaster/safety programs in place for schools	Yes
Organizations that conduct outreach to at risk populations and underserved populations	Mostly through county and NPs.
Public information officer or communications office	No
Social media for hazard mitigation education and outreach	FB, email networks
Warning systems for hazard events	No

14.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 14-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 14-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	Moderate

14.7 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.

14.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Liberty-1—Liberty (T) - Upsize Culvert on Aden Road	
Hazards Addressed	Flood, Hurricane
Lead Agency / Department	Liberty Town Supervisor
Supporting Agency / Department	-
Action Location	Aden Road
Summary of Original Problem	During severe storms, Aden Road experiences significant flooding impacts from an undersized culvert.
Summary of Solution (Project)	Reduce long-term risk from flooding issues on Aden Road, by upsizing the Aden Road culvert to increase capacity based on engineering studies for site-specific conditions.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Liberty-2— Liberty (T) - Upsize Culvert on Airport Rd	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Liberty Town Supervisor
Supporting Agency / Department	-
Action Location	Airport Rd
Summary of Original Problem	During severe storms, the Airport Road area experiences significant flooding impacts due to an undersized culvert, affecting local citizens and emergency response operations.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing the existing culvert on Airport Road to increase capacity.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project complete

T. Liberty-3— Liberty - Update Liberty Town/Village Joint Comprehensive Plan	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Town of Liberty
Supporting Agency / Department	Sullivan County Division of Planning
Action Location	-
Summary of Original Problem	Given the recent increase in seasonal community development and lack of adequate planning mechanisms to better manage growth (e.g., zoning codes, subdivision ordinances), the Town of Liberty needs to update its Comprehensive Plan, in coordination with other planning entities and surrounding communities.
Summary of Solution (Project)	Reduce long-term risks of all hazards for existing assets and future development, in coordination with the County Planning Dept and the Village of Liberty, by updating the Joint Comprehensive Plan, highlighting hazard mitigation aspects of open space flood control measures, zoning in flood-prone areas, and integrating other planning, zoning, subdivision regulations, and overlay zones that support hazard mitigation measures.
Action Category	Planning/Regulatory
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Project complete

14.7.2 Additional Mitigation Efforts

The Town of Liberty did not identify any additional mitigation efforts completed since the last HMP.

14.7.3 Identified Issues

The Town of Liberty has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall and Senior Center, do not have back up power to support the entire facilities, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- The Swan Lake Dam, a recreation dam on Swan Lake Road and Briscoe Road, has some known compromised areas, though the exact problems are not identified in a study or inspection. Although this is an intermediate hazard dam, deterioration can lead to environmental and ecological disruptions, interruptions at Swan Lake recreational areas, as well as infrastructure issues with nearby roadways.
- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near Little Beaver Kill, Brisco Lake and its tributaries, Swan Lake and its tributaries, and Middle Mongaup River are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.
  - Cooley Road
  - Dahlia Road
  - Lenape Lake Road
  - Benton Hollow Road
  - Briscoe Road
  - Murphy Road
  - Shore Road
  - Route 55
  - Aiden Road
  - Muhlig Road
- The Town has an established tree trimming program in place; however, there is a multitude of dead ash trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.

14.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Liberty participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Liberty 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.

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 14-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-LibertyT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-LibertyT-02. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Senior Center Facility Manager	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall and Senior Center, do not have back up power to support the entire facilities, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-LibertyT-03. Swan Lake Dam Study

Lead Agency:	Swan Lake Commons, LLC	
Supporting Agencies:	Town Board, NYS DEC, Engineering	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Swan Lake Dam, a recreation dam on Swan Lake Road and Briscoe Road, has some known compromised areas, though the exact problems are not identified in a study or inspection. Although this is an intermediate hazard dam, deterioration can lead to environmental and ecological disruptions, interruptions at Swan Lake recreational areas, as well as infrastructure issues with nearby roadways.	
Description of the Solution:	The Town will initiate contact with the dam owners (Swan Lake Commons, LLC) to inquire about the status of the dam, including its current structural integrity. Although the owners are ultimately responsible for the dam, the Town will work with the owners and engineers to conduct an inspection or study on the dam's integrity. The dam owners, engineers, and the Town will consult with NYS DEC as necessary.	
Estimated Cost:	TBD depending on mitigation measure(s) selected	
Potential Funding Sources:	Town Budget, NYS DEC, Swan Lake Commons, LLC	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission dam without a study performed	High cost, flood risk for nearby infrastructure and the environment increased
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-LibertyT-04. Floodprone Roads

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Roads near Little Beaver Kill, Brisco Lake and its tributaries, Swan Lake and its tributaries, and Middle Mongaup River are prone to flooding. The roads listed below may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding. • Cooley Road • Dahlia Road • Lenape Lake Road • Benton Hollow Road • Briscoe Road • Murphy Road • Shore Road • Route 55 • Aiden Road • Muhlig Road	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	Action: No action	Evaluation: Current problem persists

	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-LibertyT-05. Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has an established tree trimming program in place; however, there is a multitude of dead ash trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.	
Description of the Solution:	The Town will work with a forester to assess trees on Town-owned properties; the Town will provide contact information for the tree assessors to property owners and utility companies. The Town will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Town.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Table 14-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-LibertyT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-LibertyT-02	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-LibertyT-03	Swan Lake Dam Study	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-LibertyT-04	Floodprone Roads	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-LibertyT-05	Tree Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

15. VILLAGE OF LIBERTY

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Liberty 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 Liberty, describes who participated in the planning process, assesses Liberty's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

15.1 HAZARD MITIGATION PLANNING TEAM

The Village of Liberty identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 15-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village'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: Joan Stoddard, Village Mayor Address:167 N Main Street, Liberty, NY 12754 Phone Number: (845) 292-2250 Email: jstoddard@outlook.com	Name/Title: Dave Burke, Director of Public Works Address: 26 Elm St, Liberty, NY 12754 Phone Number: (845) 292-2250, ext. 116 Email: dburke@libertyvillageny.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Marisol Torrens, Code Enforcement Officer Address: 167 N Main Street, Liberty, NY 12754 Phone Number: (845) 292-2250 ext. 117 Email: mtorrens@libertyvillageny.org	

15.2 COMMUNITY PROFILE

15.2.1 Community Classifications

Table 15-2 summarizes classifications for community programs available to Liberty.

Table 15-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

15.2.2 Community Profile

Geographical Description

Incorporated in 1870, the Village of Liberty is centrally located in the Town of Liberty and is adjacent to New York Route 17 just off exit 100 and only 90 minutes from New York City (Village of Liberty 2025).

Government Type and Description

The Village is governed by a Village Board of Trustees, consisting of a Mayor and four trustees.

Table 15-3 through Table 15-6 note land area, population, and building stock information for the Village of Liberty.

Table 15-3. Total Land Area in the Village of Liberty

Jurisdiction	Total Land Area	
	Acres	Square Miles
Liberty (V)	1,653.6	2.6

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 15-4. Population Estimates in the Village of Liberty

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
4,700	6.0%	5,083	6.4%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 15-5. At Risk Populations in the Village of Liberty

At Risk - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
689	13.6%	528	10.4%	314	6.2%	967	19.0%	880	17.3%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 15-6. General Building Stock in the Village of Liberty

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,540	$2,185,506,732	1,215	$812,841,146	224	$805,139,324	28	$200,260,395	73	$367,265,867

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

15.3 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 Liberty's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

15.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Liberty are shown in Figure 15-1 and Figure 15-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Liberty has significant exposure.

Figure 15-1. Liberty Flood, Wildfire and Dam Inundation Area Map

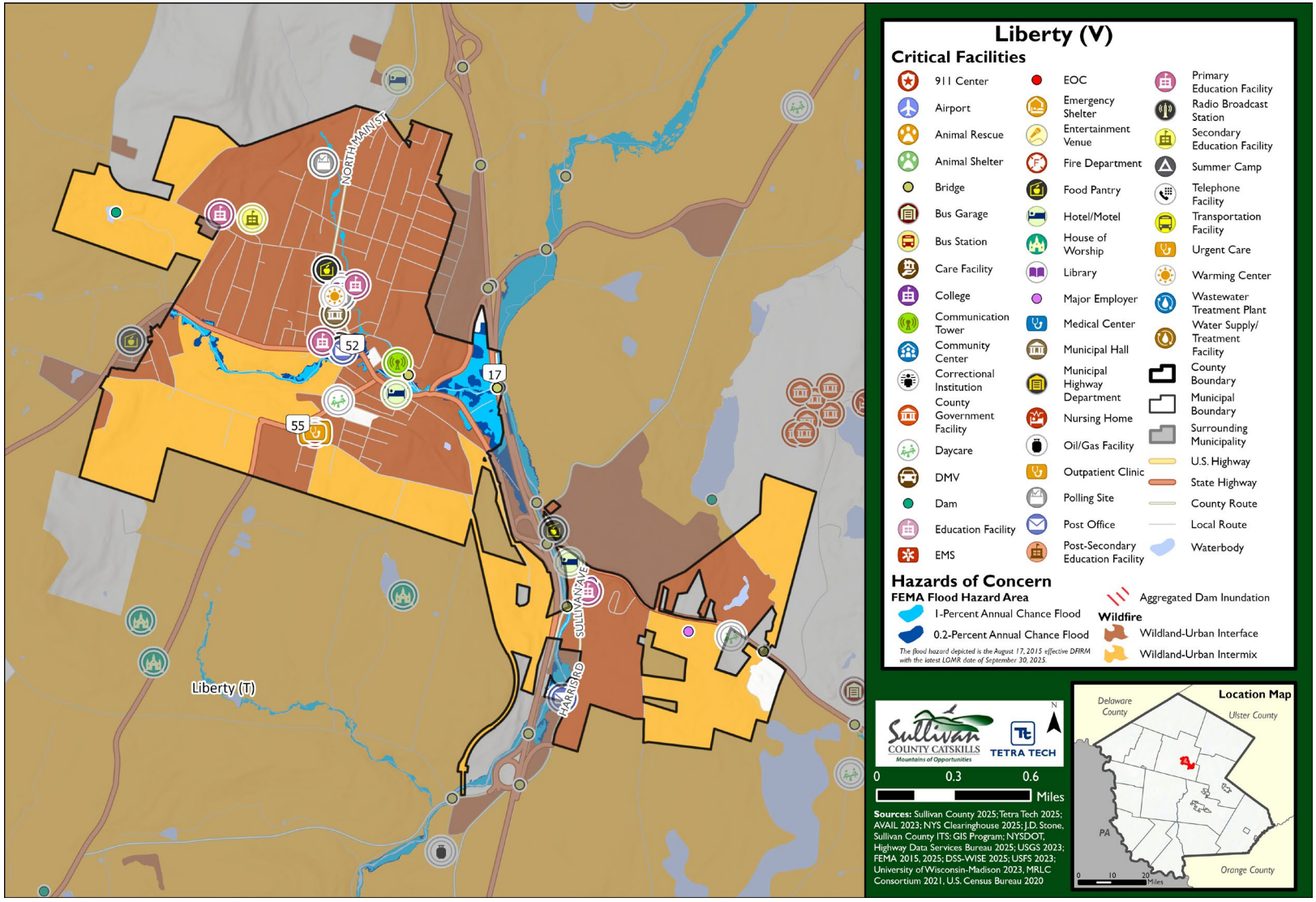
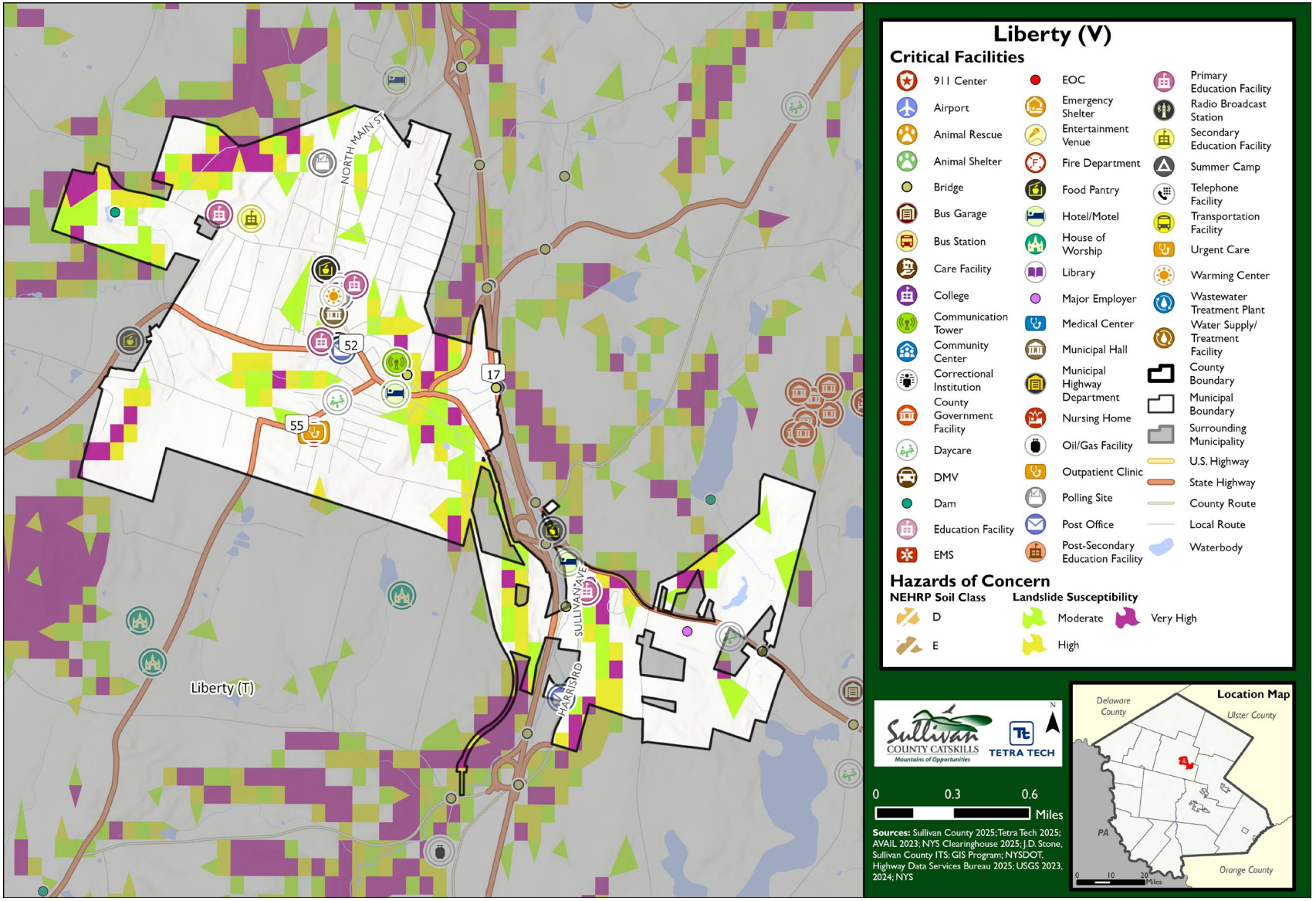


Figure 15-2. Liberty NEHRP Soil and Landslide Area Map



15.3.2 Previous Event History

The history of natural and non-natural hazard events in Liberty is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 15-7 and Table 15-8 provide details on the loss and damage in Liberty during hazard events since the last hazard mitigation plan update.

Table 15-7. Presidential Disaster Declarations History in Liberty

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Liberty
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Abided by social distancing and masking mandates
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Highlighted the Village stormwater system is lacking.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Highlighted the Village stormwater system is lacking.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 15-8. Hazard Event History in Liberty

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Liberty
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Village did not incur any documented damage or losses
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Village did not incur any documented damage or losses
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Village did not incur any documented damage or losses
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Village did not incur any documented damage or losses
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Village did not incur any documented damage or losses
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Village did not incur any documented damage or losses
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood	The Village did not incur any documented damage or losses

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Liberty
		stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Village did not incur any documented damage or losses
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Village did not incur any documented damage or losses

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

15.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations, and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 15-9 includes an inventory of critical facilities and infrastructure for the Village of Liberty.

Table 15-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Three bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Village were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

15.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Liberty Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 15-10.

Table 15-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Village infrequently has beaver concerns or issues.
Drought	Private wells prohibited in the Village. Municipal water system – very old. Village has started to replace some of the mains through grants.

Hazard Name	Local Impacts: People, Community Services, Local Economy
	Elm Street well is contaminated and Village has been working to resolve issue since 1993. No MTB hit since 1998, well is used in limited capacity. DOH gave permission to run a test to ensure no other contaminates come up. Backup water supply is Lily Pond Water Infiltration Plant – Near catastrophic event where the draft line failed and Village had to get pumps from County until they came up with temp solution. Reduced length to remove failure point. Is just an open pipe and could be impacted at any time. Village has not run into drought events. Village well is drought resistant for the most part. Sometimes Village is close to instituting shortage measures if the Lake is low but has not occurred recently.
Earthquake	Draft line at Lily pond failed about 20 minutes after an earthquake measured at Stanford New York.
Flood	Village met with DEC to update their flood maps (Feb 2026). Floodplain Development application of building permits – to be added to codes. Middle Mongaup River, tributary to Middle Mongaup (Middle Mongaup Creek) is a contention for flooding and both contribute to water infrastructure issues (well almost flooded).
Landslide	No known impacts
Pandemic	No known impacts
Severe Storm	Village lost power to well and was fixed within hours. Power is typically restored within hours. Village has a lot of older trees which impact roadways and power.
Severe Winter Storm	DPW does not have the manpower needed so they are not able to move efficiently as they would like. State and County entities are good at clearing roadways.
Wildfire	Typically smaller brush fires, no great impacts. Fire Department is well equipped.

15.3.5 Vulnerable Community Assets

Representatives from the Village of Liberty Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 15-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 15-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not applicable	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	Valley View apartment complex suffers from poor maintenance and flooded basements.	**Local Roads, Highways, Culverts, Bridges**	Wierk Avenue culvert (threat of collapse) North Main Street (behind muni office) a portion of the culvert has collapsed. North Main Street @ Liberty Street culvert drainage issue. Water main is here and in harms way. Culvert underneath Edgar Street that is clogged and needs repair.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
			South Main Street culvert by Church Street needs to be repaired. End of Church Street and over First Street that needs upsize. School Street culvert needs upsize.
Municipal Buildings	Village offices have limited backup power. Main DPW facility has no backup power. Elm Street Well does not have backup power Sewer Plant does have back up power and a portable generator to run various pump stations as needed. Water Department Facility does not have backup power.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	Methodist Church is used as a heating station but does not have a generator for power outage. County uses this as a place to send people as well.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Not applicable	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	DPW garage is a spill site and is undersized. Oil Plume is underneath and is adjacent to the well field. Village owns land to relocate. But costly. Leaks and insulation issues to the garage.
Cultural/Historic Buildings/Sites	Not applicable	**Schools (K-12)**	Three different campus – all have generators. Elementary complex just rebuild part of their stormwater system.
Elder-care Facilities	Adult Center on Lake Street. They have a backup generator.	**Utilities**	No known impacts
Fire/Police Stations	Fire Department has backup power.	**Wastewater Treatment Plants**	At lowest point in Village – when Middle Mogup is high – they are most subject to flooding. See previous action for more I&I information.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See above in Drought
Hospitals	Not applicable	**Other**	BES Program – wanted to put wet chemical storage facility in water well field.

15.3.6 Dams

Table 15-12 includes all dams in the Village of Liberty. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 15-12. Dams Located in Liberty

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
None Identified						

Notable comments regarding dams in the jurisdiction:

Village owns a dam at the Darby Lake facility. It is a former drinking water reservoir and is an earthen dam. There are a lot of trees that are growing here. Assessment may be needed here. Lily Pond was assessed. Revonah Lake Reservoir dam – Village drinking water dam. If it were to fail, it would drain through the Village. Man made pond where South Main Street and Upper Ferndale road meet. Homeowner constructed and is a very large pond.

15.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 15-13 identifies the preliminary hazard ranking for Liberty, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 15-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

15.4 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 15-14 through Table 15-17.

15.4.1 Development and Permitting

Table 15-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Village issues permitting
What is your process for tracking building permits?	Computer System
Are permits tracked by hazard area? (For example, floodplain development permits.)	No, will be looking to formally add this tracking
Does your community have a buildable land inventory? If yes, please describe.	Yes, Village is 95% built out

Table 15-15. 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
2020				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2021				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2022				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2023				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2024				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2025				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

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

Table 15-16. Recent Major Development and Infrastructure from 2020 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
None Identified					

Table 15-17. 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
Timber Wolf Road Development	Residential	4 Buildings with 4 Units each	Timber Wolf Road	-	Under Review

15.5 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 Table 15-1 is responsible for maintaining this information.

15.5.1 NFIP Statistics

Table 15-18 summarizes the NFIP policy and claim statistics for the Village of Liberty.

Table 15-18. Liberty NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360824#
# Policies	19
# Claims (Losses)	-
Total Loss Payments	-
# Repetitive Loss Properties	-
# Severe Repetitive Loss Properties	-

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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

- = Data is Not Available

Source: FEMA 2025

15.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 15-19.

Table 15-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Middle Mongaup River, tributary to Middle Mongaup (Middle Mongaup Creek) is a contention for flooding and both contribute to water infrastructure issues (well almost flooded).
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Marisol Torrens, Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #4 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 29, 2010

NFIP Topic	Comments
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	This will be included in the form that will be added to the building code (Floodplain Development Application)
What are the barriers to running an effective NFIP program in your community, if any?	Limited funding, staffing and time
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Not yet, but addition of Floodplain Permit to come in 2026
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Interested property owners express interest to Banks and Real Estate Disclosure
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	Yes, updates will be made after the implementation of the Floodplain Building permit
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?	Site plan review

15.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Liberty 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 Liberty to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

15.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 15-20 and Table 15-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 15-20. Regulatory Capabilities in Liberty

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	No person, firm or corporation shall commence the erection, construction, enlargement, alteration, improvement, conversion or change in the nature of the occupancy of any building or structure, or cause the same to be done, without first obtaining a separate building permit from the Code Enforcement Officer for each such building or structure.	Chapter 14, 2007	Planning Board and Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #4 of 2010	Code Enforcement Officer
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Site Plan Code	Yes	The Village of Liberty Planning Board is authorized, in accordance with §§ 7-725-a and 7-725-b of the New York State Village Law, to review and approve, approve with modifications or disapprove special uses and site plans. Site plan review shall be required for all special use permits and such other uses as are designated herein and the Village Board may from time to time be designated by local law or that the Code Enforcement Officer refers to the Planning Board.	Chapter 87, Article VII, 2008	Planning Board and Code Enforcement
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	When considering subdivisions of land, the Planning Board shall be guided by the following procedures, regulations and design standards. Their intent is to encourage land development which will best protect and promote general welfare.	Chapter 95, 1991	Planning Board and Code Enforcement
Wellhead Protection	Yes	The creation of new private wells or water supplies within the incorporated Village of Liberty is banned, effective immediately.	Chapter 84, Article II, 1995	Village Administration
Zoning/Land Use Code	Yes	It is the legislative intent of this chapter to provide for the orderly and desirable development and use of land within the Village of Liberty. This chapter incorporates the Liberty Joint Comprehensive Plan and is expected to evolve over time to meet other changing needs. Regular reviews and updates are anticipated.	Chapter 87, 2008	Planning Board and Code Enforcement

Planning Capabilities

Table 15-21. Planning Capabilities in Liberty

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	This plan continues to look to the future vision for the town and village that was established in the 2008 plan and provides refinement to the future	Joint Comprehensive Plan, 2025	Village Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		land use plan and zoning recommendations. Where the recommendations differ in this update from the 2008 plan, then this updated plan shall take precedence		
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Updated annually as budget	Village of Liberty Capital Improvement Plan/Budget	Village Administration
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2007	Sullivan County
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	Element of Comprehensive Plan	Joint Comprehensive Plan, 2025	Village Administration
Post-Disaster Recovery Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	Yes	Element of Comprehensive Plan	Joint Comprehensive Plan, 2025	Village Administration
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

15.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 15-22 details the available administrative and technical capabilities of the Village.

Table 15-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	Building Department
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Police Department
Environmental Commission/Specialist	Yes	Contracted
Grant Writer	Yes	Contracted
Maintenance Programs to Reduce Risk	No	-
Mitigation Planning Committee	No	-
Mutual Aid Agreements	No	-
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	No	-
Planning Board	Yes	The planning board exists to guide and regulate the orderly growth and development of a community, ensuring public safety, welfare, and responsible land use.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	Public Works

Capability Type	In Place in Municipality? Yes or No	Comments
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other	Yes	Sewer Department

15.6.3 Fiscal Capability

Table 15-23 summarizes financial resources available to Liberty.

Table 15-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes, currently have three projects
Capital improvement project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

15.6.4 Education and Outreach Capability

Table 15-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 15-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, updated regularly
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department Fire Safety Training
Hazard mitigation information available on your website	Yes, has done it for water main breaks
Local News	No
Natural disaster/safety programs in place for schools	Yes, Fire Drills, Early Dismissal
Organizations that conduct outreach to at risk populations and underserved populations	Yes, County
Public information officer or communications office	Yes, Village Administration
Social media for hazard mitigation education and outreach	Yes, Facebook
Warning systems for hazard events	Yes, Villager Alert Outreach

15.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 15-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 15-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate

Hazard	Strong, Moderate, Weak, None, N/A
Severe Winter Storm	Weak
Wildfire	Moderate

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

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Liberty-1—Liberty (V) - 2020 Village of Liberty High Risk Culvert Collapse and Sanitary Sewer Failure Mitigation Project	
Hazards Addressed	Flooding, Earthquake, Coldwave
Lead Agency / Department	Mayor
Supporting Agency / Department	Town of Liberty
Action Location	-
Summary of Original Problem	Stone laid culverts north of West Lake Street under the old railway are failing will cause catastrophic issues with water and sewer supply. A small, unnamed, class C stream runs under the Rail Trail, and is conveyed by an existing laid-up stone culvert. The existing culvert is approximately 44" wide by 48" high. A cast-iron sanitary sewer line runs through the existing culvert. The sanitary sewer line is above grade and is exposed to the stream flowing through the culvert. This sanitary sewer line transmits flow from approximately 20% of the Village's sanitary collection system.
Summary of Solution (Project)	Reduce long-term risk or flooding, earthquakes, and coldwaves for existing assets and future development by replacing the original stone culverts and protect/upgrade sewer line to prevent rupture. At this time, a hydraulic analysis has already been completed, however, the engineering aspects have not been completed.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Completed

T. Liberty-2—Liberty (V) - Gas Pumps no backup generation	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Village Administration
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	Identified gas pumps do not have backup power generation, which is critical for continuation of services during power outages (especially colder months).
Summary of Solution (Project)	Reduce long-term risk of all hazards and residents need to evacuate, by acquiring and installing a backup power generator for gas pumps.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Issue has progressed to bringing pumps up to current standards which includes a generation source. Muni pump
If discontinue, explain why	Not applicable

T. Liberty-3—Liberty (V) - Rt 52, South Main Culvert	
Hazards Addressed	Flood
Lead Agency / Department	Liberty Village Supervisor
Supporting Agency / Department	DPW
Action Location	Route 52
Summary of Original Problem	On Route 52, the South Main Street and Church culverts are in need of upsizing as a result of the collapsing underground stream infrastructure located in the Village.
Summary of Solution (Project)	Reduce long-term risk for flooding for existing assets and future development by upsizing the culvert on Route 52 and South Main, including debris removal.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Joint project because it runs under the state road. Ultimate repair needs to be done under Route 52.
If discontinue, explain why	Not applicable

T. Liberty-4—Liberty (V) - Hydrological Study/Daylighting	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Village Mayor,
Supporting Agency / Department	Sullivan County Planning, Sullivan County Soil and Water
Action Location	
Summary of Original Problem	The Liberty Village Creek area experiences severe flooding during severe storms due to aging culverts
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by conducting a hydrological study of the tributary to the Middle Mongaup River that runs through Liberty Village, specifically to assess culvert sizing and specifications for daylighting.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Issue of I&I and sewer main runs through this Brook and then the sewer plant becomes inundated. Culverts need to be upgraded as well, some are in a collapsed state. Middle Mongaup River basin is so undersized, there have been near flooding incidents by the well which would greatly impact drinking water.
If discontinue, explain why	Not applicable

T. Liberty-5—Liberty - Update Liberty Town/Village Joint Comprehensive Plan	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Town of Liberty
Supporting Agency / Department	Sullivan County Division of Planning
Action Location	-
Summary of Original Problem	Given the recent increase in seasonal community development and lack of adequate planning mechanisms to better manage growth (e.g., zoning codes, subdivision ordinances), the Town of Liberty needs to update its Comprehensive Plan, in coordination with other planning entities and surrounding communities.
Summary of Solution (Project)	Reduce long-term risks of all hazards for existing assets and future development, in coordination with the County Planning Dept and the Village of Liberty, by updating the Joint Comprehensive Plan, highlighting hazard mitigation aspects of open space flood control measures, zoning in flood-prone areas, and integrating other planning, zoning, subdivision regulations, and overlay zones that support hazard mitigation measures.
Action Category	Planning/Regulatory
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Completed

15.7.2 Additional Mitigation Efforts

The Village of Liberty did not identify any additional mitigation efforts completed since the last HMP.

15.7.3 Identified Issues

The Village of Liberty has identified the following vulnerabilities within their community for mitigation strategy development:

- The Village has noted concerns regarding water system infrastructure, primarily the water mains throughout the jurisdiction. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.
- Elm Street well is contaminated, and Village has been working to resolve issue. Pollutants can trickle into wells during and following severe storms, from flooding, and from snowmelt following severe winter storms.
- The availability of safe drinking water is crucial to the longevity of the Village; annually, there are water supply safety issues due to old and corroded pipes and well problems. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.

- Flood risk in the Village is primarily along the Middle Mongaup River, stemming from heavy rains, snowmelt, or ice jams. Flood waters from the river has contributed to water infrastructure issues including:
  - Flooded potable water wells
  - Inflow and infiltration problems at the sewer plant
  - Flooding of commercial properties bordering the river
- The Village has an established tree trimming program in place; however, there is a multitude of older trees across the Village. It is unknown the safety of trees throughout the Village located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. There are several culverts in the Village which are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters, including:
  - Wierk Avenue
  - North Main Street
  - Liberty Street
  - Edgar Street
  - South Main Street
  - Church Street
  - First Street
- Critical facilities require backup power to ensure continuity of operations. The Village Offices, Public Works, Sewer Plant, Water Department, several water wells, Village gas pumps, and the Methodist Church (a cooling and warming center), do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- The Village owns three low hazard dams – the Lilly Pond Dam, Joseph Grieble Park Dam, and Revonah Lake Dam. The dams are primarily surrounded by wooded lands; however, they would have the potential to cause environmental and ecological disruptions, as well as infrastructure issues with nearby roadways.
- The Village does not track permits by hazard area. Tracking permits by hazard area allows the Village to identify structures which may have a heightened risk from potential hazards, such as flood, wildfire, and landslides. Recording this properties can assist in identifying properties which may be eligible for various mitigation-related funding opportunities to reduce hazard risk.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- There are numerous inflow and infiltration issues (I&I) causing the sewer plant to become inundated. Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread

human waste and disease and pollute drinking water sources. Mitigation measures must be implemented, as per NYS DEC mandates.

15.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Liberty participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Liberty 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 Village priorities.

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 15-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-LibertyV-01. Water System Upgrades

Lead Agency:	Water Department	
Supporting Agencies:	Village Board, Engineer	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has noted concerns regarding water system infrastructure, primarily the water mains throughout the jurisdiction. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.	
Description of the Solution:	The Village Engineer will work with the Water Department to review the noted concerns and identify the most cost effective and efficient solution to mitigate risks to the system infrastructure.	
Estimated Cost:	Medium	
Potential Funding Sources:	Village Budget, Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS) Grant Program, Water Pollution Control Grants Program, FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities. Access to municipal water systems enhances the quality of life for residents by providing a reliable source of water for drinking, cooking, and sanitation, which are essential for daily living. Moreover, these systems support recreational activities and contribute to the aesthetic value of communities through well-maintained water bodies and parks.	
Impact on At Risk Populations:	Implementing any necessary upgrades to the water system will assist in the prevention of waterborne diseases and ensures that the water supplied is free from harmful substances such as lead and bacteria.	
Impact on Future Development:	This action will ensure water systems in the Village are working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures the water systems in the Village, which are critical pieces of infrastructure and part of the water lifeline, are working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify concerns but do not implement preventative measures	Issues likely to reoccur
	Close pump stations and outsource drinking water	Costly, inefficient, could be a detriment to residents

Action 2026-LibertyV-02. Well Protection

Lead Agency:	Engineering	
Supporting Agencies:	Planning Board, Village Board, NYS DEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Elm Street well is contaminated, and Village has been working to resolve issue. Pollutants can trickle into wells during and following severe storms, from flooding, and from snowmelt following severe winter storms.	
Description of the Solution:	The Village will perform a study on the Elm Street well to determine the most effective method to clean the well and remove contaminants. Further, the Village will review and strengthen, where possible, its existing Wellhead Protection Ordinance with assistance from NYS DEC, where applicable.	
Estimated Cost:	Medium	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 4 years	
Goals Met:	2, 5	
Benefits:	The adoption of a wellhead protection ordinance assist in ensuring the Village, its residents, visitors, and businesses, have access to safe drinking water sources; reduces risk of environmental harm from spills or leaks which would otherwise infiltrate wells; and prevents contaminants from entering the water supply.	
Impact on At Risk Populations:	This action will take a proactive approach to safeguarding the area surrounding a water well or wellfield to prevent contamination of public water supplies.	
Impact on Future Development:	This action will ensure future developments which rely on well water has protections in place around the well area to reduce the risk of water contamination, which can assist in ensuring potable water in times of drought.	
Impact on Critical Facilities/Lifelines:	This action will take a proactive approach to safeguarding the area surrounding water wells or wellfield to prevent contamination of public water supplies.	
Impact on Capabilities:	This action will create a new regulatory capability for the Village.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Enact ordinance in rural areas of Village	Leaves the potential for contaminants to enter wells in unprotected locations
	Do not include limitations of land use surrounding wells	Potential for business or industries to use surrounding land and increase possible exposure

Action 2026-LibertyV-03. Safe Drinking Water

Lead Agency:	Village Board
Supporting Agencies:	Engineering
Hazards of Concern:	☐Dam Failure ☒Drought ☒Earthquake ☒Flood ☐Landslide ☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the Village; annually, there are water supply safety issues due to old and corroded pipes and well problems. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.
Description of the Solution:	The Village will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The Village may choose to reference suggested projects from the US EPA's "*Incident Action Checklists*". Potential projects may include: • Develop an emergency drinking water supply plan and establish contacts to discuss procedures. • Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first. • Monitor water supply and calculate how long water could be provided if the drought persists • Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures. • Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system. • Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies. • Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network. • Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer. • Coordinate with other neighboring water systems to develop a water use plan. • Identify generator needs at water facilities. • Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911. • Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system. • Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.
Estimated Cost:	Medium
Potential Funding Sources:	FEMA HMA, Village Budget
Implementation Timeline:	5 years
Goals Met:	2, 4, 5
Benefits:	This action will permit the Village to investigate various methods to provide safe drinking water to its residents.
Impact on At Risk Populations:	Safe and predicable water supplies are foundational to supporting at risk populations.
Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.
Impact on Capabilities:	This action will ensure the Village is able to maintain its supply of potable water.

Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)		☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)		☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium	☐Low
Alternative	**Action**		**Evaluation**
	No action		Current problem persists
	Rely on State to resolve problem		State does not have jurisdiction
	Rely on County to resolve problem		County does not have jurisdiction

Action 2026-LibertyV-04. Middle Mongaup River Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Village is primarily along the Middle Mongaup River, stemming from heavy rains, snowmelt, or ice jams. Flood waters from the river has contributed to water infrastructure issues including: • Flooded potable water wells • Inflow and infiltration problems at the sewer plant • Flooding of commercial properties bordering the river	
Description of the Solution:	The Village Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Middle Mongaup River system. The Village may also choose to investigate acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Village Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-LibertyV-05. Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has an established tree trimming program in place; however, there is a multitude of older trees across the Village. It is unknown the safety of trees throughout the Village located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.	
Description of the Solution:	The Village will work with a forester to assess trees on Village -owned properties; the Village will provide contact information for the tree assessors to property owners and utility companies. The Village will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-LibertyV-06. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. There are several culverts in the Village which are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters, including: • Wierk Avenue • North Main Street • Liberty Street • Edgar Street • South Main Street • Church Street • First Street	
Description of the Solution:	In addition to the culverts at Wierk Avenue, North Main Street, Liberty Street, Edgar Street, South Main Street, Church Street, and First Street, the Village Engineer will complete an engineering survey of the culverts in Village that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Public Works Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed

	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-LibertyV-07. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Village Board, Public Works, Sewer Department, Water Department, Methodist Church	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Village Offices, Public Works, Sewer Plant, Water Department, several water wells, Village gas pumps, and the Methodist Church (a cooling and warming center), do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Village Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Village will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Village Budget, Utility Fees, Methodist Church	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-LibertyV-08. Dam Assessments

Lead Agency:	Engineering	
Supporting Agencies:	Village Board, NYS DEC	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village owns three low hazard dams – the Lilly Pond Dam, Joseph Grieble Park Dam, and Revonah Lake Dam. The dams are primarily surrounded by wooded lands; however, they would have the potential to cause environmental and ecological disruptions, as well as infrastructure issues with nearby roadways.	
Description of the Solution:	The Village will conduct assessments and inspections to determine the current structural integrity of each dam. The Village Engineers and Board will consult with NYS DEC as necessary.	
Estimated Cost:	TBD depending on mitigation measure(s) selected	
Potential Funding Sources:	Village Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☐High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission dam without a study performed	High cost, flood risk for nearby infrastructure and the environment increased
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-LibertyV-09. Permit Tracking

Lead Agency:	Code Enforcement	
Supporting Agencies:	Planning and Zoning Boards, Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	The Village does not track permits by hazard area. Tracking permits by hazard area allows the Village to identify structures which may have a heightened risk from potential hazards, such as flood, wildfire, and landslides. Recording this properties can assist in identifying properties which may be eligible for various mitigation-related funding opportunities to reduce hazard risk.	
Description of the Solution:	The Village will implement a permit tracking process, focused on the Special Flood Hazard Area, but inclusive of other hazard areas such as steep slopes and near forested or woodland areas. Code Enforcement will be responsible for permit review..	
Estimated Cost:	Staff time, Low	
Potential Funding Sources:	Municipal Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	2, 4, 5	
Benefits:	This action will allow all permits issued within the Village to be tracked by hazard area.	
Impact on At Risk Populations:	This action may reduce the impacts of hazards to at risk populations by restricting the construction of structures which would have otherwise been utilized by these populations.	
Impact on Future Development:	This action may lead to permits being restricted within various identified hazard areas in the Village and municipal codes to be updated.	
Impact on Critical Facilities/Lifelines:	This action will restrict the construction of structures in hazard areas which reduces the risk to first responders, as they will not have to enter hazardous areas to assist the general population.	
Impact on Capabilities:	This action will enhance the NFIP capabilities in the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Track only flood development permits	Will align with NFIP requirements, but will not consider other hazard areas in the Village
	Contract with a neighboring municipality to track permits	May not be feasible

Action 2026-LibertyV-10. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Village will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-LibertyV-11. Sewer Plant I&I Mitigation

Lead Agency:	Sewer Department	
Supporting Agencies:	Village Board, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	There are numerous inflow and infiltration issues (I&I) causing the sewer plant to become inundated. Inflow and infiltration occurs when stormwater enters sewer pipes through cracks, leaky seals, or faulty connections, while infiltration refers to groundwater seeping into sewer pipes through cracks, holes, or deteriorated connections. Both types of I&I can lead to sanitary sewer overflows (SSOs), which can spread human waste and disease and pollute drinking water sources. Mitigation measures must be implemented, as per NYS DEC mandates.	
Description of the Solution:	The Sewer Department and Engineering will work to evaluate and identify measures to rectify all I&I issues. The Sewer Department will implement proactive maintenance and monitoring of service lateral sewer lines, cap cleanouts, and routine inspections and maintenance of private lateral lines to help prevent future overflow of untreated wastewater into the environment and reduce the pressure on wastewater treatment facilities.	
Estimated Cost:	High	
Potential Funding Sources:	Village Budget, Clean Water State Revolving Fund (CWSRF), FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Treatment plants are crucial for protecting public health, preserving ecosystems, and ensuring sustainable water use. By resolving issues at the sewerage plant, the Village can ensure the safety of those in and around the community.	
Impact on At Risk Populations:	Treatment plants remove harmful contaminants from wastewater. By effectively treating sewage, these plants ensure that the materials released back into the environment are safe and clear of harmful bacteria, thereby preventing the spread of diseases.	
Impact on Future Development:	This action will ensure the sewerage plant is working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures sewerage plant, a critical facility and part of the water lifeline, is working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☐High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify issues but do not implement preventative measures	Issues likely to reoccur
	Close plant and outsource treatment	Costly, inefficient

Table 15-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-LibertyV-01	Water System Upgrades	0	1	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2026-LibertyV-02	Well Protection	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2026-LibertyV-03	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High
2026-LibertyV-04	Middle Mongaup River Mitigation	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-LibertyV-05	Tree Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-LibertyV-06	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-LibertyV-07	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-LibertyV-08	Dam Assessments	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-LibertyV-09	Permit Tracking	0	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2026-LibertyV-10	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-LibertyV-11	Sewer Plant I&I Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

16. TOWN OF LUMBERLAND

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Lumberland 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 Lumberland, describes who participated in the planning process, assesses Lumberland's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

16.1 HAZARD MITIGATION PLANNING TEAM

The Town of Lumberland identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 16-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 16-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Suzanne Edzenga, Town Supervisor Address: 1054 Proctor Rd, Glen Spey, NY 12737-5532 Phone Number: (845) 856-8600, ext. 1227 Email: supervisor@townoflumberland.gov	Name/Title: Donald Hunt, Jr., Highway Superintendent Address: 1054 Proctor Rd, Glen Spey, NY 12737-5532 Phone Number: (845) 856-2300 Email: lumberlandhwy@frontiernet.net
National Flood Insurance Program Floodplain Administrator	
Name/Title: Charles Nystrom, Code Enforcement Officer Address: 1054 Proctor Rd, Glen Spey, NY 12737-5532 Phone Number: (845) 856-8600 ext.2 Email: codeclerk@townoflumberland.gov	

16.2 COMMUNITY PROFILE

16.2.1 Community Classifications

Table 16-2 summarizes classifications for community programs available to Lumberland.

Table 16-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	September 11, 2012

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

16.2.2 Community Profile

Geographical Description

The Town of Lumberland features a mix of river valleys, notably the Neversink River, and forested hills.

Government Type and Description

The Town is governed by a Town Board, led by the Town Supervisor (four-year term). The Supervisor is a full member of the board with no additional tie-breaking or veto power, and acts as Chief Fiscal Officer, having the care and custody of monies belonging to the town; disburses such monies, keeps an accurate and complete account of all monies; makes reports as required; pays fixed salaries and, after audit by the Town Board, and preparation of abstract by the Bookkeeper, pays other claims; and leases, sells and conveys properties of the town when so directed by the Town Board (Town of Lumberland 2025).

Table 16-3 through Table 16-6 note land area, population, and building stock information for the Town of Lumberland.

Table 16-3. Total Land Area in the Town of Lumberland

Jurisdiction	Total Land Area	
	Acres	Square Miles
Lumberland (T)	29,349.6	45.9

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 16-4. Population Estimates in the Town of Lumberland

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
2,243	2.9%	2,276	2.9%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 16-5. At Risk Populations in the Town of Lumberland

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
310	13.6%	128	5.6%	32	1.4%	173	7.6%	231	10.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 16-6. General Building Stock in the Town of Lumberland

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,796	$1,429,481,922	1,558	$728,364,825	206	$520,488,752	11	$90,935,070	21	$89,693,275

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

16.3 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 Lumberland's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

16.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Lumberland are shown in Figure 16-1 and Figure 16-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Lumberland has significant exposure.

Figure 16-1. Lumberland Flood, Wildfire and Dam Inundation Area Map

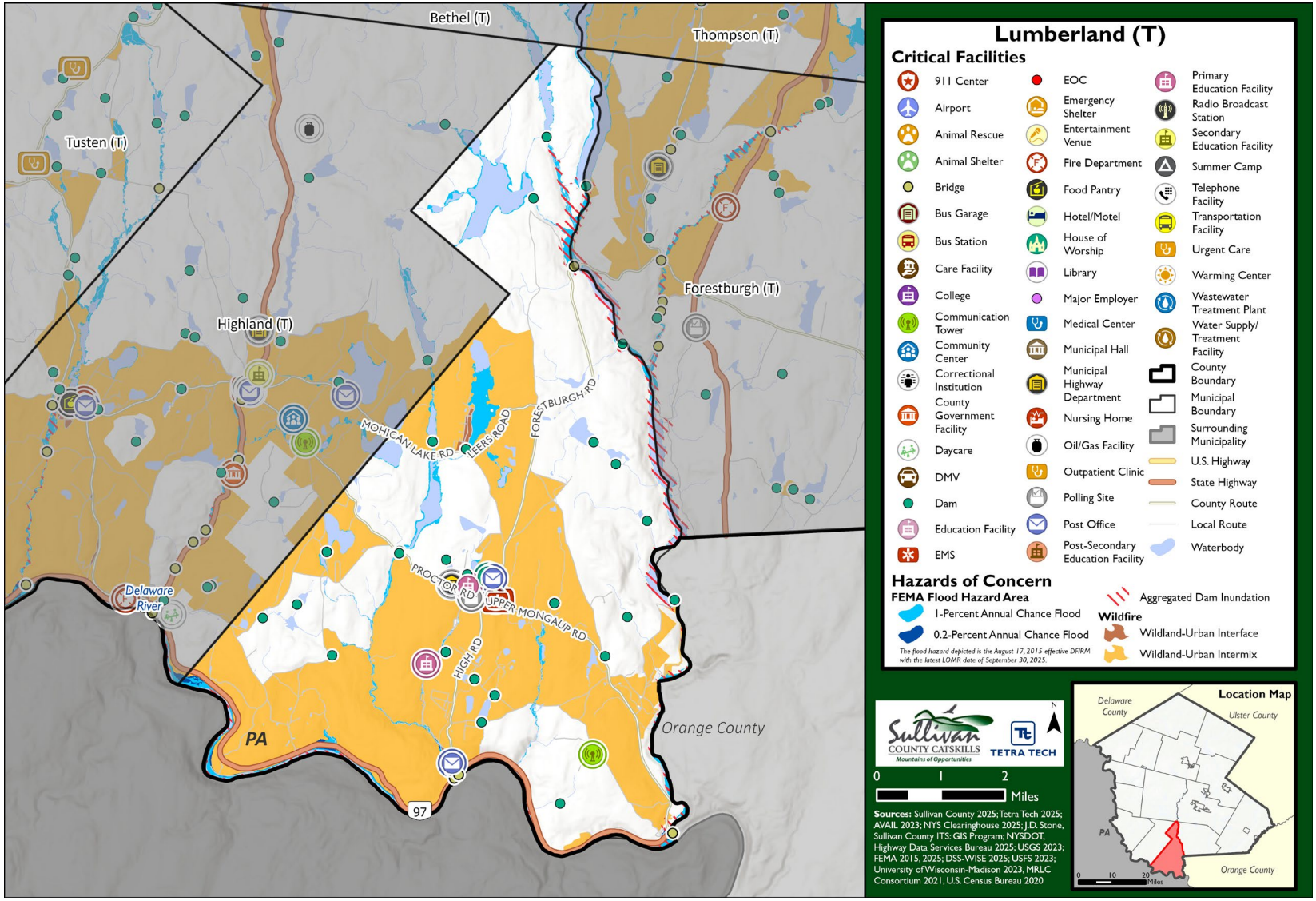
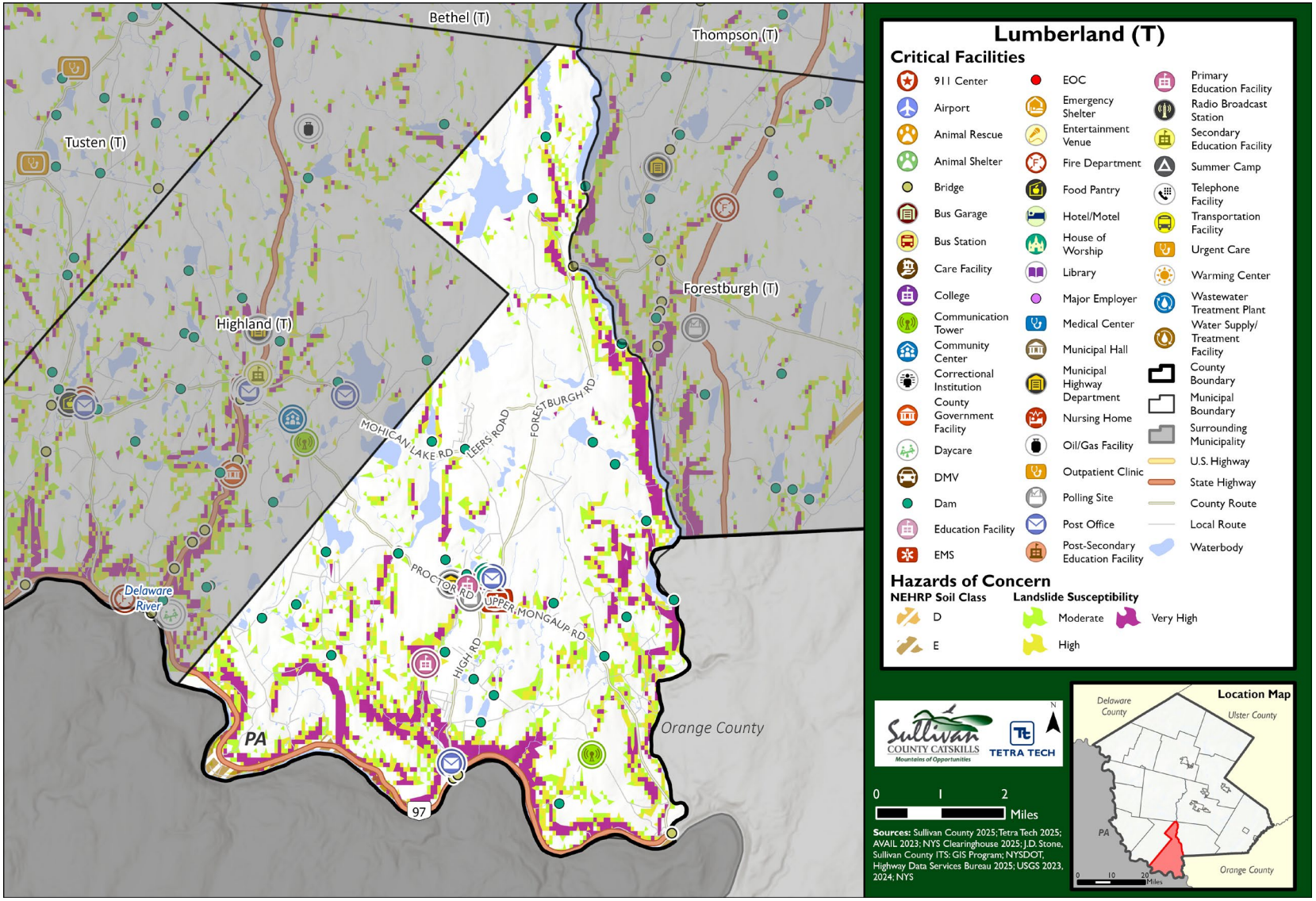


Figure 16-2. Lumberland NEHRP Soil and Landslide Area Map



16.3.2 Previous Event History

The history of natural and non-natural hazard events in Lumberland is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 16-7 and Table 16-8 provide details on the loss and damage in Lumberland during hazard events since the last hazard mitigation plan update.

Table 16-7. Presidential Disaster Declarations History in Lumberland

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Lumberland
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Staff worked from home. Adhered to social distancing and masking mandates.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	No damages or losses recorded.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Hollow Road washed out.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 16-8. Hazard Event History in Lumberland

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Lumberland
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Trees and wires were down.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Trees and wires were down.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Trees and wires were down.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Trees and wires were down.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	No damages or losses recorded.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	No damages or losses recorded.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on	No damages or losses recorded.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Lumberland
		the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	No damages or losses recorded.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Trees and wires were down.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

16.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 16-9 includes an inventory of critical facilities and infrastructure for the Town of Lumberland.

Table 16-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Five bridges and four dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

16.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Lumberland Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 16-10.

Table 16-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Cliff Lake Dam and Rio Dam are HHPDs and may impact persons, structures, and the environment should a dam failure occur.
Drought	Not a big concern, minimal impacts

Hazard Name	Local Impacts: People, Community Services, Local Economy
Earthquake	Not a big concern, minimal impacts
Flood	Rt 97, Hollow Rd. – culvert issues primarily; Hollow Road has a stream that parallels the road which causes flooding instances. Lake communities could be impacted if heavy rains cause the lake to overtop.
Landslide	Rt 97, landslides may occur, but would not impact residential properties, likely transportation impacts.
Pandemic	SOPs in place, understanding of likely impacts.
Severe Storm	High winds a concern which can cause downed trees and power lines. Power outages have been prolonged – one instance in 2018/2019 of a two-week long outage. Frequent outages. Hollow rd, decker rd, caskey rd, berm and church rds, newman rd, rt 97 to highland town line, vantule rd, bloom rd, Tuthill rd, and hallock rd are hot spots for power outages, but the entire town is vulnerable.
Severe Winter Storm	High winds cause downed trees, leading to power outages. Lack of salting or road-protection materials can impact response. Vehicles are largely impacted by the salt on the roads, a cleaner/washer for the trucks would increase the longevity of the vehicles.
Wildfire	Some structural fires close to Town boundaries. Have assisted other jurisdictions with mutual aid.

16.3.5 Vulnerable Community Assets

Representatives from the Town of Lumberland Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 16-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 16-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	One farm in Town, could be impacted by drought for yields.	**Area: Concentration of Local Businesses, Major Employers**	Not a Town asset.
Area: Concentration of Residences	Lake communities could be impacted if heavy rains cause the lake to overtop.	**Local Roads, Highways, Culverts, Bridges**	Hollow rd, decker rd, caskey rd, berm and church rds, newman rd, rt 97 to highland town line, vantule rd, bloom rd, Tuthill rd, and hallock rd are hot spots for power outages, but the entire town is vulnerable. Rt 97, Hollow Rd. – culvert issues primarily; Hollow Road has a stream that parallels the road which causes flooding instances.
Municipal Buildings	The Town Hall and Municipal Building on Proctor Road serves as an emergency shelter for affected residents. Camp Simcha has opened its grounds in the past for sheltering operations.	**Medical Centers (non-hospital)**	Not a Town asset.
College/University	Not an asset.	**Place of Worship**	Town has assets, but no known impacts.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Parks and ballfields. One ballfield is on hollow Rd, which is susceptible to flooding.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Not a Town asset.
Cultural/Historic Buildings/Sites	Historic cemeteries, town hall is a historic facility. One cemetery is in a floodplain, but has not been impacted by flooding – located along Rt. 97.	**Schools (K-12)**	Two schools – public school is pre-K through 6th grade, 1 Montessori school is pre-K through 8th grade, which is located on Hollow Rd.
Elder-care Facilities	Not a Town asset.	**Utilities**	Hollow rd, decker rd, caskey rd, berm and church rds, newman rd, rt 97 to highland town line, vantule rd, bloom rd, Tuthill rd, and hallock rd are hot spots for power outages, but the entire town is vulnerable.
Fire/Police Stations	Town has a fire department; building is not at risk. Constable office is in Town Municipal Building.	**Wastewater Treatment Plants**	Not a Town asset.
Gas Stations, Grocery Stores, Supermarkets	Town has assets, but no known impacts.	**Water: Drinking Water Resources**	Not a big concern, minimal impacts Private wells.
Hospitals	Not a Town asset.	**Other**	Not applicable.

16.3.6 Dams

Table 16-12 includes all dams in the Town of Lumberland. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 16-12. Dams Located in Lumberland

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
148-1133	Cliff Lake Dam	Black Lake Creek	Eagle Creek Hydro Power, LLC	Private	Hydroelectric	High Hazard Dam
149-0086	Rio Dam	Mongaup River	Eagle Creek Hydro Power, LLC	Private	Hydroelectric, Recreation	High Hazard Dam
149-3854	Mogisca Lake Dam	TR-Delaware River	Project Morry	Private	Recreation	Intermediate Hazard Dam
149-4150	Huegel Pond Dam	TR-Mongaup River	Edward J Huegel	Private	Recreation	Low Hazard Dam
149-5779	3B Pond Dam	Trib - Delaware	Barry Lipsitz	Private	Recreation	Low Hazard Dam
149-5744	Jesse Dickerson Mill Dam	Mill Brook	Walter Dresch	Private	Not Found	Low Hazard Dam
149-0141	Donald Partrick Dam	TR-Mongaup River	Donald Partrick	Private	Other	Low Hazard Dam
149-5268	Hill Dam	Lumberland	Steven Hill	Private	Other	Low Hazard Dam
148-4594	Lake Metaque Dam	TR-Mongaup River	Girl Scouts of America Bergen County Council	Private	Other	Low Hazard Dam
149-5568	Kadampa Meditation Center Dam	TR-Cabin Creek	KMC New York	Private	Recreation	Low Hazard Dam
148-0156	Lebanon Lake Dam	Lebanon Lake Brook	AER-NY GEN, LLC	Private	Recreation	Low Hazard Dam
149-4402	Camp Diana Dalmqua Pond Dam	TR-Delaware River	CAMP Dalmqua	Private	Recreation	Low Hazard Dam
149-0095	Bisseun Dam	TR-Mill Brook	Mr. Bisselin	Private	Other	Low Hazard Dam
149-0104	(149-0104)	TR-Mill Brook	Mike Oleniak	Private	Other	Low Hazard Dam
148-4549	Mohican Lake Dam	TR-Mill Brook	Frank A Leers	Private	Recreation	Low Hazard Dam
149-0100	Mckenzie Dam	TR-Mill Brook	Alexander Mckenzie	Private	Recreation	Low Hazard Dam
149-1223	Proctor Dam	Mill Brook	William Ross Proctor	Private	Recreation	Low Hazard Dam
148-4593	Lake Champion Dam	Mill Brook	Teen Challenge Inc	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
149-3998	Schoenfeld Recreational Pond Dam	Mapes Brook	Hans Schoenfield	Private	Recreation	Low Hazard Dam
149-4508	Lochada Lake Dam	TR-Mill Brook	Lochada Cottages LTD	Private	Recreation	Low Hazard Dam
149-5671	Hillside Pond Dam	-	Gibson Mckean	Private	Recreation	Low Hazard Dam
149-4098	Hallock Pond Dam	TR-Delaware River	Donals Hallock	Private	Other	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Cliff Lake Dam and Rio Dam are HHPDs and may impact persons, structures, and the environment should a dam failure occur.

16.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 16-13 identifies the preliminary hazard ranking for Lumberland, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 16-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	There are to HHPDs in the Town.	Medium
Drought	Medium	Disagree	Low	Private wells reduce any burdens on Town assets.	Low
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Disagree	Low	Policies and procedures have been put in place since the COVID-19 Pandemic to reduce risk.	Low
Severe Storm	Medium	Agree	-	-	Medium

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

16.4 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 16-14 through Table 16-17.

16.4.1 Development and Permitting

Table 16-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits, Building Department
What is your process for tracking building permits?	Online system and paper filing system.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, flood hazard area
Does your community have a buildable land inventory? If yes, please describe.	No

Table 16-15. 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
2020				
Total Permits	5	0	0	5
Permits within SFHA	0	0	0	0
2021				
Total Permits	15	1	0	16
Permits within SFHA	0	0	0	0
2022				
Total Permits	23	0	0	23
Permits within SFHA	0	0	0	0
2023				
Total Permits	11	0	0	11
Permits within SFHA	0	0	0	0

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2024				
Total Permits	14	0	0	14
Permits within SFHA	0	0	0	0
2025				
Total Permits	21	0	0	21
Permits within SFHA	0	0	0	0

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

Table 16-16. Recent Major Development and Infrastructure from 2020 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
No Recent Major Development and Infrastructure from 2020 to Present					

Table 16-17. 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
No Known or Anticipated Major Development and Infrastructure in the Next Five Years					

16.5 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 Table 16-1 is responsible for maintaining this information.

16.5.1 NFIP Statistics

Table 16-18 summarizes the NFIP policy and claim statistics for the Town of Lumberland.

Table 16-18. Lumberland NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360825#
# Policies	8
# Claims (Losses)	4
Total Loss Payments	$34,943.72
# Repetitive Loss Properties	2
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

16.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 16-19.

Table 16-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Rt 97, Hollow Rd. – culvert issues primarily; Hollow Road has a stream that parallels the road which causes flooding instances.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Charles Nystrom, Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer/Building Inspector is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 25, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, Inspections and engineering are all done and software backs it up
None	Lack of staffing, funding
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	No
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure

NFIP Topic	Comments
	before the "start of construction" of the improvement. Substantial improvement also means "cumulative substantial improvement." The term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	2 in about 15 years
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	There is at least 1 home
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	Hollow Road
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping, NYS DEC,
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?	Planning Board performs Flood Plain Development Review as referred by the Building Department in accordance with DEC guidelines.

16.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Lumberland 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 Lumberland to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

16.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 16-20 and Table 16-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 16-20. Regulatory Capabilities in Lumberland

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures and premises, regardless of use or occupancy, are subject to the provisions of this chapter.	Chapter 110, 2007	Building Department
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;	Chapter 142 Flood Damage Prevention, 2011	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Site plan review and approval shall be conducted by the Planning Board in accordance with the provisions of this chapter and New York State Town Law § 274-a. Site plan review is intended to apply to all development that is above the thresholds described below. When determining the applicability of these thresholds, the scope and definition of the proposed development shall include all previous development on the property occurring within the past two years within 300 feet of the proposed development.	Chapter 250-70, 2012	Building and Development
Stormwater Management Code	Yes	Stormwater drainage facilities shall be designed to accommodate storms of a twenty-five-year frequency unless a more stringent	Chapter 213-26, 1998	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		standard shall be required by the Planning Board. The general performance standard shall be that the amount of uncontrolled stormwater leaving the site along any property line after development shall not exceed that estimated for the site prior to development. In instances where stormwater facilities are impractical for engineering reasons the Town may modify this standard as it applies to a particular project but shall provide for the maximum practical reduction in flow which can be achieved under the circumstances. The subdivider shall provide full information, prepared by a professional engineer, regarding the predevelopment stormwater flows and estimates at the time of application.		
Subdivision Code	Yes	This chapter is adopted for the following purposes; A. Promoting the orderly growth and development of the Town in accordance with the Town of Lumberland's Comprehensive Plan and consistent with Chapter 250, Zoning. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Town residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Conserving the Town's natural resources and protecting its attractive environment so as to maintain property values and otherwise provide for the general welfare of residents of the Town of Lumberland.	Chapter 213, 1998	Building and Development
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	The purposes of this chapter, its regulations and its zoning districts, as outlined on the Zoning Map, are to: A. Promote the health, safety and general welfare of the present and future inhabitants of the Town; B. Guard against loss of life and damage to property due to flooding through protection of natural drainage features; C. Preserve features of historical significance; D. Encourage the most appropriate development of the Town in accordance with the Comprehensive Plan of the Town; E. Encourage the preservation of the scenic and natural assets of the Town and of the rural residential character of the community, and to discourage commercial or industrial	Chapter 250, 2012	Building and Development

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		development that is inconsistent with such preservation; F. Protect property values; G. Regulate location and use of buildings and the uses of land within each district with regard to residential, commercial, industrial and other purposes; H. Lessen congestion in streets; I. Secure safety from fire, flood, panic and other dangers; J. Provide adequate light and air and acceptable noise levels; K. Prevent overcrowding of land and avoid undue concentration of population; L. Make provision for the siting and use of certain renewable energy facilities; M. Facilitate the adequate provision of transportation, water, sewage disposal, schools, parks and other public requirements; and N. Establish districts in which regulations concerning the size of buildings and other structures, the percentage of lots that may be covered, the size of yards, and the use of buildings, structures and land for trade, commerce, residence and other purposes are restricted and regulated as hereinafter provided.		

Planning Capabilities

Table 16-21. Planning Capabilities in Lumberland

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The Town of Lumberland is currently in the process of updating its comprehensive plan, which serves as a blueprint for the town's growth over the next 5 to 10 years. The plan was developed through community input, including a survey and public focus group meetings, and was adopted by the town	Lumberland Comprehensive Plan Update	Building and Development

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		board. The update aims to address specific issues and align with the community's vision and goals. The plan includes background information on demographics, existing zoning, land use regulations, development standards, and district plans. It also highlights the historical and architectural resources of Lumberland, which are important to the town's identity and development.		
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Annual Budget	Annual Budget	Town Supervisor
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	This Comprehensive Emergency Management Plan results from recognition by Town, County and State government that an overall plan is needed to improve the Town's ability to manage emergency and disaster situations.	Town of Lumberland Comprehensive Emergency Management Plan, 2004	Emergency Management Team
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	Yes	The River Management Plan attempts to clearly describe and clarify how provisions of the law are to be met. The plan reflects the ideas, viewpoints, and needs of the people of the Upper Delaware River area for plan oversight, land use guidelines, and water use guidelines.	Upper Delaware River Management Plan, 2015	Upper Delaware Council
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community	Mid-Hudson Regional Community	Mid-Hudson Region LHDs

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

16.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 16-22 details the available administrative and technical capabilities of the Town.

Table 16-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted – Town engineer, Planning Board engineer
Construction/Building/Code Enforcement Department	Yes	Code Enforcement/Building Inspection

Capability Type	In Place in Municipality? Yes or No	Comments
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Fire Department
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Building and Development
Maintenance Programs to Reduce Risk	Yes	Highway will perform vegetation maintenance along roadways
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	County
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Contracted through Revise
Planning Board	Yes	The Planning Board has a seven-member board. Each member is appointed for a seven-year term, provided they haven't been appointed to fill a vacancy resulting from a resignation, at which time they will be appointed to fulfill the remaining balance of that term for which they were appointed. The duty of the Board is to act upon lot line changes, site plans, and special use permits and sign structures as well as the planning, growth and development of the community. The Board also reviews and approves or disapproves subdivisions.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	Through County as needed
Planner or Engineer with knowledge of land development and land management practices	Yes	Contracted – Town engineer, Planning Board engineer
Planners or engineers with an understanding of natural hazards	Yes	Contracted – Town engineer, Planning Board engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Contracted – Town engineer, Planning Board engineer, Building department
Professionals trained in conducting damage assessments	Yes	Contracted – Town engineer, Planning Board engineer, Building department, highway department
Public Works/Highway Department	Yes	Highway Department

Capability Type	In Place in Municipality? Yes or No	Comments
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) has a five-member board. Each member is appointed for a five-year term, provided they haven't been appointed to fill a vacancy resulting from a resignation, at which time they will be appointed to fulfill the remaining balance of that term for which they were appointed. The ZBA has the authority to grant variances to the Zoning Ordinance adopted by the Town of Lumberland. The Board also has the responsibility to render decisions on interpretation of the Zoning Ordinance.
Other	No	-

16.6.3 Fiscal Capability

Table 16-23 summarizes financial resources available to Lumberland.

Table 16-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
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	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Yes, used for Hollow Road wash out project
Other State funding programs	Yes, State Legislature Discretionary Funding, CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	County Discretionary Funding

16.6.4 Education and Outreach Capability

Table 16-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 16-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Online and printed
Hazard awareness campaigns, such as school and community programs and events	Fire department will go to school and summer camps for education.
Hazard mitigation information available on your website	Yes
Local News	Newspaper, radio for major emergencies
Natural disaster/safety programs in place for schools	General science education. For continuing education in the event of an emergency school students are evacuated to the Town Municipal Building until emergency is over.
Organizations that conduct outreach to at risk populations and underserved populations	Mobile unit would provide services to those in need in previous years.
Public information officer or communications office	Town Supervisor
Social media for hazard mitigation education and outreach	Facebook
Warning systems for hazard events	No, utilize website and newsletter

16.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 16-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 16-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate

Hazard	Strong, Moderate, Weak, None, N/A
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	Moderate

16.7 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.

16.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Lumberland-1— Lumberland - Rt 97 Flooding	
Hazards Addressed	Flooding
Lead Agency / Department	Lumberland Highway Department
Supporting Agency / Department	Sullivan County Department of Soil and Water Conservation District
Action Location	Route 97
Summary of Original Problem	During severe storm events, local streets and Route 97, running adjacent with the Delaware River, experience significant flooding.
Summary of Solution (Project)	Reduce long-term risk of flooding on existing and new development by upgrading embankments and culverts along Route 97.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Lumberland-2—Lumberland - Update Culverts (Hollow Road)	
Hazards Addressed	Flooding, Hurricane, Wind
Lead Agency / Department	Lumberland Highway Department
Supporting Agency / Department	-
Action Location	Hollow Road
Summary of Original Problem	During severe storm events, flooding occurs along waterways and roads, particularly Hollow Road. The area experiences issues with culverts and bridges are impacted by debris.
Summary of Solution (Project)	Reduce long-term risk of flooding on existing and new development by upgrading culverts on Hollow Road to increase capacity.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

16.7.2 Additional Mitigation Efforts

The Town of Lumberland did not identify any additional mitigation efforts completed since the last HMP.

16.7.3 Identified Issues

The Town of Lumberland has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.
- Cliff Lake Dam is a Class I High Hazard Dam that is located on Cliff Lake and Black Lake Creek. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of woodland and forested areas and transportation routes including Lebanon Road. The inundation area of Lake Cliff Dam has the potential to merge with that of Swinging Bridge Dam in the Town of Forestburgh. The dam was last inspected in August 2000, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Rio Dam is a Class I High Hazard Dam that is located on Rio Reservoir and Mongaup River. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of residential and vacation properties, recreational areas, woodland and forested areas, and transportation routes including Rio Dam Road. The inundation area of Rio Dam has the potential to impact the Town of Deerpark in Orange County, NY. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Hollow Road and Route 97

are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.

- Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Route 97 has been identified as being at risk of landslides and could result in loss of the roadway. Landslides may be able to be mitigated by cutting banks to prevent erosion.
- The Town has an established tree trimming program in place; however, there is a multitude of old and concerning trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses. Fallen trees have caused power outages along several roads in Town including Hollow Road, Decker Road, Caskey Road, Berm and Church Road, Newman Road, Route 97 (near the Town of Highland border), Van Tuyl Road, Bloom Road, Tuthill Road, and Hallock Road.
- Flood risk in the Town is primarily along the Delaware River, Mohican Lake, Lake Champion, Lake DeVenoge, Lochada Lake, Mill Brook and its streams. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Overtopping at Mohican Lake, Lake Champion, Lake DeVenoge, and Lochada Lake would impact the lake communities.
  - The baseball field at Hollow Road and Berm and Church Road has been impacted by flooding from Mill Brook and its streams.
  - Hollow Road and one of the streams from Mill Brook run parallel, often resulting in roadway flooding from periods of heavy rain.
  - Route 097 has been repeatedly flooded from heavy rains and floodwaters from the Delaware River.

16.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Lumberland participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Lumberland 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.

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 16-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-LumberlandT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has two repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-LumberlandT-02. Cliff Lake Dam Rehab

Lead Agency:	Dam Owners (Eagle Creek Hydro Power, LLC)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer, Town of Forestburgh	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Cliff Lake Dam is a Class I High Hazard Dam that is located on Cliff Lake and Black Lake Creek. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of woodland and forested areas and transportation routes including Lebanon Road. The inundation area of Lake Cliff Dam has the potential to merge with that of Swinging Bridge Dam in the Town of Forestburgh. The dam was last inspected in August 2000, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Cliff Lake Dam and encourage the dam owners to keep the dam's EAP current. The Town of Forestburgh should be involved, as the inundation area of Lake Cliff Dam has the potential to merge with that of Swinging Bridge Dam. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-LumberlandT-03. Rio Dam Rehab

Lead Agency:	Dam Owners (Eagle Creek Hydro Power, LLC)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer, Town of Deerpark, Orange County	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Rio Dam is a Class I High Hazard Dam that is located on Rio Reservoir and Mongaup River. The dam is owned by Eagle Creek Hydro Power, LLC. Failure of the dam could result in inundation of residential and vacation properties, recreational areas, woodland and forested areas, and transportation routes including Rio Dam Road. The inundation area of Rio Dam has the potential to impact the Town of Deerpark in Orange County, NY. The dam was last inspected in October 1991, which warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Rio Dam and encourage the dam owners to keep the dam's EAP current. The Town of Deerpark in Orange County, NY should be involved, as the inundation area of Rio Dam has the potential to impact the Town. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-LumberlandT-04. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Hollow Road and Route 97 are undersized or has been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	In addition to the culverts on Hollow Road and Route 97, the Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-LumberlandT-05. Landslide Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Route 97 has been identified as being at risk of landslides and could result in loss of the roadway. Landslides may be able to be mitigated by cutting banks to prevent erosion.	
Description of the Solution:	The Town Engineer will complete an assessment to identify an appropriate, cost-effective method to mitigation landslide risk along Route 97. Possible mitigation measures include: • Construction of retaining walls, soil nailing, ground anchor walls • Install horizontal drains to reduce soil saturation • Cut banks along water ways to prevent oversaturated soils from falling • Install netting	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by landslide along Route 97. Keeping the roadway open to traffic also permits at risk populations to travel to critical appointments.	
Impact on Future Development:	Future development in the impacted area will be less likely to be impacted by landslides.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct roadway outside of hazard area	Not feasible
	Close road and reroute traffic around hazard area	Not feasible, would cause confusion amongst travelers

Action 2026-LumberlandT-06. Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has an established tree trimming program in place; however, there is a multitude of old and concerning trees across the Town. It is unknown the safety of trees throughout the Town located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses. Fallen trees have caused power outages along several roads in Town including Hollow Road, Decker Road, Caskey Road, Berm and Church Road, Newman Road, Route 97 (near the Town of Highland border), Van Tuyl Road, Bloom Road, Tuthill Road, and Hallock Road.	
Description of the Solution:	The Town will work with a forester to assess trees on Town-owned properties; the Town will provide contact information for the tree assessors to property owners and utility companies. The Town will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Town.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-LumberlandT-07. Flood Mitigation Along Water Ways

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department, NYS DOT	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along the Delaware River, Mohican Lake, Lake Champion, Lake DeVenoge, Lochada Lake, Mill Brook and its streams. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Overtopping at Mohican Lake, Lake Champion, Lake DeVenoge, and Lochada Lake would impact the lake communities. • The baseball field at Hollow Road and Berm and Church Road has been impacted by flooding from Mill Brook and its streams. • Hollow Road and one of the streams from Mill Brook run parallel, often resulting in roadway flooding from periods of heavy rain. • Route 97 has been repeatedly flooded from heavy rains and floodwaters from the Delaware River.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding the Delaware River, Mohican Lake, Lake Champion, Lake DeVenoge, Lochada Lake, Mill Brook and its streams. The Town may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Table 16-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-LumberlandT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-LumberlandT-02	Cliff Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-LumberlandT-03	Rio Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-LumberlandT-04	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-LumberlandT-05	Landslide Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-LumberlandT-06	Tree Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-LumberlandT-07	Flood Mitigation Along Water Ways	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

17. TOWN OF MAMAKATING

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Mamakating 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 Mamakating, describes who participated in the planning process, assesses Mamakating's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

17.1 HAZARD MITIGATION PLANNING TEAM

The Town of Mamakating identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 17-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 17-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Peter Goodman, Town Supervisor Address: 2948 State Route 209, Wurtsboro, NY 12790 Phone Number: (845) 888-3000, ext. 4 Email: supervisor@mamakating.gov	Name/Title: Thomas Morrow, Highway Superintendent Address: 2948 State Route 209, Wurtsboro, NY 12790 Phone Number: (845) 888-3033 or (845) 888-3000, ext. 6 Email: highway@mamakating.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: Mary Grass, Building Inspector Address: 2948 State Route 209, Wurtsboro, NY 12790 Phone Number: (845) 888-3000, ext. 3 Email: building@mamakating.gov	

17.2 COMMUNITY PROFILE

17.2.1 Community Classifications

Table 17-2 summarizes classifications for community programs available to Mamakating.

Table 17-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	Not Designated	November 1, 2023
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

17.2.2 Community Profile

Geological Description

The Town of Mamakating is the largest town by area in Sullivan County, with varied geography including mountains, river valleys (the Delaware River), and forests. Being the first town in Sullivan County, the Town of Mamakating is ofttimes referred to as the Gateway to Sullivan County. It is 75.1 miles from the George Washington Bridge and 40.3 miles from Kingston. The Town is known for the Basha Kill, New York's third largest wetland (Welcome to Mamakating 2025).

Government Type and Description

The Town Board (or Town Council) consists of six elected Council persons, elected for two year terms. All council members represent the ward they are elected by. The council is chaired by the Supervisor, who is elected at large for a term of two years. They fill vacancies in town offices, select professionals, hire town employees, adopt budgets, fix salaries, and provide additional functions as specified in New York State Law (Town of Mamakating 2025).

Table 17-3 through Table 17-6 note land area, population, and building stock information for the Town of Mamakating.

Table 17-3. Total Land Area in the Town of Mamakating

Jurisdiction	Total Land Area	
	Acres	Square Miles
Mamakating (T)	58,259.1	91.0

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 17-4. Population Estimates in the Town of Mamakating

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
10,499	13.4%	10,456	13.2%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 17-5. At Risk Populations in the Town of Mamakating

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
1,532	14.7%	839	8.0%	217	2.1%	1,493	14.3%	898	8.6%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 17-6. General Building Stock in the Town of Mamakating

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,532	14.7%	839	8.0%	217	2.1%	1,493	14.3%	898	8.6%

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

17.3 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 Mamakating's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

17.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Mamakating are shown in Figure 17-1 and Figure 17-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Mamakating has significant exposure.

Figure 17-1. Mamakating Flood, Wildfire and Dam Inundation Area Map

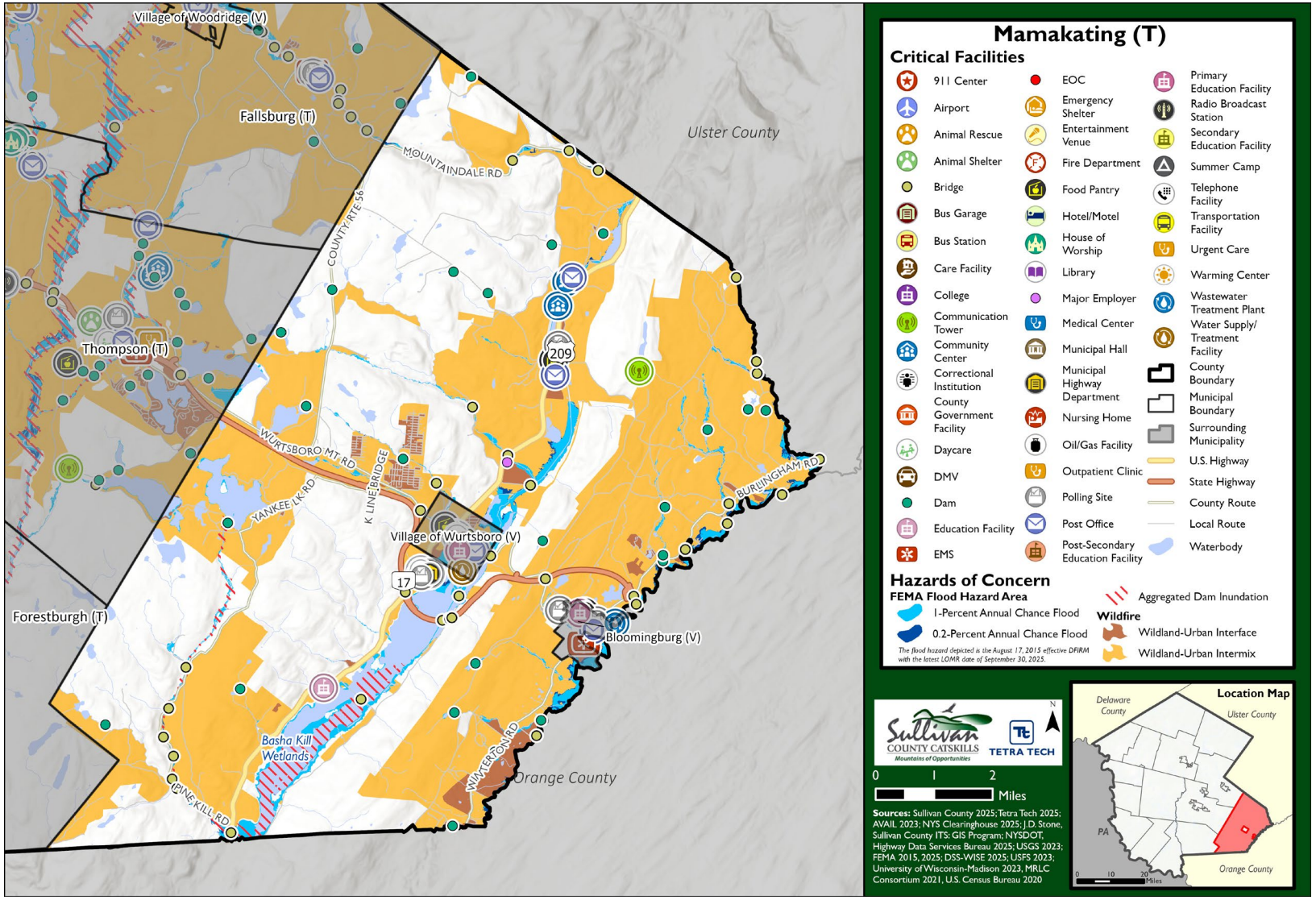
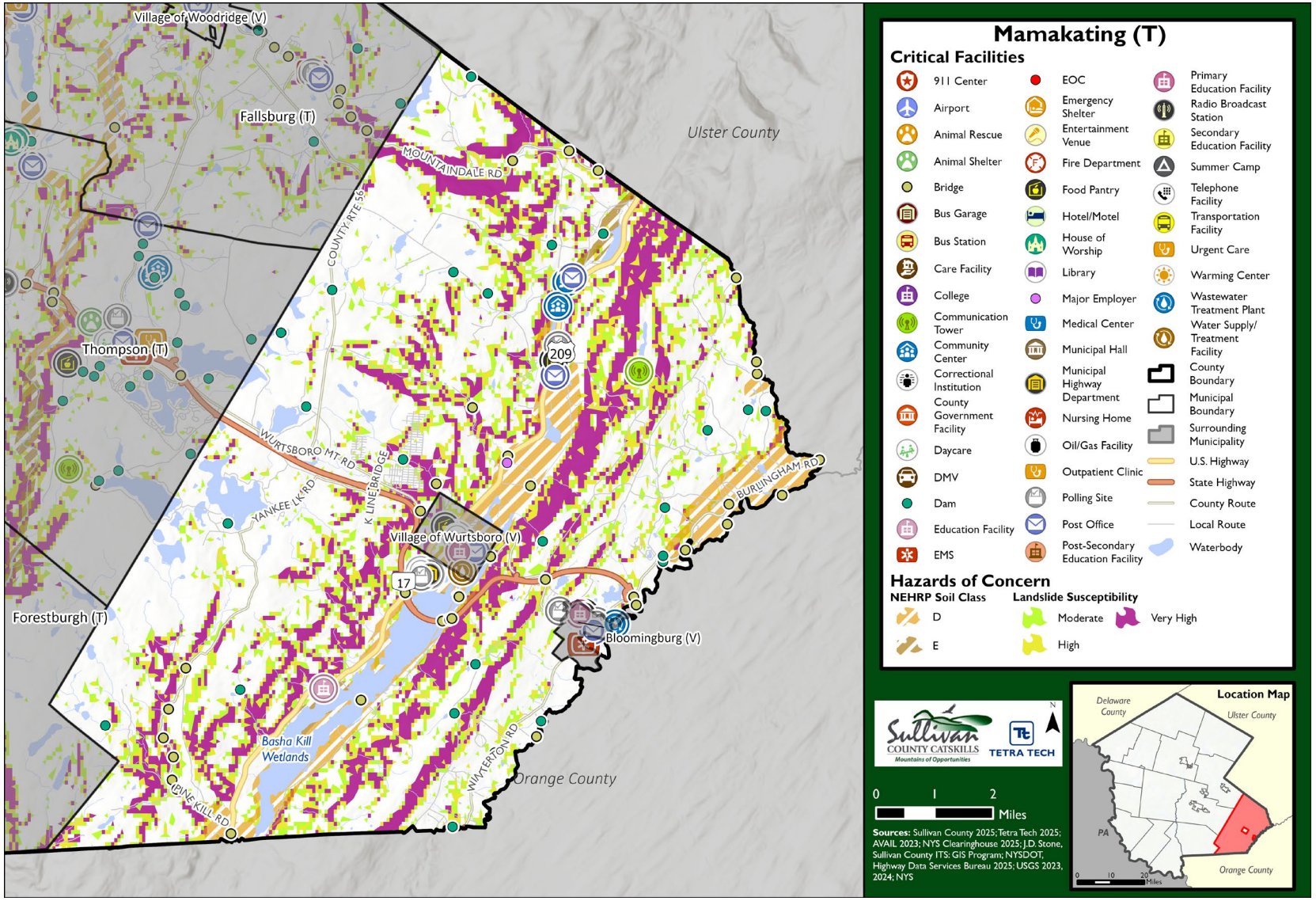


Figure 17-2. Mamakating NEHRP Soil and Landslide Area Map



17.3.2 Previous Event History

The history of natural and non-natural hazard events in Mamakating is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 17-7 and Table 17-8 provide details on the loss and damage in Mamakating during hazard events since the last hazard mitigation plan update.

Table 17-7. Presidential Disaster Declarations History in Mamakating

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Mamakating
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Masking mandates, work from home orders and social distancing
August 21-24, 2021	EM-3565-NY	Hurricane Henri	12-13 FEMA projects in relation to culverts and roadways between both declarations. Trails and parks also incurred a lot of damages.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	12-13 FEMA projects in relation to culverts and roadways between both declarations. Trails and parks also incurred a lot of damages.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 17-8. Hazard Event History in Mamakating

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Mamakating
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Minor tree and power damage
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Minor tree and power damage
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Minor tree and power damage
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Minor tree and power damage
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Minor tree and power damage

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Mamakating
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Minor tree and power damage
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	Minor tree and power damage
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Minor tree and power damage
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Minor tree and power damage

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

17.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 17-9 includes an inventory of critical facilities and infrastructure for the Town of Mamakating.

Table 17-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
25 bridges and five dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s). No additional critical facilities were identified to be in the flood hazard area.					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

17.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Mamakating Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 17-10.

Table 17-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	Lake Altamont Dam upsized culvert along roadway. Some beaver dam issues in terms of debris related issues.
Drought	Two villages in town are on municipal water, and rest of Town is on private well water. An area in Town is more susceptible than the other, Bloomingburg is where the water issues are. There is a lot of building that is being done in these areas that is impacting water. Senior complex has a low producing well and they put in another one which is not in use yet. Village of Wurtsboro is working on replacing their water infrastructure.
Earthquake	No known impacts
Flood	Pine Kill Creek needs to be dredged – see previous action Hayven Road and South Road are impacted by every severe storm and from snow melt. Roads are low lying. Ski Run Road past Echo road has a dip and that will go underwater.
Landslide	Pine Kill has a few areas of concern
Pandemic	No known impacts
Severe Storm	Town is without power for days pending severity Days in rural areas. Longest without power is typically in a few hours. Town residents have backup power. Town Hall can be used as an emergency heating/cooling shelter because it has a generator.
Severe Winter Storm	Highway is effective at clearing roadways. The Town has hilly and small roads that sometimes take longer to plow. Town is contracted to clear County roads and no concerns with State. Town has issues obtaining salt.
Wildfire	Town experiences wildfires frequently. Town has had larger incidents where they are working to put out fires that are going on for a week. This mainly impacts the Ridge. Valley between forested land and well populated areas. Town institutes its own burn ban to try and mitigate risk. DEC used to make breaks and maintain them, but they do not do that anymore which makes more vulnerable. This area is State land.

17.3.5 Vulnerable Community Assets

Representatives from the Town of Mamakating Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 17-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 17-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	Hayven Road and South Road are impacted by every severe storm and from snow melt. Roads are low lying. Ski Run Road past Echo road has a dip and that will go underwater.
Municipal Buildings	Town has an educational center and is unsure if they have a generator.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	No known impacts
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	Unsure about backup power
Elder-care Facilities	Two senior facilities and both have maintenance issues. No backup power at both.	**Utilities**	Aging infrastructure and places where replacements are needed
Fire/Police Stations	Backup power present at fire department and state police.	**Wastewater Treatment Plants**	Private septic – No known impacts Bloomingburg with population increase is impacting wastewater and drinking water. New York Alert List. Plant was discharging a lot of untreated water. Wipes plug up current system.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	No known impacts
Hospitals	Not applicable	**Other**	No known impacts

17.3.6 Dams

Table 17-12 includes all dams in the Town of Mamakating. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.

- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 17-12. Dams Located in Mamakating

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-0168	Yankee Lake Dam	Pine Kill	Yankee Lake Preservation Association	Private	Recreation	High Hazard Dam
178-1123	Bloomingburg Dam	Shawangunk Kill	Aaron Rabiner	Private	Irrigation, Recreation	Low Hazard Dam
178-6035	Wurtsboro Ridge Dam	Basher Kill	David M. Flaum	Private	Recreation	Low Hazard Dam
178-6027	Friscia Dam	Shawangunk Kill	Patricia Friscia	Private	Recreation	Low Hazard Dam
178-0605	Lake Altamont Dam	TR-Shawangunk Kill	Lake Altamont Association Inc.	Private	Recreation	Low Hazard Dam
178-0626	Fiero Pond Dam	TR-Shawangunk Kill	William M Fiero	Private	Recreation	Low Hazard Dam
178-5864	Camp Echo Lake Dam	Trib - Shawangunk Kill	Slab Holdings LLC	Private	Recreation	Hazard Classification Not Assigned
178-5852	Budd Road Dam	Trib - Hamowack Creek	Antonio Bruno	Private	Recreation	Low Hazard Dam
178-5805	Camp Kaylie Dam	Tr- Basher Kill	MJS Realty INC	Private	Recreation	Low Hazard Dam
178-5804	Barry Comer Dam	Tr - Brasher Creek	Bary Comer	Private	Recreation	Low Hazard Dam
178-5473	Pine Grove Pond Dam	Little Shwangunkill	-	Not Found	Other	Low Hazard Dam
178-5761	MARGARET WOODS CHECK DAM	Trib - Shawangunk Kill	Margarat Woods	Private	Flood Control and Storm Water Management	Low Hazard Dam
178-0636	Lake Jerry Dam	Trib - Shawangunk Kill	Pine Lake Develop Corp	Private	Recreation	Low Hazard Dam
178-1477	Tobin Pond Dam	TR-Shawangunk Kill	Walter Ryan	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
178-2014	Weiss Pond Dam	TR-Shawangunk Kill	Dr. Henry W Weiss	Private	Recreation	Low Hazard Dam
178-4732	Camp Na-sho-pa Dam	TR-Norris Brook	Charlotte Kroll	Private	Other	Low Hazard Dam
178-5156	Denamiel Pond Dam	TR-Shawangunk Kill	August Denamiel	Private	Fish and Wildlife Pond, Recreation	Low Hazard Dam
178-0610A	Campbell Pond Dam	TR-Shawangunk Kill	John Bronner	Private	Recreation	Low Hazard Dam
163-5529	Pine Lake Dam	Primrose Brook	New York Lands and Lake Developent LLC	Private	Recreation	Low Hazard Dam
163-0194	Mastens Lake Dam	Willsey Brook	Masten Lakes Estate	Private	Recreation	Low Hazard Dam
163-3047	Sherwood Allen Pond Dam	South Brook	Sherwood Allen	Private	Recreation	Low Hazard Dam
163-0142	West Brookville Pond Dam	TR-Basher Kill	John Singer	Private	Recreation	Low Hazard Dam
163-5131	Delaware Hunting Club Dam	Fall Brook	Delaware Hunting Club Inc.	Private	Recreation	Low Hazard Dam
163-1295	Wurtsboro Hills Dam	Willsey Brook	Wurtsboro Hills Community Association	Private	Recreation	Intermediate Hazard Dam
178-1443	Spring Glen Estates Dam	TR-Homowack Creek	Robert G. Borre	Private	Recreation	Hazard Classification Not Assigned
178-5086	Painter Hill Dam	TR-Sandburg Creek	NYS DEC	State	Other	Low Hazard Dam
178-2079	Besson Pond Dam	TR-Shawangunk Kill	B M Besson	Private	Fire Protection, Stock, Or Small Farm Pond, Recreation	Hazard Classification Not Assigned

Notable comments regarding dams in the jurisdiction:

Lake Altamont Dam upsized culvert along roadway Yankee Lake Dam is inspected yearly, and spillway was redone (2022) in a volunteer effort

17.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented

project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 17-13 identifies the preliminary hazard ranking for Mamakating, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 17-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

17.4 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 17-14 through Table 17-17.

17.4.1 Development and Permitting

Table 17-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town issues building permits
What is your process for tracking building permits?	Code Enforcement Officer uses a software system to track
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, Floodplain
Does your community have a buildable land inventory? If yes, please describe.	Low buildable land inventory due to zoning and topography

Table 17-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 17-16. Recent Major Development and Infrastructure from 2020 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
Dunkin Donuts and Mobile Station	Commercial	1	-	-	Recently added

Table 17-17. 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
The jurisdiction did not identify any known or anticipated major development and infrastructure in the next five years					

17.5 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 Table 17-1 is responsible for maintaining this information.

17.5.1 NFIP Statistics

Table 17-18 summarizes the NFIP policy and claim statistics for the Town of Mamakating.

Table 17-18. Mamakating NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360826#
# Policies	26
# Claims (Losses)	13
Total Loss Payments	$154,880.72
# Repetitive Loss Properties	4
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

17.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 17-19.

Table 17-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Pine Kill Creek needs to be dredged – see previous action Hayven Road and South Road are impacted by every severe storm and from snow melt. Roads are low lying. Ski Run Road past Echo road has a dip and that will go underwater.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Mary Grass, Building Inspector
What local department is responsible for floodplain management?	The Building Inspector is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	February 1, 2011

NFIP Topic	Comments
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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?	Site plan review. Planning and zoning considers flood risk.

17.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Mamakating 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 Mamakating to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

17.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 17-20 and Table 17-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 17-20. Regulatory Capabilities in Mamakating

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Mamakating. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, the Energy Code other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.	Chapter 99, 2023	Building Department

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	Yes	The Town of Mamakating, being cognizant of the detrimental and disastrous effects which might be caused by a breakdown or failure of an electrical utility service supplying this Town, hereby deems it necessary and essential that an auxiliary source of emergency light and power be provided in those occupancies, as designated in this chapter, for the maintenance and preservation of the health, safety and general welfare of the populace of this Town	Chapter 121 Emergency Lighting and Power	Town Administration
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #1 of 2011	Building Inspector
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	Yes	The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the Town of Mamakating through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order	Chapter 159, 2007	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems.		
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	To promote the health, safety and general welfare of the residents of the Town, the Town finds that: (1) The natural, open character of Shawangunk Ridge is a critical feature of the unique heritage of the Town whose preservation enriches and benefits both residents and visitors; (2) It is desirable to protect panoramic views of the ridge as well as sensitive natural habitats on Shawangunk Ridge; (3) The ridge is the source for a major portion of the Town's water resources; (4) Recreational opportunities are to be protected, including support of local and regional trail systems; and (5) Preservation of these features while providing for appropriate development can only be achieved by encouraging flexibility in the design of land use and development projects.	Chapter 199-42, Ridge Protection	Building Department
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	This code outlines when a site plan review is required, what the elements of a site plan must contain, and notes on revisions.	Chapter 199 – Article IX, 2019	Building Department, Planning Board
Stormwater Management Code	Yes	This code outlines the stormwater management efforts in the Town, including requirements for stormwater pollution prevention plans, performance and design requirements, required maintenance, inspection, and repair of system, enforcement of the code, and fees for services.	Chapter 160 Stormwater Control, 2019	Building Department
Subdivision Code	Yes	The purpose of these regulations shall be to provide rules, standards and procedures for the subdivision of land in the Town of Mamakating, New York, in order to promote public health, safety, convenience and general welfare of the municipality. It shall be administered to ensure	Chapter 166	Building Department

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		orderly growth and development, the conservation, protection and proper use of land and adequate provisions for circulation, utilities and service.		
Wellhead Protection	Yes	By the adoption of this chapter, the Town Board of the Town of Mamakating declares its intent to regulate the installation of wells in the Town of Mamakating in a manner consistent with New York State Health Department Administration Rules and Regulations, 10 NYCRR, Appendix 5-B, Rural Water Supply, in order to promote the general health, safety and welfare of the citizens of the town. Therefore, recognizing the above and the need of the community for an adequate well installation and regulatory procedure and in the exercise of its police power in these regards, the Town Board of the Town of Mamakating does hereby enact the following chapter.	Chapter 195, 1989	Town Administration
Zoning/Land Use Code	Yes	There is hereby established a comprehensive zoning local law for the Town of Mamakating, which plan is set forth in the text, map and schedule that constitute this chapter. Said zoning local law is adopted for the purposes set forth in Article 16 of the Town Law, and, in the interest of the protection and promotion of the public health, safety, convenience, comfort and general welfare	Chapter 199, 2019	Building Department

Planning Capabilities

Table 17-21. Planning Capabilities in Mamakating

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	In 2030, Mamakating will be a balanced community which provides economic development opportunities diverse in land use and diverse in population. Development will be focused around four focal points in the community, namely the Wurtsboro Town	Town of Mamakating Comprehensive Plan, 2019	Building Department

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		Center, the Bloomingburg Village center, the Phillipsport Summitville Historic Hamlet Center, and the Westbrookville Hamlet Center; these focal points will be comprised of mixed-use centers with a variety of residential uses integrated with traditional and specialty shops; pedestrian and bicycle friendly streets; historic identity and a unique sense of place. In using a Complete Streets, rural approach the Town will be developing a network that will take into consideration the needs of all users, including pedestrians, bicyclists, motorists, and citizens of all ages and abilities.		
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	Yes	Town sets money aside in reserves	Annual Budgeting	Town Board
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The CEMP defines the scope of preparedness and emergency management activities necessary in the Town. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.	Comprehensive Emergency Management Plan, 2014	Highway Department
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The plan includes the identification of essential positions, facilitation of remote work for non-essential positions, provision of personal protective equipment, and protocols for supporting contact tracing.	Emergency Operations Plan, 2024	Town Administration
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation /	Yes	Element of Comprehensive Plan	Town of Mamakating	Building Department

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Wildlife Management Plan			Comprehensive Plan, 2019	
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	Element of Comprehensive Plan	Town of Mamakating Comprehensive Plan, 2019	Building Department
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-
Other	No	-	-	-

17.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 17-22 details the available administrative and technical capabilities of the Town.

Table 17-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Officer
Economic Development Commission/Committee	Yes	Local Development Corporation
Emergency Management/Public Safety Department	Yes	County and Emergency Management Liaisons who communicate with County and Police
Environmental Commission/Specialist	Yes	Building Department and Town contacts DEC
Grant Writer	Yes	Interagency Coordinator
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire Departments and EMS
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Internal IT Department and Social Media (Supervisor Clerk)
Planning Board	Yes	Planning Commission
Planning Department	Yes	Building, Planning, and Zoning Department
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Building, Planning, and Zoning Department
Planner or Engineer with knowledge of land development and land management practices	Yes	Planners
Planners or engineers with an understanding of natural hazards	Yes	Planners
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building, Planning, and Zoning Department

Capability Type	In Place in Municipality? Yes or No	Comments
Professionals trained in conducting damage assessments	Yes	Contracted
Public Works/Highway Department	Yes	The Highway Department provides maintenance, improvements and snow removal for Town roads.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Account Clerk
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other	Yes	Building, Planning, and Zoning Department

17.6.3 Fiscal Capability

Table 17-23 summarizes financial resources available to Mamakating.

Table 17-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	Yes, Town Hall
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	Parkland Reserve Fund
Stormwater utility fee	Yes
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 (non-FEMA) funding programs	No
FEMA funding programs	Yes, Disaster Declarations
Other State funding programs	Yes, CHIPS, ARPA
Open Space Acquisition funding programs	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, smaller County grants, Environmental Education, PERMA

17.6.4 Education and Outreach Capability

Table 17-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 17-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No, but smaller local papers
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department for fire prevention, EMS, PD
Hazard mitigation information available on your website	Yes, they would update to include road closures, etc.
Local News	No
Natural disaster/safety programs in place for schools	Yes, Fire Drills and County run safety programs
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Knights of Columbus and Lions Club
Public information officer or communications office	Yes, Town Staff (Supervisor)
Social media for hazard mitigation education and outreach	Yes, Facebook page
Warning systems for hazard events	Yes, Swift911

17.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 17-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 17-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate

Hazard	Strong, Moderate, Weak, None, N/A
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

17.7 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.

17.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Mamakating-1— Mamakating - Landslide	
Hazards Addressed	Landslide, Flooding
Lead Agency / Department	Town of Mamakating Highway Department
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	The Pine Kill Creek has been previously impacted by a landslide. The Town of Mamakating exhibits a steep and mountainous terrain. As a result, heavy rainfall increases the chance of a landslide event in the Pine Kill Road region of the Town. Landslides in this area result in road washouts and closures.
Summary of Solution (Project)	Reduce long-term risks of landslides for existing assets and future development by modifying the slope geometry and implementing retaining walls on the Pine Kill Road region.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Completed

T. Mamakating-2—Route 209 Flooding Assessment	
Hazards Addressed	Flood
Lead Agency / Department	Mamakating Highway Dept.
Supporting Agency / Department	Sullivan County Highways and Bridges / NYS DEC
Action Location	Route 209
Summary of Original Problem	Route 209, between Route 17 and Westbrookville, has experienced numerous flooding issues, particularly at stream crossing south of Pine Kill Road. Pine Kill Road (a county-owned road) has deteriorated due to continued flooding events
Summary of Solution (Project)	Reduce long-term risks of flooding for existing and new development by upsizing culverts along this stream crossing to reduce or eliminate water backup which floods Route 209. Streams contributing to water issues in this area include the Delaware-Hudson Canal, Basha Kill, and Pine Kill Creek.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Three years ago, there was an ice dam which impacted bridge. State was going to replace bridge on Route 209 but did not do that yet. Make sure State is lead agency
If discontinue, explain why	Not applicable

T. Mamakating-3—Wurtsboro Hills Secondary Access for Flood Evacuation	
Hazards Addressed	Ice Storm, Landslide, Wildfire, Snow Storm
Lead Agency / Department	Town of Mamakating Supervisors Office
Supporting Agency / Department	-
Action Location	Wurtsboro Hills
Summary of Original Problem	More than one hundred (100) homes north of Skinner Road, in Wurtsboro Hills, are surrounded by two creeks with known flooding issues. During catastrophic flooding events, residents are potentially cut off from emergency services due to limited access from one road winding up into hills via a difficult switchback road. This area was a former mountain lake camp area, with seasonal homes, however, over the years, these homes have evolved into full time residences. This area is in need of a second means of access or exit in the event of an emergency.
Summary of Solution (Project)	Reduce long-term risks for all hazards by building a new access road as a necessary evacuation option. This action requires obtaining access/easement agreements.
Action Category	Planning/Regulatory
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Mountain Lakes Camp only has one way in and out and is surrounded by private property. Land owners have not replied or did not want to do it.
If discontinue, explain why	Not applicable

17.7.2 Additional Mitigation Efforts

The Town of Mamakating did not identify any additional mitigation efforts completed since the last HMP

17.7.3 Identified Issues

The Town of Mamakating has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well.
- Yankee Lake Dam is a Class I High Hazard Dam that is located on Yankee Lake and the Pine Kill. The dam is owned by Yankee Lake Preservation Association. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including Yankee Lake Road and Old Westbrookville Road. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing

up waters and causing a backflow. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.

- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Hayven Road and South Road are low lying and border the Basha Kill Marsh area.
- Ski Run Road between Yorkville Park Road and Echo Road has a low lying area and that will go underwater during periods of heavy rain. The roadway flooding is exacerbated when the stream connecting Braverman Lake and Shawangunk Kill has high water levels. Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible.
- Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. The valley areas near Wurtsboro Ridge State Forest and Roosa Gap State Forest are particularly at risk from the wildfire hazard.
- Critical facilities require backup power to ensure continuity of operations. The Educational Center and Senior facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- Route 209, between Route 17 and Westbrookville, has experienced numerous flooding issues, particularly at stream crossing south of Pine Kill Road. Pine Kill Road (a county-owned road) has deteriorated due to continued flooding events. Streams contributing to water issues in this area include the Delaware-Hudson Canal, Basha Kill, and Pine Kill Creek.
- More than one hundred (100) homes north of Skinner Road, in Wurtsboro Hills, are surrounded by two creeks with known flooding issues. During catastrophic flooding events, residents are potentially cut off from emergency services due to limited access from one road winding up into hills via a difficult switchback road. This area was a former mountain lake camp area, with seasonal homes, however, over the years, these homes have evolved into full time residences. This area is in need of a second means of access or exit in the event of an emergency. Mountain Lakes Camp only has one way in and out and is surrounded by private property. Land owners have not replied or did not want to do it.

17.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Mamakating participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Mamakating 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.

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 17-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-MamakatingT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has four repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-MamakatingT-02. Yankee Lake Dam Rehab

Lead Agency:	Dam Owners (Yankee Lake Preservation Association)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Yankee Lake Dam is a Class I High Hazard Dam that is located on Yankee Lake and the Pine Kill. The dam is owned by Yankee Lake Preservation Association. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including Yankee Lake Road and Old Westbrookville Road. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Yankee Lake Dam and encourage the dam owners to keep the dam's EAP current. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-MamakatingT-03. Beaver Removal

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Town Board, NYS DEC, USACE	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Stormwater infrastructure in the Town has experienced damages from beavers. Debris from beavers will clog the infrastructure, potentially causing damages. Trees cut down by beavers may also damage roadways, in addition, the dams built by beavers can cause occurrences of roadway flooding by backing up waters and causing a backflow. The Town will reach out to NYS DEC and USACE regarding permitting to remove beaver dams.	
Description of the Solution:	The Town will reach out to NYS DEC and USACE regarding permitting to remove the beavers and any dams, as beavers are a protected species in the State of New York. Once permitted, the Town will continue to work with NYS DEC, USACE, and approved contractors to safely remove the beaver dams and relocate the beavers.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, NYS DEC	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will remove beavers and their dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development will not incur flood damages caused by beavers.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Water systems will be protected as well due to debris no longer being able to impact stormwater infrastructure.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation and stormwater infrastructure.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Town will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dam	Flooding will still occur; Town may incur fines from NYS DEC and other entities

Action 2026-MamakatingT-04. Hayven and South Road Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Hayven Road and South Road are low lying and border the Basha Kill Marsh area.	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-MamakatingT-05. Ski Run Road Flood Mitigation

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Ski Run Road between Yorkville Park Road and Echo Road has a low lying area and that will go underwater during periods of heavy rain. The roadway flooding is exacerbated when the stream connecting Braverman Lake and Shawangunk Kill has high water levels. Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible.	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-MamakatingT-06. Wildfire Mitigation

Lead Agency:	NYS DEC (Forest Rangers Division)	
Supporting Agencies:	Summitville Fire District, Wurtsboro Fire District, Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. The valley areas near Wurtsboro Ridge State Forest and Roosa Gap State Forest are particularly at risk from the wildfire hazard.	
Description of the Solution:	The Town and its Fire Districts will coordinate with NYS DEC (Forest Rangers Division) to reduce fuel load throughout high-risk areas of the Town, including a strong focus in the valley areas near Wurtsboro Ridge State Forest and Roosa Gap State Forest where the forested land meets the built environment.	
Estimated Cost:	Low	
Potential Funding Sources:	NYS DEC, Town Budget, Fire Districts	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2	
Benefits:	The removal of fire fuel can drastically reduce the risk of wildfires. Removing the fire fuel in WUI areas can further protect persons and property from potential impacts. Added breaks will stop or slow fire spread by removing vegetative fuel.	
Impact on At Risk Populations:	The removal of fire fuel and placement of breaks can save structures and reduce risk to persons and their property from the wildfire hazard.	
Impact on Future Development:	Future development in or around the Wurtsboro Ridge State Forest and Roosa Gap State Forest will have a decreased risk of wildfire.	
Impact on Critical Facilities/Lifelines:	Critical facilities will be better protected and able to operate more proficiently by lessening the exposure to wildfire impacts.	
Impact on Capabilities:	This will increase the wildfire response and mitigation capabilities of the Town.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Town performs fuel reduction measures	State owned land, if the Town performs measures they may be fined
	Reduce fuel load without placing breaks	Fire fuel will fall to the ground again, but break areas would remain in place in further reduce wildfire risk

Action 2026-MamakatingT-07. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Educational Center Facility Manager, Senior Center facility Manager(s)	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Educational Center and Senior Center facilities, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will work with facility managers to purchase and install the generators and all necessary electrical hookup components in conjunction. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, Senior Housing facilities, Education Center facility	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-MamakatingT-08. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-MamakatingT-09. Route 209 Flooding Assessment

Lead Agency:	NYS DOT	
Supporting Agencies:	Highway Department, Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Route 209, between Route 17 and Westbrookville, has experienced numerous flooding issues, particularly at stream crossing south of Pine Kill Road. Pine Kill Road (a county-owned road) has deteriorated due to continued flooding events. Streams contributing to water issues in this area include the Delaware-Hudson Canal, Basha Kill, and Pine Kill Creek.	
Description of the Solution:	The Town will consult with NYS DOT, who will lead the development of specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS, NYS DOT	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-MamakatingT-10. Wurtsboro Hills Secondary Access

Lead Agency:	Highway Department	
Supporting Agencies:	Engineering, Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	More than one hundred (100) homes north of Skinner Road, in Wurtsboro Hills, are surrounded by two creeks with known flooding issues. During catastrophic flooding events, residents are potentially cut off from emergency services due to limited access from one road winding up into hills via a difficult switchback road. This area was a former mountain lake camp area, with seasonal homes, however, over the years, these homes have evolved into full time residences. This area is in need of a second means of access or exit in the event of an emergency. Mountain Lakes Camp only has one way in and out and is surrounded by private property.	
Description of the Solution:	The Town will seek to reduce long-term risks for all hazards by building a new access road as a necessary evacuation option. This action requires obtaining access/easement agreements.	
Estimated Cost:	High	
Potential Funding Sources:	Town Budget, Rural Surface Transportation Grant Program, BUILD Grant	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5	
Benefits:	Evaluating evacuation routes and determining a secondary route for residencies will provide another means of egress should an emergency arise necessitating the need for an evacuation of the area.	
Impact on At Risk Populations:	Having multiple evacuation routes can assist at risk populations in preparing themselves and those within their community to evacuate in a safe, timely fashion.	
Impact on Future Development:	Future development in the vicinity will have access to an additional means of egress and ingress.	
Impact on Critical Facilities/Lifelines:	This action will result in the construction of a new roadway or access road, expanding the transportation lifeline. Further, as an evacuation route, it will bolster the safety and security lifeline by providing another means of ingress and egress.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Enforce eminent domain to acquire properties	Town may not be within legal limitations to institute; can cause frustrations with private property owners
	Purchase high water vehicles to rescue persons trapped in water	Will not assist in evacuation of all persons or provide another exit or entrance into developed area

Table 17-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-MamakatingT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-MamakatingT-02	Yankee Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-MamakatingT-03	Beaver Removal	1	1	1	1	0	1	1	0	1	0	0	1	1	1	10	Medium
2026-MamakatingT-04	Hayven and South Road Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-MamakatingT-05	Ski Run Road Flood Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-MamakatingT-06	Wildfire Mitigation	1	1	1	1	1	1	1	1	1	0	1	1	0	1	12	High
2026-MamakatingT-07	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-MamakatingT-08	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-MamakatingT-09	Route 209 Flooding Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-MamakatingT-10	Wurtsboro Hills Secondary Access	1	0	1	1	0	0	0	1	0	0	1	1	1	1	**8**	Medium

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

18. VILLAGE OF MONTICELLO

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Monticello 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 Monticello, describes who participated in the planning process, assesses Monticello's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

18.1 HAZARD MITIGATION PLANNING TEAM

The Village of Monticello identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 18-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 18-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: James Snowden, Village Manager Address: 19 Pleasant St, Monticello, NY 12701 Phone Number: 845-794-6130 ext.307 Email: JSnow@villageofmonticello.com	Name/Title: Jay Sherb, Highway Superintendent Address: 19 Pleasant St, Monticello, NY 12701 Phone Number: (845) 794-4911 Email: jsherb@villageofmonticello.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: James Snowden, Village Manager (Acting Code Enforcement) Address: 19 Pleasant St, Monticello, NY 12701 Phone Number: 845-794-6130 ext.307 Email: JSnow@villageofmonticello.com	

18.2 COMMUNITY PROFILE

18.2.1 Community Classifications

Table 18-2 summarizes classifications for community programs available to Monticello.

Table 18-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

18.2.2 Community Profile

Geographical Description

Located off NYS Route 17 (future I-86), the Village of Monticello is midway between New York City and Binghamton and serves as the county seat. The village has a total area of 4.1 square miles, making it the largest village in Sullivan County by area (Village of Moniticello 2025).

Government Type and Description

The Village is governed by a Village Board of Trustees, consisting of a Mayor, Deputy Mayor/Trustee, and three trustees (Village of Moniticello 2025).

Table 18-3 through Table 18-6 note land area, population, and building stock information for the Village of Monticello.

Table 18-3. Total Land Area in the Village of Monticello

Jurisdiction	Total Land Area	
	Acres	Square Miles
Monticello (V)	2,604.3	4.1

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 18-4. Population Estimates in the Village of Monticello

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
7,173	9.1%	7,252	9.2%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population
Note: Seasonal population can increase to close to 20,000 persons

Table 18-5. At Risk Populations in the Village of Monticello

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
974	13.4%	497	6.9%	664	9.2%	1,100	15.2%	2,088	28.8%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 18-6. General Building Stock in the Village of Monticello

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
2,164	$2,972,791,748	1,827	$1,510,507,739	273	$957,592,136	14	$71,105,976	50	$433,585,897

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

18.3 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 Monticello's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

18.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Monticello are shown in Figure 18-1 and Figure 18-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Monticello has significant exposure.

Figure 18-1. Monticello Flood, Wildfire and Dam Inundation Area Map

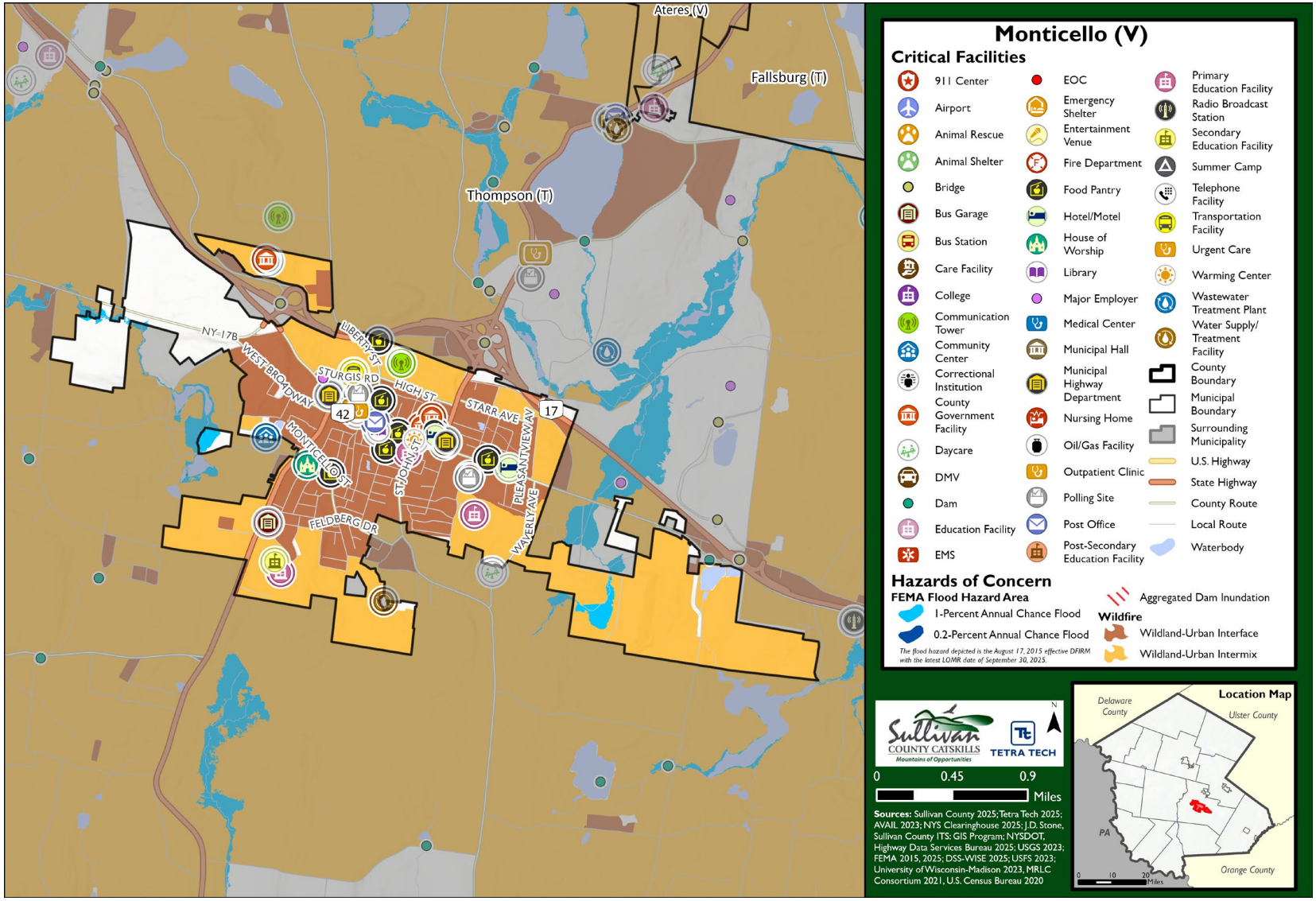
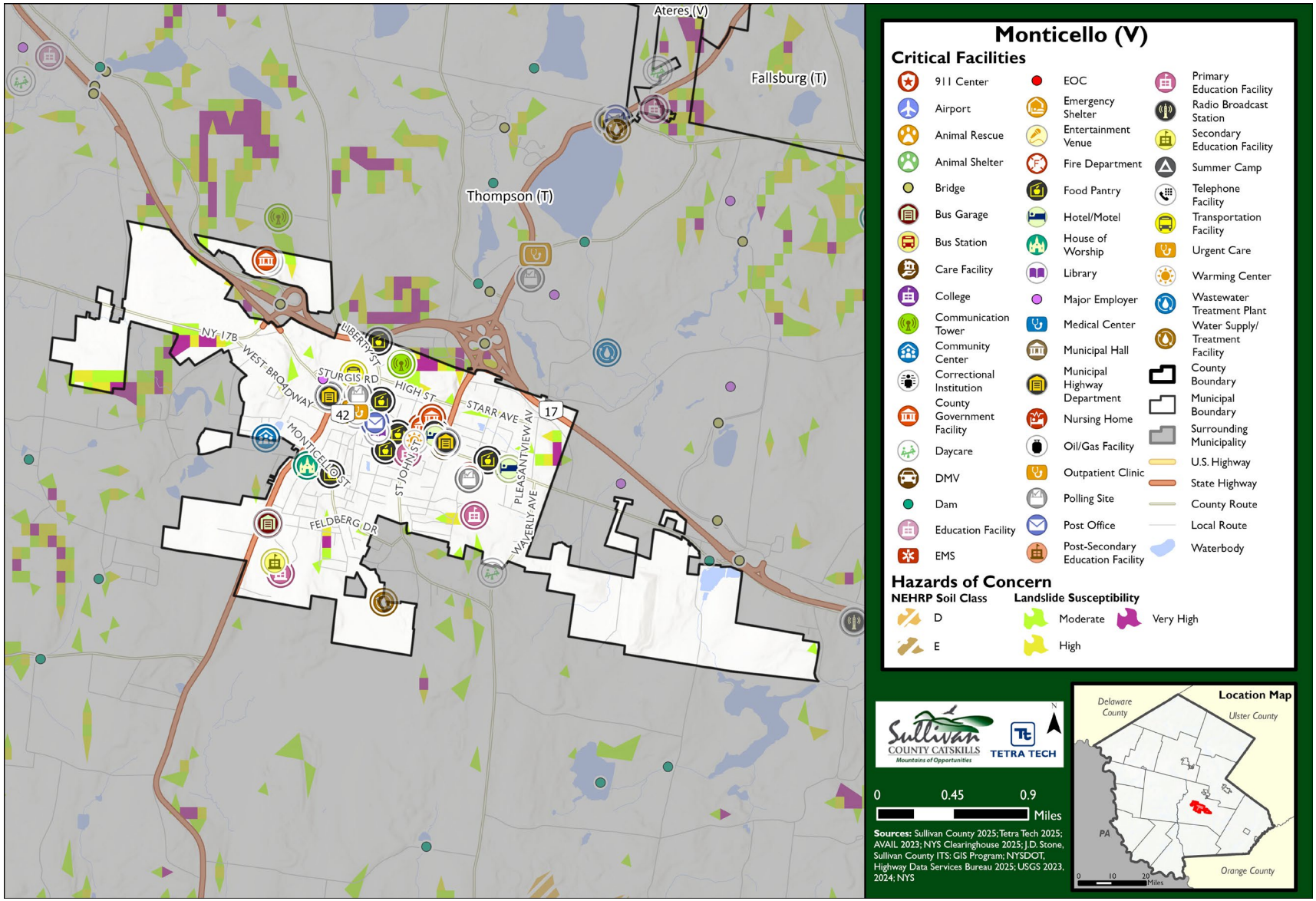


Figure 18-2. Monticello NEHRP Soil and Landslide Area Map



18.3.2 Previous Event History

The history of natural and non-natural hazard events in Monticello is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 18-7 and Table 18-8 provide details on the loss and damage in Monticello during hazard events since the last hazard mitigation plan update.

Table 18-7. Presidential Disaster Declarations History in Monticello

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Monticello
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	Adhered to mandates (masking, distance) work from on occasion
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Flooding on Sturgis Rd and Monticello St
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Flooding on Sturgis Rd and Monticello St

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 18-8. Hazard Event History in Monticello

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Monticello
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Local flooding, potential tree branches and wires downed.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Local flooding, potential tree branches and wires downed.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Local flooding, potential tree branches and wires downed.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Local flooding, potential tree branches and wires downed.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Local flooding, potential tree branches and wires downed.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Local flooding, potential tree branches and wires downed.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on	Local flooding, potential tree branches and wires downed.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Monticello
		the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Local flooding, potential tree branches and wires downed.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Local flooding, potential tree branches and wires downed.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

18.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 18-9 includes an inventory of critical facilities and infrastructure for the Village of Monticello.

Table 18-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
None Identified					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

18.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Monticello Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 18-10.

Table 18-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	No impacts, no large concerns.
Drought	Village water supply may be at risk. Water supply availability, Kiamesha Lake is downed then it impacts the Village's water. Would be interested in grant funding to find water supply.
Earthquake	No impacts, no large concerns.

Hazard Name	Local Impacts: People, Community Services, Local Economy
Flood	Sturgis Rd, Hammond St (Dead end) The brook behind Hammond St, High St has a large hil which causes flooding to residents during snowmelt and rain, Lakewood Ave is vulnerable and within flood hazard area.
Landslide	No impacts, no large concerns.
Pandemic	No impacts, no large concerns.
Severe Storm	Trees from high ends, ash borer impacting trees and causing die-offs. Dead trees more apt to impacting structures and roadways – wires come down with the trees.
Severe Winter Storm	Trees from high ends, ash borer impacting trees and causing die-offs. Dead trees more apt to impacting structures and roadways – wires come down with the trees.
Wildfire	No impacts, no large concerns.

18.3.5 Vulnerable Community Assets

Representatives from the Village of Monticello Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 18-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 18-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Not an asset, no impact.	**Area: Concentration of Local Businesses, Major Employers**	Asset, no impact.
Area: Concentration of Residences	Hammond St and High St – vulnerable to flooding	**Local Roads, Highways, Culverts, Bridges**	Sturgis Rd, Hammond St (Dead end). The brook behind Hammond St, High St has a large hill which causes flooding to residents during snowmelt and rain, Lakewood Ave is vulnerable and within flood hazard area. Stormwater management – 80-90% of galvanized pipes are rotted out. Village in process of updating, but funding is minimal and new materials are expensive. Dehoyos Park bridge and Dillon Park bridge are part of a trail within the affiliated park and ponded areas. The bridges have been repeatedly exposed to severe storms/winter storms and flooded over with pond/lake overtopping.
Municipal Buildings	Ted Strobel building has not been completed. Water and sewer pumping stations need emergency generators.	**Medical Centers (non-hospital)**	Recovery center in old hospital. Facility is decaying due to age and exposure to elements.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
College/University	Not an asset, no impact.	**Place of Worship**	Buildings showing age due to weathering from repeated exposure to hazards (extreme temps, winds, etc.). Some places of worship do act as warming/cooling centers.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Two public parks with swimming, splash – one pond, one lake.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Difficult to get all equipment out of the elements. Salt barn can be vulnerable to high winds.
Cultural/Historic Buildings/Sites	Old municipal buildings showing age due to weathering from repeated exposure to hazards (extreme temps, winds, etc.).	**Schools (K-12)**	Asset, no impact.
Elder-care Facilities	Not an asset, no impact.	**Utilities**	Dead trees more apt to impacting structures and roadways – wires come down with the trees. Utilities perform tree clearing and maintenance, but not sufficient.
Fire/Police Stations	Village PD building is in Village Hall and is aging.	**Wastewater Treatment Plants**	Water and sewer pumping stations need emergency generators. Water and sewer pipes also aging.
Gas Stations, Grocery Stores, Supermarkets	Asset, no impact.	**Water: Drinking Water Resources**	Village water supply may be at risk. Water supply availability, Kiamesha Lake is downed then it impacts the Village's water. Would be interested in grant funding to find water supply. Water pipes are aging.
Hospitals	Two old hospitals, one being flattened, one redeveloped.	**Other**	Not applicable

18.3.6 Dams

Table 18-12 includes all dams in the Village of Monticello. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.

- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 18-12. Dams Located in Monticello

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-5457	Cimarron Dam	TR-Barnum Brook	Cimarron Lake Estates, LLC	Private	Other	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Monticello Diversional Dam is not within the Village (located in Thompson) but is the responsibility of the Village. No known risks for the dam.

18.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 18-13 identifies the preliminary hazard ranking for Monticello, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 18-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Flood	High	Disagree	Medium	Not many assets in flood hazard area, but localized areas of flooding.	Medium
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

18.4 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 18-14 through Table 18-17.

18.4.1 Development and Permitting

Table 18-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Village issues building permits. Building Department.
What is your process for tracking building permits?	Online software.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No.
Does your community have a buildable land inventory? If yes, please describe.	No.

Table 18-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 18-16. Recent Major Development and Infrastructure from 2020 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
The jurisdiction did not identify any recent major development and infrastructure from 2020 to present					

Table 18-17. 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
The jurisdiction did not identify any known or anticipated major development and infrastructure in the next five years					

18.5 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 Table 18-1 is responsible for maintaining this information.

18.5.1 NFIP Statistics

Table 18-18 summarizes the NFIP policy and claim statistics for the Village of Monticello.

Table 18-18. Monticello NFIP Summary of Policy and Claim Statistics

NFIP Community Number	361613#
# Policies	8
# Claims (Losses)	-
Total Loss Payments	-

# Repetitive Loss Properties	-
# Severe Repetitive Loss Properties	-

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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

- = Data is Not Available

Source: FEMA 2025

18.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 18-19.

Table 18-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Sturgis Rd, Hammond St (Dead end). The brook behind Hammond St, High St has a large hill which causes flooding to residents during snowmelt and rain, Lakewood Ave is vulnerable and within flood hazard area. Dehoyos Park bridge and Dillon Park bridge are part of a trail within the affiliated park and ponded areas. The bridges have been repeatedly exposed to severe storms/winter storms and flooded over with pond/lake overtopping.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	James Snowden, Village Manager (Acting Code Enforcement)
What local department is responsible for floodplain management?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #4 of 2011
What is the date that your flood damage prevention ordinance was last amended?	March 8, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections

NFIP Topic	Comments
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, training, funds
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Would accept training opportunities
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial Improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping, NYS DEC
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?	Site plan review. Planning and zoning boards consider flood risk.

18.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Monticello 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 Monticello to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

18.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 18-20 and Table 18-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 18-20. Regulatory Capabilities in Monticello

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code ("Uniform Code") and the State Energy Conservation Construction Code ("Energy Code") in the Village of Monticello. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.	Chapter 105, 2007	Planning Board and Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #4 of 2011	Code Enforcement Officer
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Through site plan review, it is the intent of this chapter to promote the health, safety and	Chapter 265, 1991	Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		general welfare of the residents of the Village and to ensure that proposed development and use of land within the incorporated limits of the Village of Monticello will have a harmonious relationship with the existing or permitted use of contiguous land and of adjacent neighborhoods; to ensure that the health, safety, welfare, comfort and convenience of the public is fully considered; to assure that necessary provisions are made for traffic generation, circulation and parking, means and location of access, screening, signs, landscaping, lighting, architectural features, location and dimensions of buildings, impact of the proposed use on adjacent land uses, recreation, water supply, storm drainage, sanitary sewers or alternative wastewater treatment and disposal, solid waste and emergency services.		
Stormwater Management Code	Yes	Within Zoning Code.	Chapter 280, 2025	Planning Board and Code Enforcement
Subdivision Code	Yes		Chapter 270, 1976	Planning Board and Code Enforcement
Wellhead Protection	Yes	No new water wells may be drilled in the Village of Monticello, and no buildings, structures or uses not now served by an existing well may be connected to any existing well or connected to any other existing well.	Chapter 256, Article VII	Village Administration
Zoning/Land Use Code	Yes	This chapter is enacted to promote the physical development of the Village in accordance with the Comprehensive Development Plan.	Chapter 280, 2025	Planning Board and Code Enforcement

Planning Capabilities

Table 18-21. Planning Capabilities in Monticello

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	Yes	This Plan was prepared to help Monticello and Thompson seize the opportunities provided by new resort development in the area.	Grow the Gateways, 2017	Community & Economic Development
Climate Adaptation / Resilience Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Comprehensive Plan	Yes	A comprehensive plan (also called a master plan) is a document prepared by the community that provides direction in making land use, development and other long-range planning decisions. A comprehensive plan's usefulness lies in two aspects: the decision-making and consensus-building that go into the creation of the comprehensive plan and the use of the plan by elected officials and others once adopted.	Thompson-Monticello Joint Comprehensive Plan, 1999	Planning Board
Continuity of Operations Plan	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village.	Thompson-Monticello Joint Emergency Management Plan, 2007	Village Board
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village.	Thompson-Monticello Joint Emergency Management Plan, 2007	Village Board
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	Yes	This Plan was prepared to help Monticello and Thompson seize the opportunities provided by new resort development in the area. It looks at ways to build on and sustain the momentum that's been kicked off by the more than $1.5 billion in recent investment. It also looks at ways to make new development better — faster, more efficient, more attractive, and more supportive of community needs and goals.	Grow the Gateways Plan and Project	Town of Thompson, Village of Monticello
Emergency Operations Plan	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village.	Thompson-Monticello Joint Emergency Management Plan, 2007	Village Board
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

18.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 18-22 details the available administrative and technical capabilities of the Village.

Table 18-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Village Engineer
Construction/Building/Code Enforcement Department	Yes	The Building, Planning & Zoning Department is responsible for the enforcement of codes and regulations of the Village relating to building, zoning and other real property uses.
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Police Department
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Contracted
Maintenance Programs to Reduce Risk	Yes	Vegetation as needed, stormwater as needed
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Shared services with neighboring jurisdictions
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Contracted
Planning Board	Yes	The Planning Board is responsible for reviewing site plan applications for residential and commercial developments and subdivision applications. The Planning Board is assisted in its work by several consultants including an engineer, an attorney, a planner, and the Village's Code Enforcement Officers.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	County
Planner or Engineer with knowledge of land development and land management practices	Yes	Village Engineer
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Village Engineer, Building Department

Capability Type	In Place in Municipality? Yes or No	Comments
Professionals trained in conducting damage assessments	Yes	Village Engineer
Public Works/Highway Department	Yes	The Highway and Sanitation Department is responsible for the maintenance and repair of Village Streets and Properties, Snow and Ice Removal on Public Property and Garbage Collection.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Contracted
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals is responsible for approval of interpretation of the Village Zoning Law and hears applications for variances. The Board acts in a quasi-judicial capacity. It will give notice and hear evidence of the need for a variance. The law fixes certain criteria that the board must consider before it can grant a variance.
Other	Yes	The Village of Monticello Water Department was established in 1895. The design capacity of the Water Treatment Plant located on Kiamesha Lake is 2 million gallons per day. Also there are 3 Production Wells with a design capacity of 300 thousand gallons per day, for a total of 2.3 million gallons per day. The water is pumped to water towers at three locations in the Village.

18.6.3 Fiscal Capability

Table 18-23 summarizes financial resources available to Monticello.

Table 18-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
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	Yes – Water, sewer, sanitation
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	Yes
Other State funding programs	CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	USDA, Sullivan180

18.6.4 Education and Outreach Capability

Table 18-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 18-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	Police participate in preparedness/prevention outreach programs
Hazard mitigation information available on your website	No
Local News	Press release in newspapers
Natural disaster/safety programs in place for schools	Handled by schools
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Village has a senior program
Public information officer or communications office	Village Manager
Social media for hazard mitigation education and outreach	Facebook
Warning systems for hazard events	No

18.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 18-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 18-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Strong
Severe Winter Storm	Strong
Wildfire	Moderate

18.7 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.

18.7.1 Past Mitigation Action Status

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Monticello-1—Monticello - Flooding issues at Sturgis x Wasser Way	
Hazards Addressed	Flooding
Lead Agency / Department	Village of Monticello
Supporting Agency / Department	-
Action Location	Sturgis x Wasser Way
Summary of Original Problem	There is a wetland area located at Sturgis Road and Wasser Way that floods regularly. The flooding events affect Shortline Bus Station (located on North Street) and vacant lots areas near the Social Security Building and the Shopwell) and requires shutting down the roadway.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by conducting a study on the Sturgis Road & Wasser Way, a wetlands property for suitability as a natural flood control feature.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Monticello-2— Monticello - Lakewood Culvert Issues	
Hazards Addressed	Flood
Lead Agency / Department	Village of Monticello
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During severe storms, the area across from Lakewood has significant flooding issues due to undersized culverts.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing the culverts located near Lakewood.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Action completed

T. Monticello-3— Monticello - Backup Generation for Village Hall/Ted Strobel Building	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Department of Public Works
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During all hazards events, there is a risk of a power outages. The Village Hall and the Ted Strobel Building currently have no back-up power generators.
Summary of Solution (Project)	Reduce the risks of all hazards for existing assets and future development by acquiring and installing backup power generation for the Village Hall and the Ted Strobel Building, as well as maintain continuity of operations during hazard events in which power outages occur.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Ted Strobel building has not been completed. Water and sewer pumping stations need emergency generators.
If discontinue, explain why	Not applicable

T. Monticello-4— Monticello - Upgrade Monticello Street and Lawrence Ave Culvert	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Village of Monticello
Supporting Agency / Department	Sullivan County Dept of Soil and Water Conservation District
Action Location	-
Summary of Original Problem	During severe storms, the Monticello Street and Lawrence Avenue area experiences significant flooding due to a undersized culvert.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing the culvert located at Monticello Street and Lawrence Avenue.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Completed with CHIPS funding

18.7.2 Additional Mitigation Efforts

The Village of Monticello did not identify any additional mitigation efforts completed since the last HMP.

18.7.3 Identified Issues

The Village of Monticello has identified the following vulnerabilities within their community for mitigation strategy development:

- The availability of safe drinking water is crucial to the longevity of the Village. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.
- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Hammond Street, High Street, and Lakewood Avenue may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.
- There is a wetland area located at Sturgis Road and Wasser Way that floods regularly. The flooding events affect Shortline Bus Station and areas near the Sullivan County Administrative Building; the flooding requires shutting down the roadway.
- The Village has an established tree trimming program in place; however, there is a multitude of dead ash trees across the Village. It is unknown the safety of trees throughout the Village located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.
- The Village has noted concerns regarding water system infrastructure, primarily the water pipes throughout the jurisdiction. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.
- De Hoyos Park and Dillon Park have bridges which have been repeatedly exposed to severe storms/winter storms and flooded over with pond/lake overtopping. The bridges are part of a trail within each affiliated park and ponded areas. The bridges should be evaluated for structural integrity due to the repeated exposure.
- Critical facilities require backup power to ensure continuity of operations. The Ted Stroebele Center and several water and sewer pump stations do not have back up power to support the entire facilities, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Village's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the

Village's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.

18.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Monticello participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Monticello 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 Village priorities.

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 18-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-MonticelloV-01. Safe Drinking Water

Lead Agency:	Village Board
Supporting Agencies:	Engineering
Hazards of Concern:	☐Dam Failure ☒Drought ☒Earthquake ☒Flood ☐Landslide ☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the Village. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, flood, severe storm, and severe winter storm. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.
Description of the Solution:	The Village will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The Village may choose to reference suggested projects from the US EPA's "*Incident Action Checklists*". Potential projects may include: • Develop an emergency drinking water supply plan and establish contacts to discuss procedures. • Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first. • Monitor water supply and calculate how long water could be provided if the drought persists • Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures. • Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system. • Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies. • Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network. • Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer. • Coordinate with other neighboring water systems to develop a water use plan. • Identify generator needs at water facilities. • Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911. • Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system. • Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.
Estimated Cost:	Medium
Potential Funding Sources:	FEMA HMA, Village Budget
Implementation Timeline:	5 years
Goals Met:	2, 4, 5
Benefits:	This action will permit the Village to investigate various methods to provide safe drinking water to its residents.
Impact on At Risk Populations:	Safe and predicable water supplies are foundational to supporting at risk populations.
Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.
Impact on Capabilities:	This action will ensure the Village is able to maintain its supply of potable water.

Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)		☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)		☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium	☐Low
Alternative	Action		Evaluation
	No action		Current problem persists
	Rely on State to resolve problem		State does not have jurisdiction
	Rely on County to resolve problem		County does not have jurisdiction

Action 2026-MonticelloV-02. Floodprone Roads

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. Hammond Street, High Street, and Lakewood Avenue may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.	
Description of the Solution:	The Village will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Village Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Village's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-MonticelloV-03. Sturgis Road Flood Mitigation

Lead Agency:	Highway Department	
Supporting Agencies:	Code Enforcement, Engineering, NYS DEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	There is a wetland area located at Sturgis Road and Wasser Way that floods regularly. The flooding events affect Shortline Bus Station and areas near the Sullivan County Administrative Building; the flooding requires shutting down the roadway.	
Description of the Solution:	The Village will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Mitigation solutions will be evaluated with NYS DEC to ensure the wetlands area is not negatively impacted. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Village Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Village's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-MonticelloV-04. Tree Assessment

Lead Agency:	Highway Department	
Supporting Agencies:	Utility Companies, Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has an established tree trimming program in place; however, there is a multitude of dead ash trees across the Village. It is unknown the safety of trees throughout the Village located on private property. During wind events, ice accumulations, or heavy snow, falling tree branches or trees can damage utilities and private property, and cause road blockages, leading to delays with emergency responses.	
Description of the Solution:	The Village will work with a forester to assess trees on Village -owned properties; the Village will provide contact information for the tree assessors to property owners and utility companies. The Village will implement, review, and enforce municipal policies and programs to prevent trees from threatening lives and impacting power availability/interruption in conjunction with property owners and utility companies.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4	
Benefits:	This action will result in the reduction of risk surrounding power outages by minimizing potential impacts from trees on utility lines.	
Impact on At Risk Populations:	Some at risk population rely on power utilities for everyday care. If power outages are caused by a lack of tree maintenance, lives could potentially be at risk.	
Impact on Future Development:	This action assists in the protection of future development from impacts caused by tree collapses or branch falls as a result of severe storms and severe winter storms.	
Impact on Critical Facilities/Lifelines:	Utility lines provide power to residencies, private businesses, government entities, and various providers. Not maintaining trees, tree limbs, or tree branches may impact the availability of power during severe weather and severe winter weather events.	
Impact on Capabilities:	This action will enhance the existing tree maintenance program in the Village.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Do not contact utility companies	Trees along utility lines may impact power during severe weather and severe winter weather events
	Do not contact property owners	Trees on private residencies may impact power during severe weather and severe winter weather events

Action 2026-MonticelloV-05. Water System Upgrades

Lead Agency:	Water Department	
Supporting Agencies:	Village Board, Engineer	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has noted concerns regarding water system infrastructure, primarily the water pipes throughout the jurisdiction. Infrastructure has been damaged previously from passing weather systems which have exposed weaknesses in the system.	
Description of the Solution:	The Village Engineer will work with the Water Department to review the noted concerns and identify the most cost effective and efficient solution to mitigate risks to the system infrastructure.	
Estimated Cost:	Medium	
Potential Funding Sources:	Village Budget, Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS) Grant Program, Water Pollution Control Grants Program, FEMA HMA, Utility Fees, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Municipal water systems are essential for public health, economic development, and environmental sustainability, providing safe and reliable water to communities. Access to municipal water systems enhances the quality of life for residents by providing a reliable source of water for drinking, cooking, and sanitation, which are essential for daily living. Moreover, these systems support recreational activities and contribute to the aesthetic value of communities through well-maintained water bodies and parks.	
Impact on At Risk Populations:	Implementing any necessary upgrades to the water system will assist in the prevention of waterborne diseases and ensures that the water supplied is free from harmful substances such as lead and bacteria.	
Impact on Future Development:	This action will ensure water systems in the Village are working efficiently and can provide a necessary service to current and future development.	
Impact on Critical Facilities/Lifelines:	This action ensures the water systems in the Village, which are critical pieces of infrastructure and part of the water lifeline, are working efficiently and can provide a necessary service.	
Impact on Capabilities:	This action will keep an existing capability running efficiently.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rectify concerns but do not implement preventative measures	Issues likely to reoccur
	Close pump stations and outsource drinking water	Costly, inefficient, could be a detriment to residents

Action 2026-MonticelloV-06. Bridge Evaluation

Lead Agency:	Parks and Recreation Department	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	De Hoyos Park and Dillon Park have bridges which have been repeatedly exposed to severe storms/winter storms and flooded over with pond/lake overtopping. The bridges are part of a trail within each affiliated park and ponded areas. The bridges should be evaluated for structural integrity due to the repeated exposure.	
Description of the Solution:	The Parks and Recreation Department will evaluate each bridge to determine its current usability. The evaluation will indicate whether the Village will need to replace or retrofit the identified bridges and causeways.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2	
Benefits:	This action will ensure the bridges in the jurisdiction are structurally sound to continue in operation.	
Impact on At Risk Populations:	The pedestrian bridges provide access to recreation trails for all populations.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action will ensure pedestrian routes remain open and accessible to the public for daily use in the parks; the bridges provide a point of access for first responders should anyone need assistance within the park or on the trails.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove bridges	May cause significant traffic problems
	Replace bridges	Cost prohibitive

Action 2026-MonticelloV-07. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Village Board, Ted Stroebele Center Facility Manager; Sewer Department, Water Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Ted Stroebele Center and several water and sewer pump stations do not have back up power to support the entire facilities, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Village Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Village will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Village Budget, Utility Fees, Ted Stroebele Center	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-MonticelloV-08. Floodplain Management Training

Lead Agency:	Code Enforcement		
Supporting Agencies:	Village Board		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire	
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.		
Description of the Solution:	Where feasible, the Village will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.		
Estimated Cost:	Low		
Potential Funding Sources:	Village Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	2, 3, 4		
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.		
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.		
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.		
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.		
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	Hire outside contractors for floodplain administration	Costly	
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role	

Action 2026-MonticelloV-09. Highway Garage

Lead Agency:	Highway Department	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Village's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Village's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.	
Description of the Solution:	The Village will consult with an engineer to retrofit the current highway garage to an upgraded and weather-proofed highway garage facility that has the capacity to store all the vehicles and equipment that should be kept inside to protect their functionality and useful life. The new facility will be retrofitted to withstand intense precipitation and strong winds. The Village will be responsible for ensuring routine maintenance is performed in the garage. The Village will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on Engineer	
Potential Funding Sources:	FEMA HMA, Village Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	The Village will have a proper-sized highway garage that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By constructing a modern, resilient highway garage designed to withstand local hazard risks, the municipality will ensure that these assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Village's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Highway Department's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Table 18-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-MonticelloV-01	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High
2026-MonticelloV-02	Floodprone Roads	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-MonticelloV-03	Sturgis Road Flood Mitigation	1	1	1	1	1	0	1	1	1	0	1	1	1	1	12	High
2026-MonticelloV-04	Tree Assessment	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-MonticelloV-05	Water System Upgrades	0	1	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2026-MonticelloV-06	Bridge Evaluation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-MonticelloV-07	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-MonticelloV-08	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-MonticelloV-09	Highway Garage	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

19. TOWN OF NEVERSINK

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Neversink 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 Neversink, describes who participated in the planning process, assesses Neversink's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

19.1 HAZARD MITIGATION PLANNING TEAM

The Town of Neversink identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 19-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 19-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Chris Mathews, Town Supervisor Address: 273 Main St, Grahamsville, NY 12740 Phone Number: (845) 985-2262, ext. 301 Email: supervisor@townofneversink.org	Name/Title: Preston Kelly, Highway Superintendent Address: 273 Main St, Grahamsville, NY 12740 Phone Number: (845) 985-2281, ext. 401 Email: highway@townofneversink.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Glenn Gabbard, Code Enforcement Officer Address: 273 Main St, Grahamsville, NY 12740 Phone Number: (845) 985-2262, ext. 301 Email: codeenforcement@townofneversink.org	

19.2 COMMUNITY PROFILE

19.2.1 Community Classifications

Table 19-2 summarizes classifications for community programs available to Neversink.

Table 19-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	Not Designated	October 28, 2022
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

19.2.2 Community Profile

Geographical Description

Named after the Neversink River, the Town of Neversink features mountainous terrain, forested lands, and parts of the Catskill Park. In the Town there are two reservoirs that are owned by the City of New York, the Neversink Reservoir and Rondout Reservoir, as well as large forests/farms of maple trees in the Catskill Mountains (Town of Neversink 2025). The town covers a total area of about 86.4 square miles. Most of this area, about 82.9 square miles, is land and the rest is water (Kiddle Encyclopedia 2025).

Government Type and Description

The Town is governed by a Town Board, which is comprised of the Town Supervisor, four council members, and Town Attorney. Each council member is on various committees (Town of Neversink 2025).

Table 19-3 through Table 19-6 note land area, population, and building stock information for the Town of Neversink.

Table 19-3. Total Land Area in the Town of Neversink

Jurisdiction	Total Land Area	
	Acres	Square Miles
Neversink (T)	52,348.8	81.8

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 19-4. Population Estimates in the Town of Neversink

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
3,366	4.3%	3,381	4.3%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 19-5. At Risk Populations in the Town of Neversink

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
680	20.1%	105	3.1%	338	10.0%	662	19.6%	235	7.0%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 19-6. General Building Stock in the Town of Neversink

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
2,292	$1,693,278,156	1,940	$913,963,951	292	$436,167,570	14	$40,323,452	46	$302,823,184

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

19.3 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 Neversink's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

19.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Neversink are shown in Figure 19-1 and Figure 19-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Neversink has significant exposure.

Figure 19-1. Neversink Flood, Wildfire and Dam Inundation Area Map

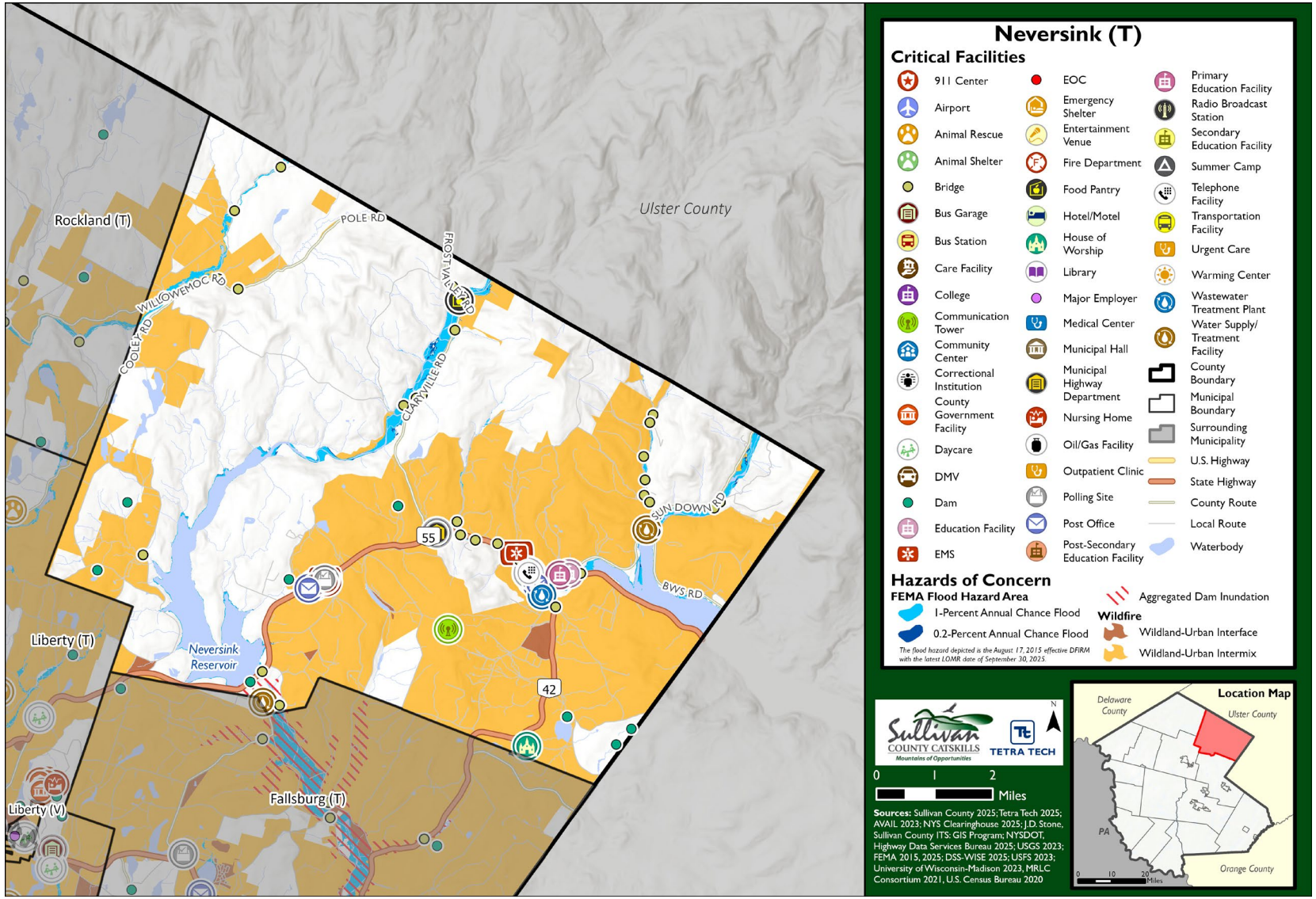
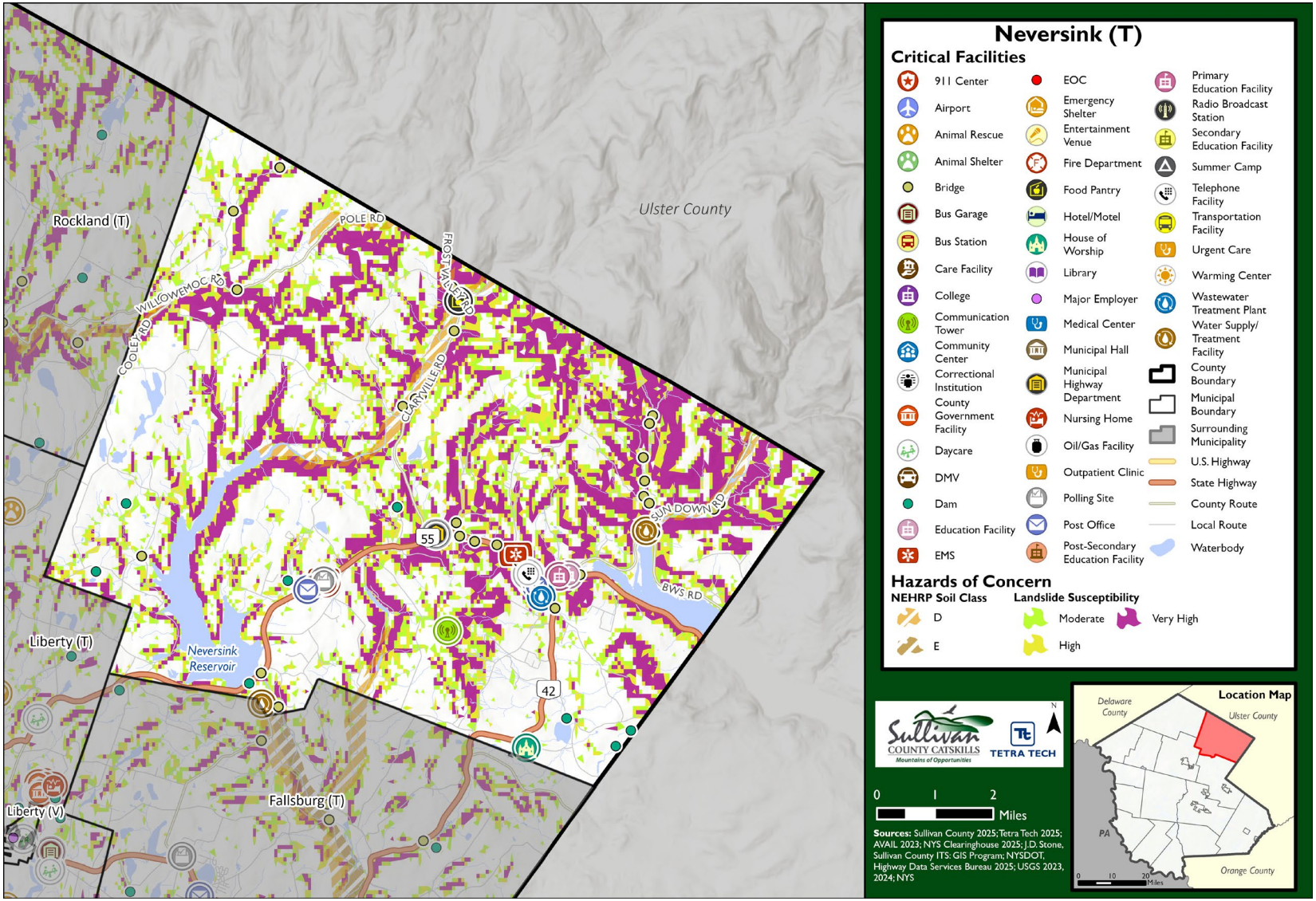


Figure 19-2. Neversink NEHRP Soil and Landslide Area Map



19.3.2 Previous Event History

The history of natural and non-natural hazard events in Neversink is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 19-7 and Table 19-8 provide details on the loss and damage in Neversink during hazard events since the last hazard mitigation plan update.

Table 19-7. Presidential Disaster Declarations History in Neversink

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Neversink
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	No known impacts
August 21-24, 2021	EM-3565-NY	Hurricane Henri	Local flooding, potential tree branches and wires downed.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	Local flooding, potential tree branches and wires downed.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 19-8. Hazard Event History in Neversink

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Neversink
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	Local flooding, potential tree branches and wires downed.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	Local flooding, potential tree branches and wires downed.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	Local flooding, potential tree branches and wires downed.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	Local flooding, potential tree branches and wires downed.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	Local flooding, potential tree branches and wires downed.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	Local flooding, potential tree branches and wires downed.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being	Local flooding, potential tree branches and wires downed.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Neversink
		blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	Local flooding, potential tree branches and wires downed.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	Local flooding, potential tree branches and wires downed.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

19.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 19-9 includes an inventory of critical facilities and infrastructure for the Town of Neversink.

Table 19-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Claryville Reformed Church	Food Pantry	Y	Y	2026-NeversinkT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: 30 bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

19.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Neversink Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 19-10.

Table 19-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	No beaver dam break concerns

Hazard Name	Local Impacts: People, Community Services, Local Economy
Drought	Private wells, Town has not had calls or concerns relating to dry wells. No issues with agriculture.
Earthquake	No known impacts
Flood	Neversink Round Out Stream Program (funded by DEP and works with Soil and Water). They work a lot on flooding, erosion and protecting stream banks. They work on stream and riverbed. Have helped with flood analysis and culvert upsizing.
Landslide	Can happen along steeper slopes, hard to pinpoint a specific area. One area on 55A is vulnerable. Town had a washout that impacted a little league field and Town had to relocate and partnered with DEP for the new community park area.
Pandemic	No known impacts
Severe Storm	The hub where Town Hall is has DEP headquarters, so power in this area is typically restored pretty quickly. Central Hudson is great at communicating with the Town.
Severe Winter Storm	Highway Department is very effective at clearing roadways. County and State are effective at clearing roadways.
Wildfire	Whitehill Fire was more in Ulster County – Town responded and worked in mutual aide. Residents from Town, and other jurisdictions and Counties brought food and supplies for the Fire Department. No infrastructure impacts to the Town.

19.3.5 Vulnerable Community Assets

Representatives from the Town of Neversink Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 19-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 19-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	NYC DEP, Central Hudson, Town Hall and School are all located in a potential flood area.
Area: Concentration of Residences	55/Main Street Gramsville is vulnerable to flooding and homes are located here.	**Local Roads, Highways, Culverts, Bridges**	Main Street and Chestnut Creek run parallel
Municipal Buildings	Town Hall, School are located along 55/Main Street and are vulnerable. Town Hall was impacted by flooding in the early 2000's. New water system for the park and there is no generator. It is on the Town's agenda for implementation in near future.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	2 Churches in Main Street that are vulnerable.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Main Street Gramsville is vulnerable to flooding. Town Park (Fairgrounds).	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	No known impacts Salt Storage is located next to Chestnut Creek, but no known impacts.
Cultural/Historic Buildings/Sites	Small historical district in Gramsville would be vulnerable and they also contain older homes. There is a revolutionary war museum site and is floodprone. Covered bridge to fairgrounds is vulnerable.	**Schools (K-12)**	School is located in floodprone area.
Elder-care Facilities	Not applicable	**Utilities**	Three hydroplants in Town, but no known impacts.
Fire/Police Stations	Fire has backup power. DEP police can help, Town also calls County for police.	**Wastewater Treatment Plants**	Only exist in and around Hamlet Gramsville. Wastewater goes to the City treatment plant and they have an agreement Town shares a septic district with neighboring jurisdiction and Town helps to maintain them. Outside of that everyone is on septic.
Gas Stations, Grocery Stores, Supermarkets	Gramsville has some gas stations and general store. No historic damage	**Water: Drinking Water Resources**	See above
Hospitals	Not applicable	**Other**	Not applicable

19.3.6 Dams

Table 19-12 includes all dams in the Town of Neversink. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 19-12. Dams Located in Neversink

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
162-1306	Neversink Reservoir Dam	Neversink River	NYCDEP Dams West of the Hudson River	Local Government	Water Supply - Primary	High Hazard Dam
162-5464	Old Brodhead Lake Dam	TR-Botsford Brook	Richard I Coombe	Private	Fish and Wildlife Pond, Recreation	Low Hazard Dam
162-5125	Thunder View Farms Dam	TR-Botsford Brook	Richard and Philip Coombe	Private	Fire Protection, Stock, Or Small Farm Pond	Low Hazard Dam
162-0806	Beaver Dam	Red Brook	Beaver Dam Club	Private	Recreation	Low Hazard Dam
162-5120	Craig Weiss Dam	TR-Scott Brook	Craig Weiss	Private	Recreation	Low Hazard Dam
162-1253	Magvel Dam	TR-Neversink Reservoir	John and Pauline Magvel	Private	Recreation	Low Hazard Dam
162-3684	Kurtz Recreational Pond Dam	TR-Neversink Reservoir	John Kurtz	Private	Recreation	Low Hazard Dam
162-3991	Aden Hunting Club Pond Dam	TR-Neversink Reservoir	Aden Hunting Club Inc.	Private	Other	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

Town works with owner well for the High Hazard Dam. No issues or concerns with the smaller ones

19.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 19-13 identifies the preliminary hazard ranking for Neversink, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 19-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Disagree	-	-	Medium
Pandemic	Medium	Disagree	Low	The Town did not incur many impacts from the COVID-19 pandemic and believes its risk to the hazard is low.	Low
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Disagree	High	Given previous occurrences, the Town would like to increase its risk to Wildfire.	High

19.4 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 19-14 through Table 19-17.

19.4.1 Development and Permitting

Table 19-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits
What is your process for tracking building permits?	Town tracks permits with a system
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes

Topic	Comment
Does your community have a buildable land inventory? If yes, please describe.	No

Table 19-15. 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
2020				
Total Permits	5	1	1	7
Permits within SFHA	0	0	0	0
2021				
Total Permits	8	0	0	8
Permits within SFHA	1	0	0	0
2022				
Total Permits	3	3	2	8
Permits within SFHA	0	0	0	0
2023				
Total Permits	13	0	0	13
Permits within SFHA	0	0	0	0
2024				
Total Permits	6	0	0	6
Permits within SFHA	0	0	0	0
2025				
Total Permits	7	0	0	7
Permits within SFHA	0	0	0	0

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

Table 19-16. Recent Major Development and Infrastructure from 2020 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
None Identified					

Table 19-17. 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					

19.5 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 Table 19-1 is responsible for maintaining this information.

19.5.1 NFIP Statistics

Table 19-18 summarizes the NFIP policy and claim statistics for the Town of Neversink.

Table 19-18. Neversink NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360828B
# Policies	0
# Claims (Losses)	11
Total Loss Payments	$313,338.27
# Repetitive Loss Properties	5
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

19.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 19-19.

Table 19-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Hamlet of Gramsville, City field off of Route 55 Claryville has incurred flooding.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Glenn Gabbard, Code Enforcement Officer
What local department is responsible for floodplain management?	The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.

NFIP Topic	Comments
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 19, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	August 17, 2015
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, training, funds
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Would accept training opportunities
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping, NYS DEC
Are there other local ordinances, plans or programs (e.g., site plan review) that support	Yes, site plan review, flood area overlays. The planning board or zoning board consider efforts to reduce flood risk.

NFIP Topic	Comments
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?	

19.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Neversink 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 Neversink to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

19.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 19-20 and Table 19-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 19-20. Regulatory Capabilities in Neversink

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This local law provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code and the State Energy Conservation Construction Code in the Town of Neversink in Sullivan County, New York. This local law is	Local Law #2 of 2009	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		adopted pursuant to section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, the Energy Code other state law, or other section of this local law, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this local law.		
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #1 of 2011	Code Enforcement Officer
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Site plan review by the Planning Board is required for all special uses. The Planning Board shall first determine compliance. No building permit will be issued for any structure until an approved site plan or approved amendment of any such plan has been secured by the applicant and presented to the Code Enforcement Officer. No certificates of occupancy will be issued for any structure or use of land which are identified as a special use unless the structure is completed or the land developed or used in accordance with an approved site plan or approved amendment of any such plan.	Chapter 50 Article VII, 1991	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. To provide for the orderly growth and development of the Town. B. To provide for the health, safety and welfare of Town residents and for the preservation of the environment. C. To minimize foreseeable maintenance and improvements problems, as well as economic burdens associated with the development of land.	Chapter 41, 1989	Planning Board
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	It is the legislative purpose of this Zoning Law to provide for the orderly and desirable development and use of land in accordance with authority granted to towns in §§ 261 through 266 of the New York State Town Law. This chapter is, moreover, intended to promote the public health, safety and welfare by meeting the goals, objectives and recommendations set forth in the Town of Neversink Comprehensive	Chapter 50, 1991	Code Enforcement

Capability Type	In Place in Municipality? Yes or No	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		Plan and effectuate the Comprehensive Plan. Accordingly, in furtherance of such intention, this chapter shall supersede, in part, in their application to the Town of Neversink, the provisions of the aforesaid sections of the New York State Town Law.		

Planning Capabilities

Table 19-21. Planning Capabilities in Neversink

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	Element of Comprehensive Plan	Master Plan, 1991	Planning Board
Business / Downtown Revitalization / Development Plan	Yes	Element of Comprehensive Plan	Master Plan, 1991	Planning Board
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The goals of this Plan are to preserve and protect natural resources within the Town, to avoid conflict between incompatible land uses, and to establish policies and guidelines for the future development of the Town.	Master Plan, 1991	Planning Board
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The development of this plan included an analysis of potential hazards that could affect the Town and an assessment of the existing capabilities to deal with potential hazards.	Comprehensive Emergency Management Plan, 2009	Town Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens in the event of an emergency of disaster.	Emergency Response Plan	Town Administration

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Floodplain Management or Watershed Plan	Yes	The Neversink Water Management Plan is a non-regulatory guidance document that lays out a holistic multi-jurisdictional planning approach necessary to ensure the sound future management and conservation of the Neversink watershed. This plan acts as a tool for stakeholders to develop and work towards a shared vision and common goals that will benefit the future of the watershed.	Neversink Water Management Plan, 2024	Division of Planning, Community Development and Environmental Management
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	Element of Comprehensive Plan	Master Plan, 1991	Planning Board
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	Yes	Element of Comprehensive Plan	Master Plan, 1991	Planning Board

Capability Type	In Place in Municipality? Yes or No	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Watershed Management of Protection Plan	Yes	The Neversink Water Management Plan is a non-regulatory guidance document that lays out a holistic multi-jurisdictional planning approach necessary to ensure the sound future management and conservation of the Neversink watershed. This plan acts as a tool for stakeholders to develop and work towards a shared vision and common goals that will benefit the future of the watershed.	Neversink Water Management Plan, 2024	Division of Planning, Community Development and Environmental Management
Other	No	-	-	-

19.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 19-22 details the available administrative and technical capabilities of the Town.

Table 19-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Glen Smith – Contracted
Construction/Building/Code Enforcement Department	Yes	The Building Department/Code Enforcement Officer is responsible for the following: • Enforcement of the codes & regulations of the Town relating to building, zoning and other real property uses. • Enforces the unsafe building laws of the town. • Issues reviews of building plans. • Assures compliance with codes. • Issues building permits and certificates of occupancy. • Assists in filing of documents with the Planning Board & Zoning Board.
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	DEP Sheriff's Department and local Fire and Police
Environmental Commission/Specialist	Yes	Neversink Round Out Stream Program
Grant Writer	No	-
Maintenance Programs to Reduce Risk	Yes	Highway Department
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Financial

Capability Type	In Place in Municipality? Yes or No	Comments
Open Space Board/Committee	Yes	OSI
Personnel skilled or trained in website development	No	-
Planning Board	Yes	The Planning Board accepts and processes land use applications for subdivision of land, both residential and commercial and site plan review for special use applications.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	Yes	Contracted
Planners or engineers with an understanding of natural hazards	Yes	Contracted
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Professionals trained in conducting damage assessments	Yes	Code Enforcement and Contracted
Public Works/Highway Department	Yes	The Highway Superintendent is responsible for the construction, maintenance, repair, plowing and sanding of the town roads. The Highway Department also is responsible for adding and abandoning roads. They operate highly complex road building equipment and carry out state and local road building programs.
Resilience Officer	Yes	Neversink Round Out Stream Program
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	Yes	Contracted
Zoning Board of Appeals	Yes	The Zoning Board is responsible for approval of interpretation of the zoning law and the approval of area and use variances. The Board acts in a quasi-judicial capacity. It will give notice and hear evidence of the need for a variance. The law fixes certain criteria which the Board must consider before it can grant a variance
Other	No	-

19.6.3 Fiscal Capability

Table 19-23 summarizes financial resources available to Neversink.

Table 19-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	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 (non-FEMA) funding programs	No
FEMA funding programs	Yes
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No, but works with OSI in Catskill Park
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

19.6.4 Education and Outreach Capability

Table 19-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 19-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, the Townsman
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department
Hazard mitigation information available on your website	Yes
Local News	Yes, the paper
Natural disaster/safety programs in place for schools	Yes, Fire Drills and Evacuation Drills
Organizations that conduct outreach to at risk populations and underserved populations	Yes, the Lions, local churches and County
Public information officer or communications office	Yes

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Social media for hazard mitigation education and outreach	Yes, Facebook
Warning systems for hazard events	Yes, Fire Department alarms

19.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 19-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 19-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

19.7 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.

19.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Neversink-1—Neversink - Communication Tower Back Generation	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snowstorm
Lead Agency / Department	Neversink Town Supervisor's Office
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	There are two communication towers providing services for the area and neither have emergency back-up systems.
Summary of Solution (Project)	To reduce loss of life and to maintain effective operations during hazard related emergencies, Neversink will install backup power generation at one of its communications towers.
Action Category	-
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	There is a cell tower that has three providers, there is a generator, but the generator is not fully operable. The generator was most likely able to handle when it was one provider, but not with three.
If discontinue, explain why	Not applicable

T. Neversink-2—Neversink - Critical Facilities Backup Generator	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snowstorm
Lead Agency / Department	Neversink Town Supervisors Office
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	The Town Hall and Tri-Valley Central School do not have backup power generators.
Summary of Solution (Project)	Reduce long-term risk of all hazards for existing assets and future development by acquiring a back-up generator for the Town Hall and Tri-Valley Central School in the event of a power outage.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Town Hall does not have a generator, unsure about the school.
If discontinue, explain why	Not applicable

19.7.2 Additional Mitigation Efforts

The Town of Neversink did not identify any additional mitigation efforts completed since the last HMP.

19.7.3 Identified Issues

The Town of Neversink has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has five repetitive loss properties, but other properties may be impacted by flooding as well.
- The Claryville Reformed Church is used as a Town Food Pantry and is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- Neversink Reservoir Dam is a Class I High Hazard Dam that is located on the Neversink Reservoir and Neversink River. The dam is owned by the New York City Department of Environmental Protection. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including Route 55, Route 42, Route 52, Route 17, several County and local roads, and bridges, as per the current EAP, last updated in April 2023. Surrounding, or potentially impacted, jurisdictions should be included or kept aware of any changes to the dam's EAP. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- Town Hall (273 Main St, Grahamsville, NY 12740) is vulnerable to the flood hazard and is located in very close proximity to Chestnut Creek. The property has been impacted by flooding conditions. The Town purchased approximately an acre of land on higher grounds at an undisclosed location in the Town to relocate the Town Hall.
- Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Route 55A have been identified as being at risk of landslides and could result in loss of the roadway; both roads have experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.
- Flood risk in the Town is primarily along Chestnut Creek and its tributaries, Red Brook, and the Rondout Reservoir, with a focus on Route 55. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include:
  - Main Street (Route 55) in the hamlet of Grahamsville is susceptible to flooding. Several critical facilities are located on this road including the Town Hall, Fairgrounds, Tri-Valley Secondary School, Grahamsville Reformed Church, and the Quaker Meeting House; residential and commercial properties also stretch along Route 55.
  - Small historical district in Grahamsville would be vulnerable and contains older, historic homes; this district also includes the Time And The Valleys Museum, a revolutionary war museum site.
- There is a new water system at Neversink Park; however, the system does not have a generator. Generators play a crucial role in water systems by providing backup power during outages, ensuring continuous operations, and safeguarding the water supply. They help prevent water contamination risks, maintain water pressure, and prevent operational costs from increasing due to power failures.

- The covered bridge to fairgrounds (6598 Route 55) is vulnerable to the flood hazard. The bridge crosses over Chestnut Creek and provides a means of egress into the fairgrounds. The Davies Lane bridge, the second means of egress to the Fairgrounds (but is also a local road), is in satisfactory condition, but is closer in proximity to the Creek.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.
- Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. Wooded and forested areas in the Town are vulnerable to the wildfire hazard.
- Critical facilities require backup power to ensure continuity of operations. The Town Hall and Tri-Valley Central School and two communication towers providing services for the area do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.

19.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Neversink participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Neversink 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.

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 19-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-NeversinkT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has five repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-NeversinkT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Claryville Reformed Church is used as a Town Food Pantry and is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Town.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-NeversinkT-03. Neversink Reservoir Dam Rehab

Lead Agency:	Dam Owners (New York City Department of Environmental Protection)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer, Town of Fallsburg, Town of Thompson, Town of Forestburgh	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Neversink Reservoir Dam is a Class I High Hazard Dam that is located on the Neversink Reservoir and Neversink River. The dam is owned by the New York City Department of Environmental Protection. Failure of the dam could result in inundation of residential and commercial properties, woodland areas, and transportation routes including Route 55, Route 42, Route 52, Route 17, several County and local roads, and bridges, as per the current EAP, last updated in April 2023. Surrounding, or potentially impacted, jurisdictions should be included or kept aware of any changes to the dam's EAP. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Neversink Reservoir Dam and encourage the dam owners to keep the dam's EAP current. Surrounding, or potentially impacted, jurisdictions should be included or kept aware of any changes to the dam's EAP. These jurisdictions include, but are not limited to: • Town of Fallsburg • Town of Thompson • Town of Forestburgh If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	Action	Evaluation
	No action	Current problem persists

	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.
	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-NeversinkT-04. Relocate Town Hall

Lead Agency:	Engineering	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Town Hall (273 Main St, Grahamsville, NY 12740) is vulnerable to the flood hazard and is located in very close proximity to Chestnut Creek. The property has been impacted by flooding conditions. The Town purchased approximately an acre of land on higher grounds at an undisclosed location in the Town to relocate the Town Hall.	
Description of the Solution:	The Town will conduct a BCA to evaluate the cost effectiveness of relocating the Town Hall versus other flood mitigation measures, including structural elevation. If the BCA is conducive, the Town may consider developing a grant application for the relocation of the Town Hall. The Town may also consider constructing a new facility on the purchased property.	
Estimated Cost:	High	
Potential Funding Sources:	Town Budget, FEMA HMA	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	Ensures continuity of operations at the Town Hall	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for the Town to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will remove a critical facility from the flood hazard area, 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.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate structure	Facility remains in flood hazard area, but with less risk. May still be vulnerable to the flood hazard.
	Move Town offices into an existing structure	May require Town to purchase or rent an additional building

Action 2026-NeversinkT-05. Landslide Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. Route 55A has been identified as being at risk of landslides and could result in loss of the roadway; the road has experienced washouts. Landslides may be able to be mitigated by cutting banks to prevent erosion.	
Description of the Solution:	The Town Engineer will complete an assessment to identify an appropriate, cost-effective method to mitigation landslide risk along Route 55A. Possible mitigation measures include: • Construction of retaining walls, soil nailing, ground anchor walls • Install horizontal drains to reduce soil saturation • Cut banks along water ways to prevent oversaturated soils from falling • Install netting	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by landslide along Route 55A. Keeping the roadway open to traffic also permits at risk populations to travel to critical appointments.	
Impact on Future Development:	Future development in the impacted area will be less likely to be impacted by landslides.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct roadway outside of hazard area	Not feasible
	Close road and reroute traffic around hazard area	Not feasible, would cause confusion amongst travelers

Action 2026-NeversinkT-06. Route 55 Flood Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Town is primarily along Chestnut Creek and its tributaries, Red Brook, and the Rondout Reservoir, with a focus on Route 55. Floods from these water ways may stem from heavy rains, snowmelt, or ice jams. Impacted areas include: • Main Street (Route 55) in the hamlet of Grahamsville is susceptible to flooding. Several critical facilities are located on this road including the Town Hall, Fairgrounds, Tri-Valley Secondary School, Grahamsville Reformed Church, and the Quaker Meeting House; residential and commercial properties also stretch along Route 55. • Small historical district in Grahamsville would be vulnerable and contains older, historic homes; this district also includes the Time And The Valleys Museum, a revolutionary war museum site.	
Description of the Solution:	The Town Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding Chestnut Creek and its tributaries, Red Brook, and the Rondout Reservoir. The Town may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	Neversink Round Out Stream Program, FEMA HMA, Town Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	Stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-NeversinkT-07. Water System Generator

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Parks and Recreation Department, Water Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	There is a new water system at Neversink Park; however, the system does not have a generator. Generators play a crucial role in water systems by providing backup power during outages, ensuring continuous operations, and safeguarding the water supply. They help prevent water contamination risks, maintain water pressure, and prevent operational costs from increasing due to power failures.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the new water system at Neversink Park. The Town will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility manager. The installation of the back-up emergency generators will ensure continuity of operations for the water system and its operations. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-NeversinkT-08. Bridge Evaluation

Lead Agency:	Engineering	
Supporting Agencies:	Parks and Recreation Department, Town Board, Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The covered bridge to fairgrounds (6598 Route 55) is vulnerable to the flood hazard. The bridge crosses over Chestnut Creek and provides a means of egress into the fairgrounds. The Davies Lane bridge, the second means of egress to the Fairgrounds (but is also a local road), is in satisfactory condition, but is closer in proximity to the Creek.	
Description of the Solution:	Engineering, in conjunction with the Highway and Parsk and Recreation Departments (as needed) will evaluate each bridge to determine its current usability. The evaluation will indicate whether the Town will need to replace or retrofit the identified bridges and causeways.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2	
Benefits:	This action will ensure the bridges in the jurisdiction are structurally sound to continue in operation.	
Impact on At Risk Populations:	The bridges provide access to recreational for all populations.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action will ensure routes remain open and accessible to the public for use; the bridges provide a point of access for first responders should anyone need assistance.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove bridges	May cause significant traffic problems
	Replace bridges	Cost prohibitive

Action 2026-NeversinkT-09. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Town will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2026-NeversinkT-10. Wildfire Mitigation

Lead Agency:	Neversink Fire Department	
Supporting Agencies:	NYS DEC (Forest Rangers Division), Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☒Wildfire
Description of the Problem:	Dried trees, ground cover, and other vegetation can act as fuel for wildfire, causing conditions to exacerbate, placing both the natural and built environments in the Town at risk. Wooded and forested areas in the Town are vulnerable to the wildfire hazard.	
Description of the Solution:	The Town and the Neversink Fire Department will coordinate with NYS DEC (Forest Rangers Division) to reduce fuel load throughout high-risk areas of the Town, including a strong focus in the where the woodland and forested lands meet the built environment.	
Estimated Cost:	Low	
Potential Funding Sources:	NYS DEC, Town Budget, Neversink Fire Department	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2	
Benefits:	The removal of fire fuel can drastically reduce the risk of wildfires. Removing the fire fuel in WUI areas can further protect persons and property from potential impacts. Added breaks will stop or slow fire spread by removing vegetative fuel.	
Impact on At Risk Populations:	The removal of fire fuel and placement of breaks can save structures and reduce risk to persons and their property from the wildfire hazard.	
Impact on Future Development:	Future development in or around the Town will have a decreased risk of wildfire.	
Impact on Critical Facilities/Lifelines:	Critical facilities will be better protected and able to operate more proficiently by lessening the exposure to wildfire impacts.	
Impact on Capabilities:	This will increase the wildfire response and mitigation capabilities of the Town.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Town performs all fuel reduction measures	If the Town performs measures on State owned land they may be fined
	Reduce fuel load without placing breaks	Fire fuel will fall to the ground again, but break areas would remain in place in further reduce wildfire risk

Action 2026-NeversinkT-11. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Board, Tri-Valley Central School, Communication Utilities	
Hazards of Concern:	☐Dam Failure ☐Drought ☒Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Town Hall, Tri-Valley Central School, and two communication towers providing services for the area do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Town will work with facility managers to purchase and install the generators and all necessary electrical hookup components in conjunction. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget, School Budget, Communication Utilities	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Table 19-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-NeversinkT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-NeversinkT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-NeversinkT-03	Neversink Reservoir Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-NeversinkT-04	Relocate Town Hall	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-NeversinkT-05	Landslide Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-NeversinkT-06	Route 55 Flood Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-NeversinkT-07	Water System Generator	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-NeversinkT-08	Bridge Evaluation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-NeversinkT-09	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2026-NeversinkT-10	Wildfire Mitigation	1	1	1	1	1	1	1	1	1	0	1	1	0	1	12	High
2026-NeversinkT-11	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

20. TOWN OF ROCKLAND

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Rockland 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 Rockland, describes who participated in the planning process, assesses Rockland's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

20.1 HAZARD MITIGATION PLANNING TEAM

The Town of Rockland identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 20-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 20-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Robert Eggleton, Town Supervisor Address: 95 Main St, Livingston Manor, NY 12758-5145 Phone Number: (845) 439-4399, ext. 102 Email: Supervisor@townofrocklandny.gov	Name/Title: Roger Decker, Highway Superintendent Address: 95 Main St, Livingston Manor, NY 12758-5145 Phone Number: (845) 439-5110 Email: r.decker@townofrocklandny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: Glenn Gabbard, Code Enforcement Officer Address: 95 Main St, Livingston Manor, NY 12758-5145 Phone Number: (845) 439-4399, ext. 106 Email: codeenforcement@townofrocklandny.gov	

20.2 COMMUNITY PROFILE

20.2.1 Community Classifications

Table 20-2 summarizes classifications for community programs available to Rockland.

Table 20-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	Yes	Registered	September 28, 2021

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	Not Designated	October 28, 2022
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

20.2.2 Community Profile

Geographical Description

The Town of Rockland, the “Trout Town, USA,” is home to Mongaup State Park, Beaverkill State Park, America’s top trout streams, and plenty of other water sources. It is located about two hours away from New York City and easily accessible from New York State Route 17 (Town of Rockland 2025).

Government Type and Description

The Town is governed by a Town Board, which is comprised of the Town Supervisor, Deputy Supervisor/council member, and three council members (Town of Rockland 2025).

Table 20-3 through Table 20-6 note land area, population, and building stock information for the Town of Rockland.

Table 20-3. Total Land Area in the Town of Rockland

Jurisdiction	Total Land Area	
	Acres	Square Miles
Rockland (T)	59,587.4	93.1

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 20-4. Population Estimates in the Town of Rockland

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
3,290	4.2%	3,323	4.2%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 20-5. At Risk Populations in the Town of Rockland

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
914	27.5%	112	3.4%	133	4.0%	655	19.7%	535	16.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 20-6. General Building Stock in the Town of Rockland

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
2,659	$2,106,441,850	2,279	$1,205,600,222	306	$577,840,799	20	$113,370,240	54	$209,630,590

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

20.3 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 Rockland's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

20.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within Rockland are shown in Figure 20-1 and Figure 20-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Rockland has significant exposure.

Figure 20-1. Rockland Flood, Wildfire and Dam Inundation Area Map

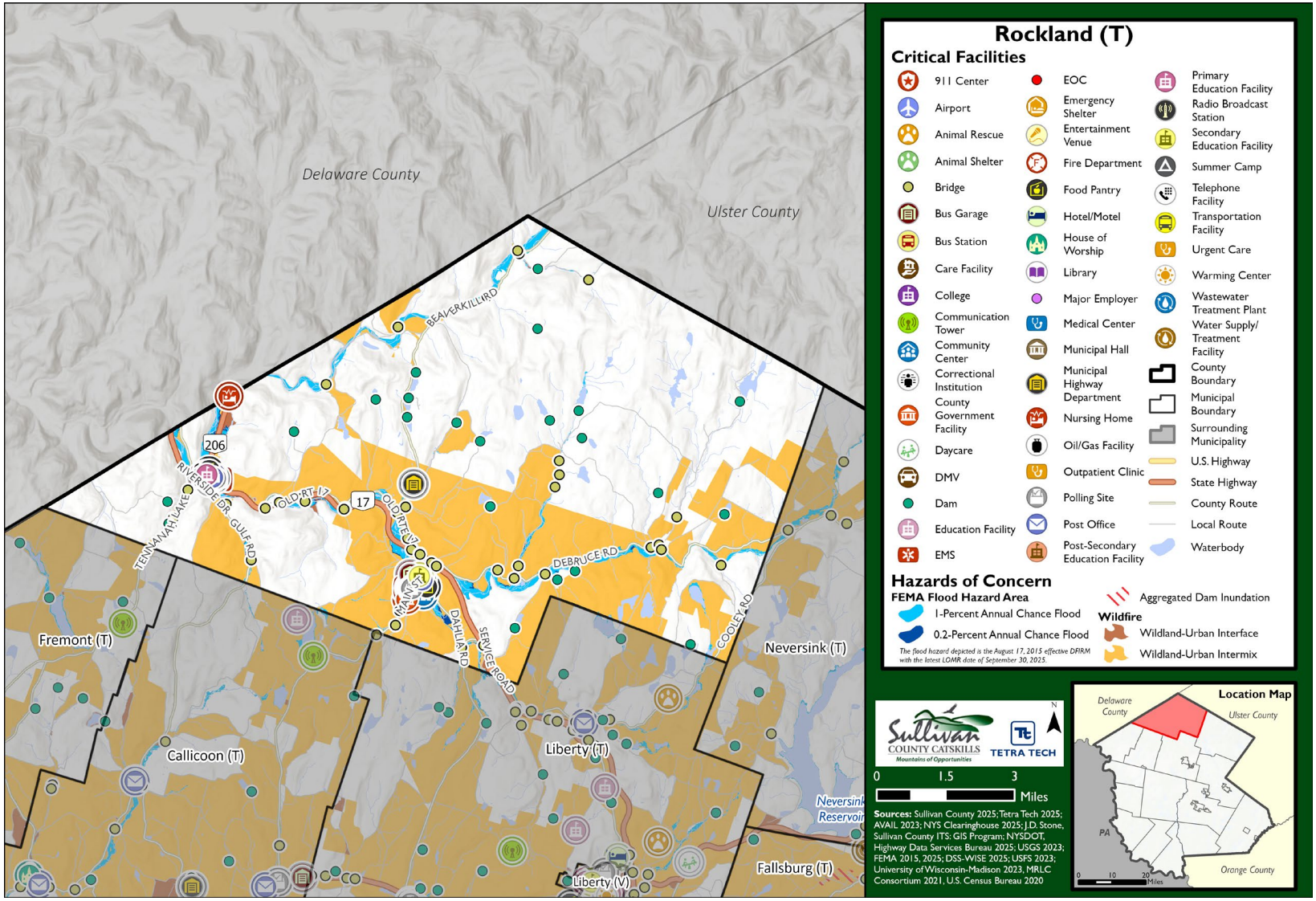
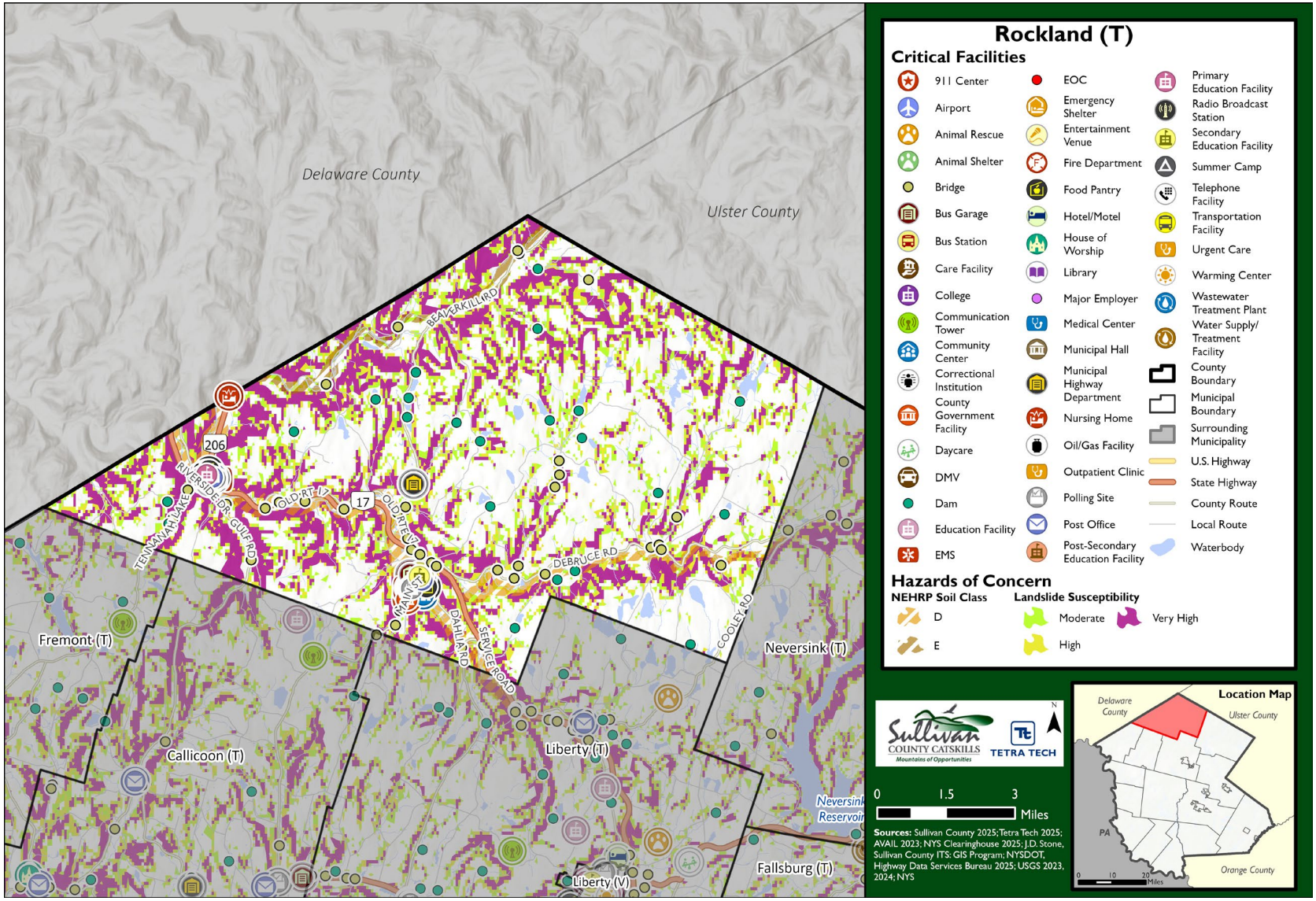


Figure 20-2. Rockland NEHRP Soil and Landslide Area Map



20.3.2 Previous Event History

The history of natural and non-natural hazard events in Rockland is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 20-7 and Table 20-8 provide details on the loss and damage in Rockland during hazard events since the last hazard mitigation plan update.

Table 20-7. Presidential Disaster Declarations History in Rockland

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Rockland
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Town abided by masking mandates, social distancing and work from home orders.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 20-8. Hazard Event History in Rockland

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Rockland
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Rockland
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town reported damage to the courthouse roof, and several people reported home damage. The Town also reported road damage and washouts.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town incurred areas of localized flooding and there were potential tree branches and wires downed.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

20.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 20-9 includes an inventory of critical facilities and infrastructure for the Town of Rockland.

Table 20-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Livingston Manor Post Office	Post Office	N	Y	2026-RocklandT-02	-
Livingston Manor Rotary Park	Community Center	Y	Y	2026-RocklandT-02	-
Rolling V - Livingston Manor	Bus Garage	Y	Y	2026-RocklandT-02	-
Roscoe Community Center	Polling Site	Y	Y	2026-RocklandT-02	-
Roscoe Free Library	Library	Y	Y	2026-RocklandT-02	-
Roscoe Post Office	Post Office	Y	Y	2026-RocklandT-02	-

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Roscoe-Rockland Volunteer Ambulance Corp	EMS	Y	Y	2026-RocklandT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: One dam and 42 bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

20.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Rockland Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 20-10.

Table 20-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Town reported beaver dam concerns relating to flooding along roadways. One beaver dam break occurred in the neighboring Town along Route 206 which led to two lives lost, as well as home and infrastructure damage.
Drought	There are two municipal water systems in the Town, and the Town is looking at drilling a new well in the Hamlet of Roscoe, and the Town has applied for funding, but was not selected. The Town has a grant to purchase and install all new water meters. The Town has had to issue conserve water warnings.
Earthquake	No known impacts
Flood	Crop loss in relation to Beaver Kill River flooding was reported. The Town has two hamlets, and both tend to be flood prone including: Hamlet of Roscoe: Willowemoc River, Beaver Kill Hamlet of Livingston Manor: Little Beaver Kill River, Willowemoc River, Cattail Creek (this area tends to incur more flooding than Roscoe). There is a big issue at the location where all the bodies of water converge.
Landslide	Along the Beaver Kill Road there is a steep slope that leads to washouts and barriers, and stabilization measures were put in. Cornell Cooperative Extension helped fund a project to stabilize the bank. Whisky Run, Beaver Kill Valley and Tuddle Hill banks are slowly eroding and contributing to some washouts along roadways in the area. High Street goes up to water tower and the ties are deteriorating, making it a part of a large project of nearly 20 feet high.
Pandemic	No known impacts
Severe Storm	Power is restored within hours for the most part.
Severe Winter Storm	The Highway Department is effective at clearing roadways. Sometimes the State is delayed at clearing roadways.
Wildfire	No known impacts

20.3.5 Vulnerable Community Assets

Representatives from the Town of Rockland Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 20-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 20-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	Crop loss in relation to Beaver Kill River flooding was reported.	**Area: Concentration of Local Businesses, Major Employers**	There is a grocery store downtown that is flood prone and has incurred damages. Most of the businesses in Roscoe and Livingston Manor are flood prone.
Area: Concentration of Residences	Cottage Street has a mobile home park where there is only one way out and it is flood prone.	**Local Roads, Highways, Culverts, Bridges**	Trout Unlimited assists the Town in funding culvert upsizing with fish friendly culverts. There is a bridge located on Liberty that is an old train trussell and it is privately owned.
Municipal Buildings	Town Hall, Town Barn, Ambulance, and two High Schools do not have backup power.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	Presbyterian Church in Roscoe is flood prone.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Riverside Park incurs flooding frequently. The Community Center, which could be used as a shelter in downtown Roscoe, does not have backup power but is also flood prone. Flooding impacts fish life throughout the Town and fishing is a huge economic driver.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	A lot of trucks have to sit outside due to the undersized Highway Garage.
Cultural/Historic Buildings/Sites	Not applicable	**Schools (K-12)**	Two high schools do not have backup power.
Elder-care Facilities	No known impacts	**Utilities**	Part of the sewer plant is located in an area that has an old berm.
Fire/Police Stations	Fire Department does not have backup in Roscoe.	**Wastewater Treatment Plants**	Part of the sewer plant is located in an area that has an old berm.
Gas Stations, Grocery Stores, Supermarkets	Most of the businesses in Roscoe and Livingston Manor are flood prone.	**Water: Drinking Water Resources**	There are two municipal water systems in the Town, and the Town is looking at drilling a new well in the Hamlet of Roscoe, and the Town has applied for funding,

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
			but was not selected. The Town has a grant to purchase and install all new water meters. The Town has had to issue conserve water warnings.
Hospitals	Not applicable	**Other**	Not applicable

20.3.6 Dams

Table 20-12 includes all dams in the Town of Rockland. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 20-12. Dams Located in Rockland

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-4471	Edgewood Lake Upper Dam	TR-Beaver Kill	DT Mance & Associates	Private	Recreation	Intermediate Hazard Dam
147-4472	Edgewood Lake Lower Dam	TR-Beaver Kill	DT Mance & Associates	Private	Recreation	Intermediate Hazard Dam
147-0418	Orchard Lake Dam	Sprague Brook	Theodore Roosevelt Council Boy Scouts of America	Private	Recreation	Intermediate Hazard Dam
147-4470	Mud Pond Dam	TR-Willowemoc Creek	Alan Gerry	Private	Recreation	Low Hazard Dam
147-4962	Calvin Danzig Pond Dam	TR-Willowemoc Creek	Calvin Danzig	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
147-4469	Lake Uncas Dam	TR-Sprague Brook	Monastery our Lady of Beatitude	Private	Recreation	Low Hazard Dam
147-4209	Waneta Lake Dam	TR-Beaver Kill	NYS DEC Division of Fish and Wildlife	State	Recreation	Low Hazard Dam
162-4601	Mongaup Pond Dam	Mongaup Creek	NYS DEC	State	Recreation	Low Hazard Dam
147-4208	Parkston Pond Dam	Willowemoc Creek	Mosdos Bnei Zion	Private	Recreation	Low Hazard Dam
147-4234	Lincoln Farms Dam	Bascom Brook	Timber Lake Camp West	Private	Fire Protection, Stock, Or Small Farm Pond, Recreation	Low Hazard Dam
147-4226	Trojan Lake Dam	TR-Willowemoc Creek	Spartan Hills Inc.	Private	Recreation	Low Hazard Dam
147-0417	Knickerbocker Pond Dam	TR- Sprague Brook	Gene Klochoff	Private	Recreation	Low Hazard Dam
147-3785	Herbert Heaton Pond Dam	TR-Willowemoc Creek	Bott Nisha and Nikhil	Private	Recreation	Low Hazard Dam
147-5011	Quick Pond Dam	Gee Brook	Open Space Institute	Private	Other	Low Hazard Dam
147-5304	Blume Pond Dam	Elm Hollow Brook	Chad Blume	Private	Recreation	Low Hazard Dam
147-0406	Roscoe Reservoir Dam	Abe Wood Creek	Roscoe Water Company	Local Government	Water Supply - Primary	Low Hazard Dam
147-4207	The Punchbowl Dam	TR-Abe Wood Brook	Jorge Kuri	Private	Recreation	Low Hazard Dam
147-4211	Nimrod Lake Dam	TR-Little Beaver Kill	Terrance Bryons	Private	Recreation	Intermediate Hazard Dam
162-5667	Thomas Cole Dam	TR-Willowemoc Creek	Robert Rubin, Edward Burstein	Private	Other	Low Hazard Dam
162-4141	Victor Diescher Pond Dam	TR-Willowemoc Creek	Victor Diescher	-	Recreation	Hazard Classification Not Assigned
147-5059	Berlin Farm Dam	Shin Creek	Estate of Irving Berlin	Private	Other	Hazard Classification Not Assigned

Notable comments regarding dams in the jurisdiction:

The Town has some concerns with the Roscoe Reservoir Dam (last inspected in 1998 with no condition rating assigned) and the Mud Pond Dam (last inspected in 2013 with no condition rating assigned.

Nimrod Lake Dam is of concern because a lot of flooding comes from this area, and the dam was last inspected in July of 2025 and was assigned an unsound rating with more analysis needed.

20.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 20-13 identifies the preliminary hazard ranking for Rockland, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 20-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Disagree	Medium	Issues and concerns with bank stabilization	Medium
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Agree	-	-	Medium
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

20.4 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 20-14 through Table 20-17.

20.4.1 Development and Permitting

Table 20-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Town issues permits
What is your process for tracking building permits?	Software used
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	Some buildable land inventory, most of the land available is in the floodprone.

Table 20-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 20-16. Recent Major Development and Infrastructure from 2020 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
The jurisdiction did not identify any recent major development and infrastructure from 2020 to present					

Table 20-17. 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
The jurisdiction did not identify any known or anticipated major development and infrastructure in the next five years					

20.5 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 Table 20-1 is responsible for maintaining this information.

20.5.1 NFIP Statistics

Table 20-18 summarizes the NFIP policy and claim statistics for the Town of Rockland.

Table 20-18. Rockland NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360829B
# Policies	7
# Claims (Losses)	268
Total Loss Payments	$5,093,382.87
# Repetitive Loss Properties	85
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

20.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 20-19.

Table 20-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Roscoe: Willowemoc River, Beaver Kill Livingston Manor: Little Beaver Kill River, Willowemoc River, Cattail Creek (this area tends to get more flooding than Roscoe). Issue of when all the bodies of water come together.

NFIP Topic	Comments
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Glenn Gabbard and is trained well
What local department is responsible for floodplain management?	The Code Enforcement Officer of the Town of Rockland is hereby appointed Local Administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2010
What is the date that your flood damage prevention ordinance was last amended?	December 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	August 17, 2015
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit review, inspections
What are the barriers to running an effective NFIP program in your community, if any?	Staffing, Funding and Training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	No
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time

NFIP Topic	Comments
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping, NYS DEC
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, they consider flood risk and height restrictions. Site plan review.

20.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Rockland 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 Rockland to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

20.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 20-20 and Table 20-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 20-20. Regulatory Capabilities in Rockland

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, the Energy Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Chapter 60 Building Construction, 2023	Planning Board and Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens within the Town of Rockland in the event of a disaster.	Chapter 10 Emergency Preparedness	Town Supervisor
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and	Local Law #1 of 2010	Code Enforcement Officer

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		F. Qualify for and maintain participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	An applicant for a special use permit shall submit a conceptual site plan for review and advice by the Planning Board. Such a conceptual site plan shall provide locations and dimensions of the proposed use in relation to the property boundaries and adjacent uses. It shall also indicate all accesses, rights-of-way and improvements both existing and proposed and any site features which could have a bearing on the project, including the general topography and existing ground cover.	Chapter 185, Article IV	Planning Board and Code Enforcement
Stormwater Management Code	Yes	Every application for a new or substantially modified special use shall include provisions for stormwater management as required by the DEC and the standards of this section. Additionally, should any person intend to make land changes by grading, filling, excavating or the removal or destruction of the natural topsoil or vegetative covering thereon in accordance with a site plan submitted to the Town, the same shall only be approved and accomplished after the developer has submitted to the Town a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the performance standards of the New York State Stormwater Design Manual published by the DEC.	Chapter 185-30, 2017	Town Administration

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Town in accordance with the Town of Rockland Comprehensive Plan. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Town residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Conserving the Town's natural resources and protecting its attractive environment so as to maintain property values and otherwise provide for the general welfare of residents of the Town of Rockland.	Chapter 154, 2002	Planning Board and Code Enforcement
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	This chapter is intended to implement the recommendations and fulfill the goals and objectives of the Town of Rockland Comprehensive Plan, as amended. Specific purposes of this chapter include those contained in § 263 of the Town Law.	Chapter 185, 2002	Planning Board and Code Enforcement

Planning Capabilities

Table 20-21. Planning Capabilities in Rockland

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	Yes	Element of Comprehensive Plan	Comprehensive Plan, 2025	Planning Board and Supervisor
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	This plan provides a framework for the planning for the Town's future over the next 5 year planning period, especially regarding decisions that will guide future growth. It also seeks to encompass a long-range planning horizon by peering into the future for the next 15 year and beyond.	Comprehensive Plan, 2025	Planning Board and Supervisor
Continuity of Operations Plan	Yes	This Comprehensive Emergency Management Plan results from recognition by	Comprehensive Emergency	Town Administration

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		Town, County and State government that an overall plan is needed to improve the Town's ability to manage emergency and disaster situations. This Plan was prepared by Town officials working as a team, using a planning process recommended by the New York State Emergency Management Office (SEMO)	Management plan, 2010	
Capital Improvement Plan	Yes	Specific projects are being worked on in the Town. Most pertains to water and sewer. Building Reserve Fund too.	Annual Budget	Town Administration
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	This Comprehensive Emergency Management Plan results from recognition by Town, County and State government that an overall plan is needed to improve the Town's ability to manage emergency and disaster situations. This Plan was prepared by Town officials working as a team, using a planning process recommended by the New York State Emergency Management Office (SEMO)	Comprehensive Emergency Management plan, 2010	Town Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The plan includes the identification of essential positions, facilitation of remote work for non-essential positions, provision of personal protective equipment, and protocols for supporting contact tracing.	Emergency Response Plan	Emergency Services
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	Element of Comprehensive Plan	Comprehensive Plan, 2025	Planning Board and Supervisor
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	No	-	-	-
Sheltering Plan	No	-	-	-

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	Yes	Element of Comprehensive Plan	Comprehensive Plan, 2025	Planning Board and Supervisor
Watershed Management of Protection Plan	No	-	-	-
Other	Yes	New York Resilient grant through DEC is doing a study on all streams and creeks in the Town and will be completed at the end of 2026.	-	Town Administration

20.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 20-22 details the available administrative and technical capabilities of the Town.

Table 20-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality? Yes or No	Comments
Civil Engineer	Yes	Contracted out
Construction/Building/Code Enforcement Department	Yes	Chief Building Official
Economic Development Commission/Committee	Yes	Pro-housing committee
Emergency Management/Public Safety Department	Yes	Beaverkill Valley, Livingston Manor, and Roscoe-Rockland Fire Departments; Livingston Manor Volunteer Ambulance; R&R Volunteer Ambulance Corps
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Contracted
Maintenance Programs to Reduce Risk	Yes	Highway Department

Capability Type	In Place in Municipality? Yes or No	Comments
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire Department
Open Space Board/Committee	Yes	Planning Department responsibility
Personnel skilled or trained in website development	No	-
Planning Board	Yes	The planning board upholds and implements the community's development policies through the review and approval of subdivision proposals, site plans, and special use permits. The planning board also reviews any proposed amendments to the zoning laws and advises the Town Board on those matters.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Code Enforcement
Planner or Engineer with knowledge of land development and land management practices	Yes	Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Contracted through Delaware Engineering
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	Highway Department
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	Contracted
Surveyor(s)	Yes	Contracted
Zoning Board of Appeals	Yes	The primary function of the Zoning Board of Appeals is to consider variance requests from the strict zoning laws when they create hardships or practical difficulties for property owners. The Zoning Board of Appeals also interprets zoning laws when in question.
Other	Yes	Water District

20.6.3 Fiscal Capability

Table 20-23 summarizes financial resources available to Rockland.

Table 20-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes
FEMA funding programs	No
Other State funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

20.6.4 Education and Outreach Capability

Table 20-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 20-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, Local Newspaper written by High School Students
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department at fairs
Hazard mitigation information available on your website	No
Local News	Yes, Local Newspaper written by High School Students
Natural disaster/safety programs in place for schools	Yes, Fire Drills and shelter in place

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Senior Citizens program is funded through County and Town pays for site (at Presbyterian Church)
Public information officer or communications office	Yes, Town Clerk
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Yes, Reverse Texting Alert System and Fire Department

20.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 20-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 20-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

20.7 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.

20.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Rockland-1—Rockland - Cattail Creek Culvert/Bridge	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Rockland DPW/Highway
Supporting Agency / Department	-
Action Location	Cattail Creek
Summary of Original Problem	The Cattail Creek area experiences flash flooding events due to significant elevation change resulting in culvert and bridge washouts, including significant property damage and loss of life in 2006, with an additional localized flooding event that occurred six (6) to eight (8) years ago.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by upsizing culverts, improving roadside storm water drainage infrastructure, and upsizing the Town bridge on Cattail Creek to increase capacity.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Completed

T. Rockland-2— Rockland - Roscoe LFA	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Rockland DPW/Highway
Supporting Agency / Department	Sullivan County Soil and Water Conservation
Action Location	-
Summary of Original Problem	The Roscoe area is affected by flooding similar to the Livingston Manor area. The main downtown area is subject to significant flooding.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water, conduct a local flood assessment (LFA) to accurately identify causes of flooding in the Livingston Manor Area.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	New York Resilient grant through DEC is doing a study on all streams and creeks in the Town and will be completed at the end of 2026. Town also got a grant to remove a berm near the high school to reclaim the older property which will reduce flooding as well.
If discontinue, explain why	Not applicable

T. Rockland-3— Rockland - Acquire Generators for Critical Facilities	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Rockland Highway Department
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During all hazards, there is a risk of a power outages and multiple critical facilities lack back-up generation capacity including Town Hall, firehouses and ambulance buildings.
Summary of Solution (Project)	To reduce loss of life and to maintain operations during hazard related emergencies, multiple critical facilities in Rockland require three (3) back-up power generators: at the Town Hall, The Firehouse and the Ambulance building.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Remove firehouse, they have their own.
If discontinue, explain why	Not applicable

20.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Rockland identified the following mitigation efforts completed since the last HMP:

- Town has performed mitigation work on Cottage Street to control bank from washing out
- Town has performed mitigation work Cattail Brook in relation to steep slopes
- Highway Department replaces culverts as needed.
- Waterline work- ensuring they were not exposed with help from Trout Unlimited and Upper Delaware River UDR.

20.7.3 Identified Issues

The Town of Rockland has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has 85 repetitive loss properties, but other properties may be impacted by flooding as well.
- The following facilities are located in the special flood hazard area and may be vulnerable to flooding:
  - Livingston Manor Post Office
  - Livingston Manor Rotary Park
  - Rolling V - Livingston Manor
  - Roscoe Community Center
  - Roscoe Free Library
  - Roscoe Post Office
  - Roscoe-Rockland Volunteer Ambulance Corp

  Critical facilities must be protected to the 0.2% annual chance flood level.
- The Town Hall, Highway Barn, Ambulance Facility, and two high schools are without power and are vulnerable during power outages, as continuity of operations will not be maintained. With sufficient backup power, the Town can use the schools as an emergency heating/cooling station during power outages or during a Code Red/Blue event.
- The bank of the Beaver Kill River has been damaged by recent flooding events and would cause flooding if it fails. The endured erosion of the bank has weakened the stability of surrounding soils which can lead to a higher risk of flooding out of the bank, or cause debris build-up within the body of water, forcing the water over the bank.
- The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.
- The Town has numerous dams that are located within the Town limits. The Town has some concerns relating to the structural stability of privately owned dams in the Town including the Roscoe Reservoir Dam

(last inspected in 1998 with no condition rating assigned) and the Mud Pond Dam (last inspected in 2013 with no condition rating assigned). Additionally, the Nimrod Lake Dam is of concern because a lot of flooding comes from this area, and the dam was last inspected in July of 2025 and was assigned an unsound rating with more analysis needed.

- Beaver dams in New York can cause significant issues such as flooding, tree damage, and water contamination that impact Town owned property and private properties that are downstream from Beaver Dams. One beaver dam break occurred in the neighboring Town along Route 206 which led to two lives lost, as well as home and infrastructure damage. There are areas in the Town where infrastructure and residential safety may be impacted if a beaver dam break was to occur.
- The status of the Town's bridges and causeways in relation to the ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access. There is a bridge located on Liberty Street that is an old train trussell and is privately owned, however the structural stability is unknown.
- The banks of the Whisky Run, Beaver Kill Valley and Tuddle Hill have been damaged by recent flooding events and contribute to washouts which may leave roadways in the area inaccessible. The endured erosion of the banks has weakened the stability of surrounding soils which can lead to a higher risk of washouts.
- The Roscoe area is affected by flooding similar to the Livingston Manor area. The main downtown area is subject to significant flooding. The Town has two hamlets, and both tend to be flood prone including: Hamlet of Roscoe: Willowemoc River, Beaver Kill. Hamlet of Livingston Manor: Little Beaver Kill River, Willowemoc River, Cattail Creek (this area tends to incur more flooding than Roscoe). There is a big issue at the location where all the bodies of water converge. New York Resilient grant was obtained through DEC to do a study on all streams and creeks in the Town which will be completed at the end of 2026.
- There are flood prone roadways in the Town. Cottage Street is the only access point to a mobile home park, and the roadway is flood prone which may impact emergency access to the area.
- The Town Sewer Plant is partially in an area that has an old berm which contributes to flooding. The Town also received a grant to remove the berm to reclaim the older property which will reduce flooding as well.
- The stormwater pipe under the Town tends to contribute to flooded areas in the Town, however no one knows who owns the pipe for mitigation measures to be implemented.

20.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Rockland participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Rockland 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.

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 20-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-RocklandT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has 85 repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-RocklandT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The following facilities are located in the special flood hazard area and may be vulnerable to flooding: • Livingston Manor Post Office • Livingston Manor Rotary Park • Rolling V - Livingston Manor • Roscoe Community Center • Roscoe Free Library • Roscoe Post Office • Roscoe-Rockland Volunteer Ambulance Corp Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Town.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-RocklandT-03. Backup Power at Critical Facilities

Lead Agency:	Town Administration	
Supporting Agencies:	Town Highway Department, School Administrators, Ambulance Facility Manager	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town Hall, Highway Barn, Ambulance Facility, and two high schools are without power and are vulnerable during power outages, as continuity of operations will not be maintained. With sufficient backup power, the Town can use the schools as an emergency heating/cooling station during power outages or during a Code Red/Blue event.	
Description of the Solution:	The Town will conduct a generator study to determine the size generator that is needed for the Town Hall, Highway Barn, Ambulance Facility, and two high schools to be able to perform continuity of operations, including the potential of the Town Hall or Highway Department being used as an emergency heating/cooling shelter. Once the size is determined, the Town will acquire the funding for the purchase and installation of the generators, and the Highway Department will conduct routine maintenance on the generator.	
Estimated Cost:	TBD after Study	
Potential Funding Sources:	HMGP, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of a critical facility that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-RocklandT-04. Beaver Kill River Mitigation

Lead Agency:	Town Highway Department	
Supporting Agencies:	NYSDEC, Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The bank of the Beaver Kill River has been damaged by recent flooding events and would cause flooding if it fails. The endured erosion of the bank has weakened the stability of surrounding soils which can lead to a higher risk of flooding out of the bank, or cause debris build-up within the body of water, forcing the water over the bank.	
Description of the Solution:	The Town will consult with engineering to identify cost-effective projects to replace and augment susceptible structures and portions of stream bank will be implemented. NYSDEC will be notified before any work near the Beaver Kill River is done to protect the natural environment.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, NYSDEC, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will prevent erosion along the Beaver Kill River, protecting property and infrastructure from further impact.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding from the Beaver Kill River. Furthermore, this action will assist in keeping roadways clear of flood waters for the populations which may need to attend medical appointments or require medical attention from first responders.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action would assist in the reduction of roadway flooding from the Beaver Kill River, permitting first responders to traverse the roadways safely.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Remove properties impacted by stream overflow	Costly
	Construct floodwall to prevent flooding	Cost prohibitive and could ruin natural floodplain function

Action 2026-RocklandT-05. Highway Garage

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.	
Description of the Solution:	The Town will consult with an engineer to retrofit the current highway garage to an upgraded and weather-proofed highway garage facility that has the capacity to store all the vehicles and equipment that should be kept inside to protect their functionality and useful life. The new facility will be retrofitted to withstand intense precipitation and strong winds. The Town will be responsible for ensuring routine maintenance is performed in the garage. The Town will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on Engineer	
Potential Funding Sources:	HMGP, Town Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	The Town will have a proper-sized highway garage that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By constructing a modern, resilient highway garage designed to withstand local hazard risks, the municipality will ensure that these assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Town's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Highway Department's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Action 2026-RocklandT-06. Dam Owner Partnership and Inspections

Lead Agency:	Town Administration	
Supporting Agencies:	NYSDEC, Private Property Owners	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has numerous dams that are located within the Town limits. The Town has some concerns relating to the structural stability of privately owned dams in the Town including the Roscoe Reservoir Dam (last inspected in 1998 with no condition rating assigned) and the Mud Pond Dam (last inspected in 2013 with no condition rating assigned). Additionally, the Nimrod Lake Dam is of concern because a lot of flooding comes from this area, and the dam was last inspected in July of 2025 and was assigned an unsound rating with more analysis needed.	
Description of the Solution:	The Town will work with private property owners and NYSDEC to inspect the Roscoe Reservoir Dam and the Mud Pond Dam and will work to identify mitigation actions pending the condition rating assigned. The Town will also work with the property owner and NYSDEC to conduct the additional analysis needed on the Nimrod Lake Dam.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget, Property Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	This action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exist.	
Impact on Future Development:	This action accounts for future development that may be impacted by the inundation area of the dams in the Town.	
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.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory
	Rely on Private Property owners	Private property owners may be unsure of who to contact

Action 2026-RocklandT-07. Beaver Dam Mitigation

Lead Agency:	Town Administration	
Supporting Agencies:	Town Highway Department, NYSDEC	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Beaver dams in New York can cause significant issues such as flooding, tree damage, and water contamination that impact Town owned property and private properties that are downstream from Beaver Dams. One beaver dam break occurred in the neighboring Town along Route 206 which led to two lives lost, as well as home and infrastructure damage. There are areas in the Town where infrastructure and residential safety may be impacted if a beaver dam break was to occur.	
Description of the Solution:	The Town will apply for special permits from the NYDEC to remove nuisance beavers and dams, including trapping and relocation. The Town will also look into installed water level control devices to monitor when beaver activity may be taking place. The Town will also distribute information about NYDEC approved beaver and beaver dam removal methods to interested private property owners.	
Estimated Cost:	TBD based on selected mitigation measure	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years and ongoing once established	
Goals Met:	2, 3, 4	
Benefits:	This action will remove beaver dams which are causing or contributing to roadway flooding in the Town. The reduction of flood risk to Town roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action protects people that are located downstream of potential Beaver Dam locations and may be impacted by the inundation of beaver dam breaks.	
Impact on Future Development:	Future development would be better protected from limited beaver activity and routine monitoring of potential beaver dams that may cause issues.	
Impact on Critical Facilities/Lifelines:	Critical facilities that may be impacted from a beaver dam break are better protected.	
Impact on Capabilities:	This lessens the Village's risk from flood events by streams and rivers that may be impacted by beaver dam breaks.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Village will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dams	Flooding may still occur; Village may incur fines from NYS DEC and other entities

Action 2026-RocklandT-08. Bridge Mitigation

Lead Agency:	Town Highway Department	
Supporting Agencies:	Private Property, NYSDEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The status of the Town's bridges and causeways in relation to the ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access. There is a bridge located on Liberty Street that is an old train trussell and is privately owned, however the structural stability is unknown.	
Description of the Solution:	The Town will work with an engineer to identify inadequate or vulnerable bridges and causeways within the Town and replace or retrofit the identified bridges and causeways. The Town will work with the private property owner to evaluate the bridge located on Liberty Street and the Town will work to acquire funding for cost effective mitigation measures.	
Estimated Cost:	TBD based on engineer	
Potential Funding Sources:	HMGP, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	• Infrastructure will be protected from future hazard damages. • Ensures at least a single transportation route remains accessible to the community.	
Impact on At Risk Populations:	This action protects the transportation lifeline which would is used by emergency responders as needed.	
Impact on Future Development:	Future development would have access to a more reliable transportation system.	
Impact on Critical Facilities/Lifelines:	• Ensures transportation routes remain open and accessible to the public for daily use and evacuation needs. • Provides a point of access for first responders into communities that may have faced damage from a hazard event on either side of the bridge.	
Impact on Capabilities:	Increases community resiliency to flooding events in vulnerable areas that would normally be vulnerable to prolonged isolation after high-water events.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove bridge	May not be feasible
	Rebuild all bridges in the Town	Not cost effective

Action 2026-RocklandT-09. Bank Stabilization

Lead Agency:	Town Highway Department	
Supporting Agencies:	NYSDEC, USGS, Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The banks of the Whisky Run, Beaver Kill Valley and Tuddle Hill have been damaged by recent flooding events and contribute to washouts which may leave roadways in the area inaccessible. The endured erosion of the banks has weakened the stability of surrounding soils which can lead to a higher risk of washouts.	
Description of the Solution:	The Town will consult with engineering to identify cost-effective projects to replace and augment susceptible structures and portions of Whisky Run, Beaver Kill Valley and Tuddle Hill will be implemented. NYSDEC will be notified before any work near any other bodies of water is done to protect the natural environment.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, NYSDEC, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will prevent erosion along the Whisky Run, Beaver Kill Valley and Tuddle Hill, protecting property and infrastructure from further impact.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding from Whisky Run, Beaver Kill Valley and Tuddle Hill. Furthermore, this action will assist in keeping roadways clear of flood waters for the populations which may need to attend medical appointments or require medical attention from first responders.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action would assist in the reduction of roadway flooding from Whisky Run, Beaver Kill Valley and Tuddle Hill, permitting first responders to traverse the roadways safely.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove properties that may be impacted by bank washouts	Costly and may not be feasible
	Remove banks that lead to washouts	Not feasible

Action 2026-RocklandT-10. Roscoe and Livingston Manor Mitigation

Lead Agency:	Town Administration	
Supporting Agencies:	NYSDEC, Sullivan County Soil & Water, Town Highway Department, Private Property Owners	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Roscoe area is affected by flooding similar to the Livingston Manor area. The main downtown area is subject to significant flooding. The Town has two hamlets, and both tend to be flood prone including: Hamlet of Roscoe: Willowemoc River, Beaver Kill. Hamlet of Livingston Manor: Little Beaver Kill River, Willowemoc River, Cattail Creek (this area tends to incur more flooding than Roscoe). There is a big issue at the location where all the bodies of water converge. New York Resilient grant was obtained through DEC to do a study on all streams and creeks in the Town which will be completed at the end of 2026.	
Description of the Solution:	The Town will consult with an engineer to determine mitigation measures that aim to reduce the long-term risk to flooding for existing assets and future development in the Town. Once the most cost-effective solutions are identified through the current stream/creek study, the Town will work to acquire the funding for the implementation of mitigation measures.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, NYSDEC, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the Hamlets, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will aim to protect impacted infrastructure which includes private properties that may be negatively impacted.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-RocklandT-11. Cottage Street

Lead Agency:	Town Administration	
Supporting Agencies:	Town Highway Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	There are flood prone roadways in the Town. Cottage Street is the only access point to a mobile home park, and the roadway is flood prone which may impact emergency access to the area.	
Description of the Solution:	The Town will consult with an engineer to determine mitigation measures that aim to reduce the long-term risk to flooding on Cottage Steet to ensure that accessibility to the mobile home park remains open.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist socially vulnerable populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-RocklandT-13. Sewer Plant Mitigation

Lead Agency:	Town Administration	
Supporting Agencies:	Sewer Plant Managers, NYSDEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town Sewer Plant is partially in an area that has an old berm which contributes to flooding. The Town also received a grant to remove the berm to reclaim the older property which will reduce flooding as well.	
Description of the Solution:	The Town will consult with an engineer to determine the best and most cost-effective way to remove the berm without contributing to any additional flooding. Once established, the Town will acquire the funding and will remove the berm with the support of engineering and NYSDEC.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure that is negatively impacted by the berm.	
Impact on At Risk Populations:	This action will assist socially vulnerable populations whose properties are impacted by flooding in the area. This action also aims to further protect the Town Sewer Plant.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and new development will have a reliable sewer plant.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect the sewer plant from flooding which preserves the functionality of the sewer plant and reduces potential overloading of the sewer plant.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts and preserve the functionality of critical facilities such as the sewer plant.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate sewer system	Cost prohibitive
	Construct second sewer system	Cost prohibitive

Action 2026-RocklandT-14. Stormwater Pipe

Lead Agency:	Town Administration	
Supporting Agencies:	County Administration, NYS	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The stormwater pipe under the Town tends to contribute to flooded areas in the Town, however no one knows who owns the pipe for mitigation measures to be implemented.	
Description of the Solution:	The Town will consult with the County and State to try and evaluate who owns the Stormwater pipe that is contributing to flooding in the Town. Once established, the Town will work with the identified owner to acquire funding for the repair and possibly upsizing of the stormwater pipe.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure that is negatively impacted by the damaged stormwater pipe.	
Impact on At Risk Populations:	This action will assist socially vulnerable populations whose properties are impacted by flooding in the area. This action also aims to further protect the Town stormwater system.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and new development will have a reliable stormwater system.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect the Town stormwater system from flooding which preserves the functionality of some critical facilities.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts and preserve the functionality of critical facilities such as the stormwater pipe.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Reconstruct the stormwater pipe	May not be cost effective and owner of current one is unknown
	Build a new stormwater pipe	May not be cost effective

Table 20-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-RocklandT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-RocklandT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-RocklandT-03	Backup Power at Critical Facilities	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-RocklandT-04	Beaver Kill River Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-RocklandT-05	Highway Garage	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-RocklandT-06	Dam Owner Partnership and Inspections	1	1	1	1	1	0	1	1	0	1	1	1	1	1	12	High
2026-RocklandT-07	Beaver Dam Mitigation	1	1	1	1	1	0	1	1	1	1	1	0	1	1	12	High
2026-RocklandT-08	Bridge Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-RocklandT-09	Bank Stabilization	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-RocklandT-10	Roscoe and Livingston Manor Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-RocklandT-11	Cottage Street	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-RocklandT-12	Sewer Plant Mitigation	0	1	1	1	1	0	1	1	1	1	1	1	1	1	12	High
2026-RocklandT-13	Stormwater Pipe	1	1	1	1	1	0	1	1	0	1	1	1	1	1	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

21. TOWN OF THOMPSON

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Thompson 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 Thompson, describes who participated in the planning process, assesses Thompson's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

21.1 HAZARD MITIGATION PLANNING TEAM

The Town of Thompson identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 21-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 21-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Scott Mace, Town Supervisor Address: 4052 State Route 42, Monticello, NY 12701 Phone Number: (845) 794-2500, ext. 306 Email: supervisor@thompsonny.gov	Name/Title: Hayden Carnell, Highway Superintendent Address: 4052 State Route 42, Monticello, NY 12701 Phone Number: (845) 794-5560 Email: HighwaySuper@thompsonny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: James Carnell, Jr., Director of Building, Planning & Zoning Department Address: 4052 New York 42, Monticello, NY 12701 Phone Number: (845) 794-2500 ext. 321 Email: jcarnell@thompsonny.gov	

21.2 COMMUNITY PROFILE

21.2.1 Community Classifications

Table 21-2 summarizes classifications for community programs available to Thompson.

Table 21-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	Registered	September 28, 2021

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	1-Star	July 2, 2024
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

21.2.2 Community Profile

Geographical Description

The Town of Thompson, situated in the southeastern part of Sullivan County, NY, features a varied geography that includes rolling hills, forested areas, lakes, and streams. It encompasses several villages, including Monticello—the county seat—and Woodridge. The town's landscape is marked by natural features such as the Neversink River and multiple small lakes and ponds, contributing to its scenic and recreational character. Thompson's terrain supports diverse land uses, from residential and commercial areas concentrated around its villages to extensive natural and open spaces used for outdoor activities like hiking, fishing, and boating. (Town of Thompson 2025)

Government Type and Description

The Town is governed by a Town Board, which is comprised of the Town Supervisor (two-year term), who carries out all policies of the Board, and four council members (four-year staggering terms) (Town of Thompson 2025).

Table 21-3 through Table 21-6 note land area, population, and building stock information for the Town of Thompson.

Table 21-3. Total Land Area in the Town of Thompson

Jurisdiction	Total Land Area	
	Acres	Square Miles
Thompson (T)	49,930.6	78.0

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 21-4. Population Estimates in the Town of Thompson

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
9,377	11.9%	8,628	10.9%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 21-5. At Risk Populations in the Town of Thompson

At Risk Populations - American Community Survey 5-Year Population Estimates (YEAR)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
2,451	28.4%	481	5.6%	289	3.3%	1,492	17.3%	1,221	14.2%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 21-6. General Building Stock in the Town of Thompson

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
7,526	$7,018,047,712	6,886	$4,666,711,818	461	$1,443,428,492	80	$434,479,263	99	$473,428,139

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

21.3 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 Thompson's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

21.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Town are shown in Figure 21-1 and Figure 21-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Thompson has significant exposure.

Figure 21-1. Thompson Flood, Wildfire and Dam Inundation Area Map

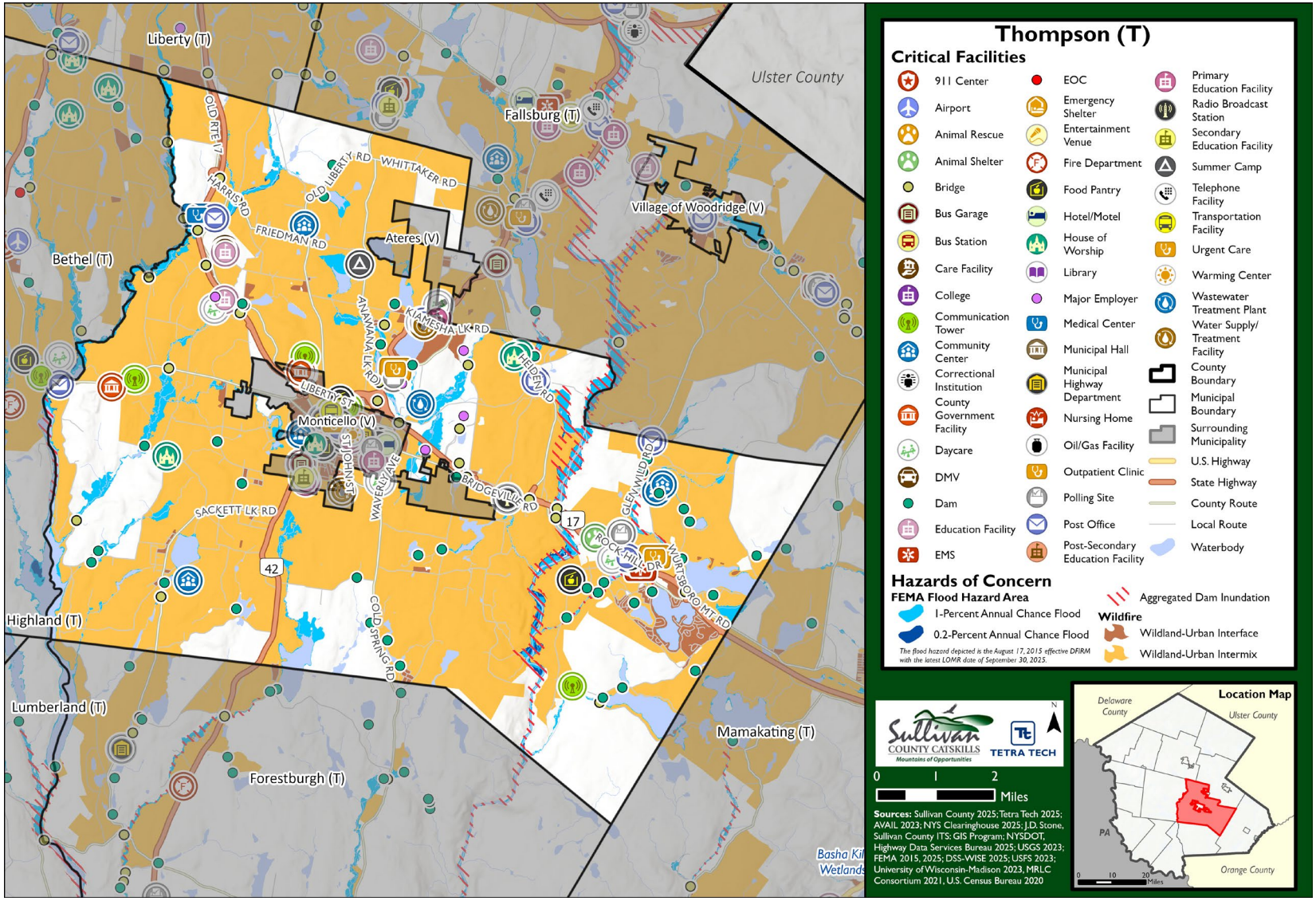
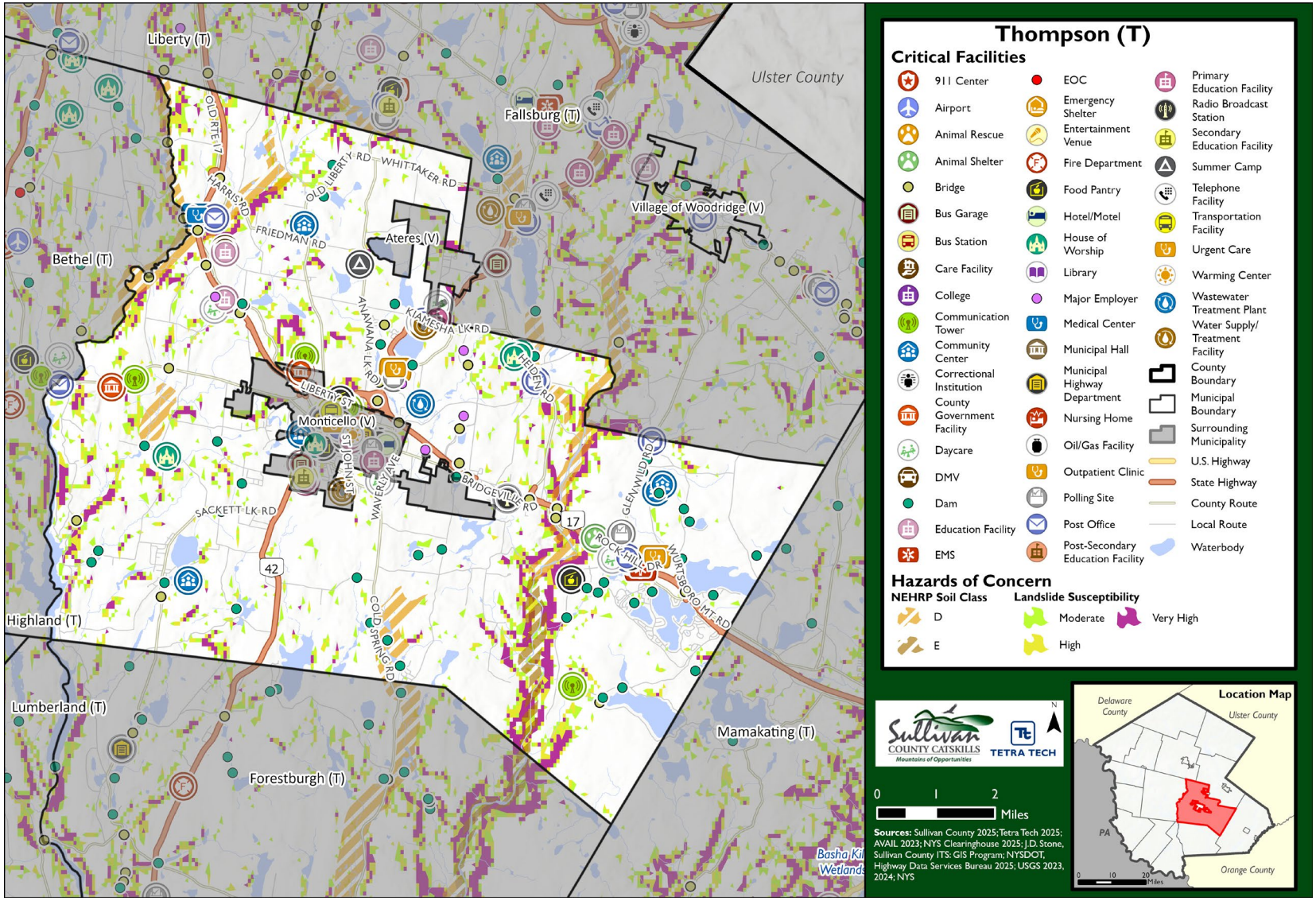


Figure 21-2. Thompson NEHRP Soil and Landslide Area Map



21.3.2 Previous Event History

The history of natural and non-natural hazard events in Thompson is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 21-7 and Table 21-8 provide details on the loss and damage in Thompson during hazard events since the last hazard mitigation plan update.

Table 21-7. Presidential Disaster Declarations History in Thompson

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Thompson
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Town abided by masking mandates, work from home orders and social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town reported localized areas of flooding, and trees and wires knocked down.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town reported localized areas of flooding, and trees and wires knocked down.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 21-8. Hazard Event History in Thompson

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Thompson
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town reported localized areas of flooding, and trees and wires knocked down.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town reported localized areas of flooding, and trees and wires knocked down.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town reported localized areas of flooding, and trees and wires knocked down.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town reported localized areas of flooding, and trees and wires knocked down.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town reported localized areas of flooding, and trees and wires knocked down.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town reported localized areas of flooding, and trees and wires knocked down.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Thompson
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town reported localized areas of flooding, and trees and wires knocked down.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town reported localized areas of flooding, and trees and wires knocked down.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town reported localized areas of flooding, and trees and wires knocked down.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

21.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 21-9 includes an inventory of critical facilities and infrastructure for the Town of Thompson.

Table 21-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
The Arc Greater Hudson Valley	Major Employer	Y	Y	2026-ThompsonT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: 16 dams and 20 bridges were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

21.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Thompson Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 21-10.

Table 21-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Town has some concerns relating to some of the privately owned dams that may have elements of delinquency or are abandoned.
Drought	The Town property owners are on both well water and water systems. The Town owns their own water system and there is a private one as well. There has been no significant water related issues with water availability with private wells as well as those dependent on the water systems.
Earthquake	No known impacts
Flood	There is a flood monitor on Neversink River which tends to be a more flood prone area. The twin pond area also incurs occasional flooding
Landslide	The Neversink River area has some bank stabilization concerns.
Pandemic	The Town is most concerned with their older resident's population.
Severe Storm	The Town reported that the one side of the Town constantly loses power, but the rest is okay and power is restored rather quickly.
Severe Winter Storm	The limitation of salt is a concern in the Town; however, Highway is effective at clearing roadways. The Town also reported that the County and State are effective at clearing their applicable roadways.
Wildfire	No known impacts

21.3.5 Vulnerable Community Assets

Representatives from the Town of Thompson Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 21-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 21-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	No known impacts
Municipal Buildings	Town Hall, Highway Department, Water, Sewer and Parks do not have backup power.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing,	The Town has three parks, and only one park tends to flood, however the park does not have a lot of infrastructure in this area.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage,**	The Town reported an undersized highway garage which results in equipment sitting outside and becoming weathered which impacts the Town's continuity of operations

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
farming, fishing, etc.)		**critical public transit routes, Airport(s)**	The Town also has a salt pile, but there is not a cover, and the Town would benefit from a covered shed.
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	The Town reported issues with some of the utility poles with breaking off and becoming vulnerable because they are not repaired or removed.
Fire/Police Stations	Hurleyville (Fallsburgh) Rock Hill (Thompson) Monticello are all Fire Departments that service the Town.	**Wastewater Treatment Plants**	The Town has five wastewater treatment plants that have aging infrastructure and new development. Some of these are decentralized plants that are not set up for year-round use, which is a monitoring and accessing issue.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	See above
Hospitals	No known impacts	**Other**	No known impacts

21.3.6 Dams

Table 21-12 includes all dams in the Town of Thompson. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 21-12. Dams Located in Thompson

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-0195	Wanaksink Lake Dam	Fowlwood Brook	Wanaksink Lake Club, INC.	Private	Recreation	High Hazard Dam
163-0188	Treasure Lake Dam	TR-Neversink River	Emerald Green Property Owners Association	Private	Recreation	Intermediate Hazard Dam
163-0173	Melody Lake Dam	TR-Bush Kill Creek	S Trowbridge and G Cooke	Private	Other	Low Hazard Dam
163-0193	Lake Louise Marie Dam	TR-Davies Lake	Emerald Green Property Owners Association	Private	Recreation, Water Supply - Primary	High Hazard Dam
163-1534	Teicher Pond Dam	TR-Lords Lake	D Teicher	Private	Recreation	Hazard Classification Not Assigned
163-5995	Bowers Pond Dam	-	Five Cousins Farm LLC	Private	Recreation	Low Hazard Dam
163-3360	Monticello Diversional Dam	TR-Kiamesha Creek	Village of Monticello	Local Government	Flood Control and Storm Water Management	Low Hazard Dam
163-2448	Davies Lake Dam	Davies Brook	Emerald Green Property Owners Association	Private	Recreation	Low Hazard Dam
163-5174	GEMSTAR DAM	Sheldrake	N.E. Group Properties LLC	Private	Recreation	Low Hazard Dam
163-4901	Jacob Miller Pond Dam	TR-Neversink River	Millerockhill LLC	Private	Recreation	Low Hazard Dam
163-5754	TOMMY CHOU POND DAM	Trib - Turner Brook	Tommy Chou	Private	Recreation	Low Hazard Dam
163-5833	Lucky Lake Dam	Trib- Davies Brook	Town of Thompson, King Lucky Lake LTD	Local Government, Private	Recreation, Water Supply - Secondary	Low Hazard Dam
163-3047B	Sherwood Allen Pond Dam Upper	South Brook	Parkwood MW LLC	Private	Recreation	Low Hazard Dam
163-0225	Kiamesha Lake Dam	Kiamesha Creek	Town of Thompson	Local Government	Recreation	Low Hazard Dam
163-5772	Applebee Farm Dam	Trib - East Montgaup River	Center for Discovery	Private	Recreation	Low Hazard Dam
163-5794	Kritsky Pond Dam	Trib - Fowlwood Brook	Peter M. Kritsky	Private	Recreation	Low Hazard Dam
163-5737	STACKHOUSE POND DAM	Trib - Kiamesha Creek	George Berlovan	Private	Recreation	Low Hazard Dam
163-5713	Monticello Hunting Club Dam	Trib - Turner Brook	Monticello Hunting Club Dam	Private	Recreation	Low Hazard Dam
163-5723	SIEGORDNER POND DAM	TRIB – Montgaup River	Walter Siegordner	Private	Recreation	Low Hazard Dam
163-1509A	Rubin Lake Dam	TR-Yankee Reservoir	Bertha Rubin	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-4490	Beaver Lake Dam	TR-Bowers Pond	Beaver Lake Realty LTD	Private	Flood Control and Storm Water Management, Recreation	Low Hazard Dam
163-0204	Adams Pond Dam (163-0204)	TR-Bowers Pond Brook	Cerebal Palsy Association of New York	Private	Recreation, Water Supply - Secondary	Low Hazard Dam
163-5015	Kaszas Pond Dam	Fowlwood Brook	William J Kaszas	Private	Other	Low Hazard Dam
163-5085	Fowlwood Brook Dam	Fowlwood Brook	Irving Bogursky	Private	Other	Low Hazard Dam
163-0170	Wolf Reservoir Dam	TR-Neversink River	Wolf Lake INC	Private	Recreation	Low Hazard Dam
163-3863	Krimsky Lake Dam	TR-Neversink River	Rock Hill Volunteer Fire Department	Private	Recreation	Low Hazard Dam
163-0191	Gareghty Pond Dam	TR-Neversink River	Adelaide A Ackland	Private	Recreation	Low Hazard Dam
163-4222	Melody Lake Dam	Turner Brook	Relaxmor Cottages Inc	Private	Recreation	Low Hazard Dam
163-4603	Baileys Dam	Trib - Kiamesha Creek	G Bresler M Walzer and M Kutsher	Private	Flood Control and Storm Water Management, Recreation	Low Hazard Dam
163-0242	Crescent Lake Colony Dam	TR-Mongaup River	Crescent Lake Colony	Private	Recreation	Low Hazard Dam
163-4488	Strolowitz Pond Dam	Kinne Brook	Donald Friedland	Private	Flood Control and Storm Water Management	Low Hazard Dam
163-4492	Wildwood Lake Dam	TR-Ruddick Pond	Dominic Basso	Private	Recreation	Low Hazard Dam
163-0205	Pelton Pond Dam	TR- Sackett Lake	John Pelton	Private	Recreation	Low Hazard Dam
163-1354	Lake Gordon Dam	TR- Kinne Brook	Bessie Gordon	Private	Recreation	Low Hazard Dam
163-1245	Winston Dam	Sackett Lake Brook	Robert and Wioletta Szczesna	Private	Recreation	Low Hazard Dam
148-4225	Camp Kenny Brook Dam	Kinne Brook	Camp Kenny Brook	Private	Recreation	Low Hazard Dam
148-5541	Twin Ponds Dam Upper	Burnt Meadow Brook	Sullivan County	Local Government	Recreation	Low Hazard Dam
148-5536	Twin Ponds Dam - Lower	Burnt Meadow Brook	Burnt Meadow Lake LLC	Private	Recreation	Low Hazard Dam
163-1157	Wolf Lake Inc Dam	TR-Wolf Lake	Wolf Lake INC	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-4628	Beaver Lake Dam	TR-Neversink River	Woodside Realty	Private	Other	Hazard Classification Not Assigned

Notable comments regarding dams in the jurisdiction:

The Town has some concerns relating to some of the privately owned dams that may have elements of delinquency or are abandoned. The Wanaksink Lake Dam is in great shape, and the Lake Louise Marie Dam has recently had some infrastructure work done.

21.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 21-13 identifies the preliminary hazard ranking for Thompson, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 21-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Disagree	High	Lots of trees that are not taken care of – private property related issues.	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

21.4 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 21-14 through Table 21-17.

21.4.1 Development and Permitting

Table 21-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues building permits
What is your process for tracking building permits?	Yes, BAS Software
Are permits tracked by hazard area? (For example, floodplain development permits.)	No, but is a part of SEQR process
Does your community have a buildable land inventory? If yes, please describe.	No

Table 21-15. 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
2020	At the time of this plan update, the jurisdiction was unable to provide permitting information.			
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				
2025				
Total Permits				
Permits within SFHA				

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

Table 21-16. Recent Major Development and Infrastructure from 2020 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
The jurisdiction did not identify any recent major development and infrastructure from 2020 to present					

Table 21-17. 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
The jurisdiction did not identify any known or anticipated major development and infrastructure in the next five years					

21.5 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 Table 21-1 is responsible for maintaining this information.

21.5.1 NFIP Statistics

Table 21-18 summarizes the NFIP policy and claim statistics for the Town of Thompson.

Table 21-18. Thompson NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360830#
# Policies	34
# Claims (Losses)	19
Total Loss Payments	$54,004.19
# Repetitive Loss Properties	7
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

21.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 21-19.

Table 21-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Areas near and along the Neversink River and Twin Pond Area
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	James Carnell, Jr., Director of Building, Planning & Zoning Department
What local department is responsible for floodplain management?	The Building Inspector of the Town of Thompson is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #9 of 2010
What is the date that your flood damage prevention ordinance was last amended?	November 23, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Permit Review, Inspections
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	No
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Substantial damage also means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. Substantial improvement also means "cumulative substantial improvement." The term includes structures which have incurred "substantial damage", regardless of the actual repair work performed
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many	Permitting tracks this

NFIP Topic	Comments
structures are in special flood hazard area (SFHA)?	
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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, they consider flood risk and height restrictions

21.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Thompson 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 Thompson to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

21.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 21-20 and Table 21-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 21-20. Regulatory Capabilities in Thompson

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	The purpose of this article is to establish the procedure and means for the enforcement and administration of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) and of all codes, regulations, standards, ordinances and other controls pertaining to the use, location, occupancy, design, materials, construction, alteration, repair, equipment, removal and demolition of all buildings and structures or facilities thereof in the Town of Thompson, exclusive of the Village of Monticello, Sullivan County, New York.	Chapter 113 Article VI, 2007	Department of Building, Planning and Zoning
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;	Chapter 138 (Local Law #9), 2010	Building Inspector

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify and maintain for participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Yes	Sites for development must be reasonably free of objectionable conditions such steep slopes, wetlands and other environmental or physical constraints.	Chapter 250, 2003	Department of Building, Planning and Zoning
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	An applicant shall be required to submit a site plan in accordance with § 250-51. In addition, the site plan shall show all existing and proposed structures and improvements, including roads, buildings, tower(s), guy wires and anchors, antennas, parking and landscaping, and shall include grading plans for new facilities and roads.	Chapter 250-69, 2003	Department of Building, Planning and Zoning
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	By the authority of the resolution of the Town Board of the Town of Thompson adopted on June 6, 1961, pursuant to the provisions of Article 16 of the Town Law of the State of New York, the Planning Board of the Town of Thompson is authorized and empowered to approve plats showing lots, blocks or sites, with or without streets or highways, and to approve the development of entirely or partially	Chapter 255, 1993	Department of Building, Planning and Zoning

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		undeveloped plats already filed in the office of the Sullivan County Clerk within the Town of Thompson, outside the limits of any incorporated village.		
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	There is hereby established a Zoning Law regulating and restricting the location, grouping, bulk, construction and use of buildings and structures and the development and use of land in the Town of Thompson, New York (hereinafter referred to as the "Town"), and providing fines and penalties for the violation thereof, which law is set forth in the following text, schedules and related maps forming the Zoning Law for the Town of Thompson. This Part 1 is adopted for the purposes set forth in the Municipal Home Rule Law of the State of New York in the interest of protection of order and the health, safety and well-being of residents.	Chapter 250, 2003	Department of Building, Planning and Zoning

Planning Capabilities

Table 21-21. Planning Capabilities in Thompson

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	Yes	This Plan was prepared to help Monticello and Thompson seize the opportunities provided by new resort development in the area.	Grow the Gateways, 2017	Community & Economic Development
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	A comprehensive plan (also called a master plan) is a document prepared by the community that provides direction in making land use, development and other long-range planning decisions. A comprehensive plan's usefulness lies in two aspects: the decision-making and consensus-building that go into the creation of the comprehensive plan and the use of the plan by elected officials and others once adopted.	Thompson Comprehensive Plan, 2025	Town Administration
Continuity of Operations Plan	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village and the objectives include identifying,	Thompson-Monticello Joint Emergency	Town Board

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		assessing and prioritizing vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them.	Management Plan, 2006	
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village and the objectives include identifying, assessing and prioritizing vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them.	Thompson-Monticello Joint Emergency Management Plan, 2006	Town Board
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The plan sets forth the basic requirements for managing emergencies in the Town/Village and the objectives include identifying, assessing and prioritizing vulnerabilities to emergencies or disasters and the resources available to prevent or mitigate, respond to, and recover from them.	Thompson-Monticello Joint Emergency Management Plan, 2006	Town Board
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Community Health Improvement Plan	Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	Yes	The Parks and Recreation Plan looks at current publicly available parks and recreational facilities and needs related to new residential developments that may contribute to population growth and need for more services. Descriptions of the existing area public parks are within this plan.	Recreation Development Plan, 2019	Parks & Recreation Department

21.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 21-22 details the available administrative and technical capabilities of the Town.

Table 21-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality	Comments
Civil Engineer	Yes	Contracted as needed
Construction/Building/Code Enforcement Department	Yes	Building Inspector
Economic Development Commission/Committee	Yes	Community & Economic Development

Capability Type	In Place in Municipality	Comments
Emergency Management/Public Safety Department	No	-
Environmental Commission/Specialist	No	-
Grant Writer	Yes	Contracted as needed
Maintenance Programs to Reduce Risk	Yes	The Highway Department is responsible for road and equipment maintenance. Highway Department employees perform other maintenance duties in the Town, including vegetation maintenance.
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire Departments
Open Space Board/Committee	Yes	Parks and Recreation Advisory Committee
Personnel skilled or trained in website development	Yes	Contracted as needed
Planning Board	Yes	The planning board exists to guide and regulate the orderly growth and development of a community, ensuring public safety, welfare, and responsible land use.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	Rely on County for any needs
Planner or Engineer with knowledge of land development and land management practices	Yes	Planning Board, contracted engineer
Planners or engineers with an understanding of natural hazards	Yes	Planning Board, contracted engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building, Planning and Zoning Department, contracted engineer
Professionals trained in conducting damage assessments	No	-
Public Works/Highway Department	Yes	The Highway Department also is responsible for adding and abandoning roads. In addition, the Highway Department operates highly complex road building equipment and carries out state and local road building programs. Highway Department employees perform other maintenance duties for various departments of the town.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-

Capability Type	In Place in Municipality	Comments
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals (ZBA) serves to ensure fair and equitable application of zoning regulations, providing a forum for property owners to challenge decisions made by local zoning officials.
Other	Yes	Water and Sewer Department

21.6.3 Fiscal Capability

Table 21-23 summarizes financial resources available to Thompson.

Table 21-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes, Park Fees implemented on development projects to build out parks and recreation opportunities in the Town.
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes, USDA funding for Water & Sewer Infrastructure upgrades
FEMA funding programs	No
Other State funding programs	Yes, NYPA Financing for Streetlights, State funding for Water/Sewer infrastructure upgrades
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

21.6.4 Education and Outreach Capability

Table 21-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 21-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	No
Local News	Yes
Natural disaster/safety programs in place for schools	No
Organizations that conduct outreach to at risk populations and underserved populations	Youth program
Public information officer or communications office	Town Supervisor
Social media for hazard mitigation education and outreach	Yes, Facebook
Warning systems for hazard events	Yes, Town News and Severe Weather Warnings

21.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 21-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 21-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

21.7 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.

21.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Thompson-1—Wastewater Infrastructure Modernization	
Hazards Addressed	Flood
Lead Agency / Department	Town of Thompson Town Board
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	During severe flooding events, the wastewater system infrastructure experiences infiltration. For example, from 2005 to 2007, multiple storms caused 100-year and 200-year floods, cresting the river 22 feet above typical levels. Many projects have been undertaken to mitigate this persistent issue, but only about one-third of the system has been mitigated. Infiltration causes dilution in sanitary sewers which decreases the efficiency of treatment and causes sewage volumes to exceed design capacity. The result is damage to the sewer treatment infrastructure and potential for environmental catastrophe.
Summary of Solution (Project)	Reduce long-term risk from flooding on existing and future development by upgrading wastewater infrastructure to reduce infiltration which causes damage to the sewer infrastructure and results in potential for environmental catastrophe.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Thompson-2—Thompson - Vegetation Cleanup/Maintenance	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Technical Assistance/Program Management
Supporting Agency / Department	-
Action Location	Town of Thompson Supervisors Office
Summary of Original Problem	Power can get knocked out by hazards and the utility provider can be difficult to communicate with for resolution. Individual outages are being handled as necessary, but the root problem is not being resolved and no long term resolutions have been agreed upon.
Summary of Solution (Project)	Reduce the long-term risk of power outages due to high winds for existing assets and future development by adopting and monitoring a vegetation maintenance program, with coordination among neighboring communities and the local utility company, to increase efficiency of roadway clearance of downed trees and powerlines, and more timely power restoration.
Action Category	Technical Assistance/Program Management
Current Status – Please select one:	Discontinued – Ongoing Capability
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Ongoing Capability

21.7.2 Additional Mitigation Efforts

The Town of Thompson did not identify any additional mitigation efforts completed since the last HMP.

21.7.3 Identified Issues

The Town of Thompson has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has seven repetitive loss properties, but other properties may be impacted by flooding as well.
- The Arc Greater Hudson Valley, which is a major employer in the Town, is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- Lake Louise Marie Dam is a Class I High Hazard Dam that is located on Lake Louise Marie and a tributary connecting it to Davies Lake. The dam is owned by Emerald Green Property Owners Association. Failure of the dam could result in inundation of residential properties, woodland areas, and transportation routes including Route 17, Lake Shore Drive W, N Emerald Drive, Old Sackett Road, and Katrina Falls Road, as per the current EAP, last updated in April 2009. Mapping performed as a part of this 2026 HMP update indicates Lake Louise Marie Dam inundation area may intersect with the inundation areas of the Wanaksink Lake Dam and Neversink Reservoir Dam inundation areas. The dam was last inspected in October 2022.

The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.

- Wanaksink Lake Dam is a Class I High Hazard Dam that is located on Wanaksink Lake and Fowlwood Brook. The dam is owned by Wanaksink Lake Club, Inc.. Failure of the dam could result in inundation of residential properties, a campground, recreation areas, woodland areas, and transportation routes including Factory Road, Rock Hill Drive, Bowers Road, and Adams Road. The 2025 EAP indicates inundation mapping is unavailable; mapping performed as a part of this 2026 HMP update indicates Wanaksink Lake Dam inundation area may intersect with the inundation areas of the Lake Louise Marie Dam and Neversink Reservoir Dam inundation areas. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.
- The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.
- The Town has five wastewater treatment plants that have aging infrastructure and new development that can put a strain on the current system. Some of these are decentralized plants that are not set up for year-round use, which is a monitoring and accessing issue. The Town experiences infiltration in the wastewater system during intense precipitation events. Many projects have been undertaken to mitigate this persistent issue, but only about one-third of the system has been mitigated. Infiltration causes dilution in sanitary sewers which decreases the efficiency of treatment and causes sewage volumes to exceed the design capacity. The result is damage to the sewer treatment infrastructure and potential for environmental catastrophe.
- The bank of Neversink River has been damaged by recent flooding events and would cause flooding if it fails. The Neversink River does have a flood monitoring device, but there are other vulnerabilities and concerns. The endured erosion of the bank has weakened the stability of surrounding soils which can lead to a higher risk of flooding out of the bank, or cause debris build-up within the body of water, forcing the water over the bank.
- The Town does not currently have a covered salt pile which impacts the Town's salt supply and makes them vulnerable in severe winter storm events. This also may impact emergency responses in the Town.
- The Town Hall, Highway Department, Water and Sewer system are without power and are vulnerable during power outages, as continuity of operations will not be maintained. It is also unknown if the Fire Departments that service the Town have backup power. With sufficient backup power, the Town can use the Town Hall or Highway Department as an emergency heating/cooling station during power outages or during a Code Red/Blue event.
- The Town has numerous dams that are located within the Town limits. Rubin Lake Dam has the wrong owner identified in the NYSDEC dam data list and the Town now currently owns the Adams Pond Dam (163-0204) as has created a park in the area and the wrong owner is identified in the NYSDEC list. It is important for NYSDEC to have the correct information on file in case of emergencies or dam interruptions.

21.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Thompson participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative

risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Thompson 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.

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 21-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-ThompsonT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has seven repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-ThompsonT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers		
Supporting Agencies:	Town Board		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire	
Description of the Problem:	The Arc Greater Hudson Valley, which is a major employer in the Town, is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.		
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.		
Estimated Cost:	Medium		
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program		
Implementation Timeline:	Within 5 Years		
Goals Met:	2, 5		
Benefits:	Ensures continuity of operations of several critical facilities in the Town.		
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.		
Impact on Critical Facilities/Lifelines:	This action will protect 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.		
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	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 2026-ThompsonT-03. Lake Louise Marie Dam Rehab

Lead Agency:	Dam Owners (Emerald Green Property Owners Association)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Lake Louise Marie Dam is a Class I High Hazard Dam that is located on Lake Louise Marie and a tributary connecting it to Davies Lake. The dam is owned by Emerald Green Property Owners Association. Failure of the dam could result in inundation of residential properties, woodland areas, and transportation routes including Route 17, Lake Shore Drive W, N Emerald Drive, Old Sackett Road, and Katrina Falls Road, as per the current EAP, last updated in April 2009. Mapping performed as a part of this 2026 HMP update indicates Lake Louise Marie Dam inundation area may intersect with the inundation areas of the Wanaksink Lake Dam and Neversink Reservoir Dam inundation areas. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Lake Louise Marie Dam and encourage the dam owners to update the April 2009 EAP. Future updates to the EAP may want to consider involvement from the owners of the Neversink Reservoir Dam. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.

	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-ThompsonT-04. Wanaksink Lake Dam Rehab

Lead Agency:	Dam Owners (Wanaksink Lake Club, Inc.)	
Supporting Agencies:	County OEM/HS, NYDEC, Municipal Engineer	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Wanaksink Lake Dam is a Class I High Hazard Dam that is located on Wanaksink Lake and Fowlwood Brook. The dam is owned by Wanaksink Lake Club, Inc.. Failure of the dam could result in inundation of residential properties, a campground, recreation areas, woodland areas, and transportation routes including Factory Road, Rock Hill Drive, Bowers Road, and Adams Road. The 2025 EAP indicates inundation mapping is unavailable; mapping performed as a part of this 2026 HMP update indicates Wanaksink Lake Dam inundation area may intersect with the inundation areas of the Lake Louise Marie Dam and Neversink Reservoir Dam inundation areas. The dam was last inspected in October 2022. The risk of dam failure warrants an engineering evaluation to determine what retrofits of the dam would result in safer conditions.	
Description of the Solution:	The Municipal Engineer will work with the dam owners to complete an updated engineering study of Wanaksink Lake Dam and encourage the dam owners to keep the dam's EAP current. Future updates to the EAP should seek to include inundation mapping. Future updates to the EAP may want to consider involvement from the owners of the Neversink Reservoir Dam. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the dam owners, with potential assistance from the Town, County, and NYSDEC, will pursue funding support, permit approval from NYSDEC, and implement the cost-effective measures.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, HHPD, Dam Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 3, 6	
Benefits:	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 At Risk Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.	
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 and strengthen the structural integrity of dam, as needed.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss an environmental, flood control, and stormwater management resource.

	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions

Action 2026-ThompsonT-05. Highway Garage

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.	
Description of the Solution:	The Town will consult with an engineer to retrofit the current highway garage to an upgraded and weather-proofed highway garage facility that has the capacity to store all the vehicles and equipment that should be kept inside to protect their functionality and useful life. The new facility will be retrofitted to withstand intense precipitation and strong winds. The Town will be responsible for ensuring routine maintenance is performed in the garage. The Town will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on Engineer	
Potential Funding Sources:	HMGP, Town Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	The Town will have a proper-sized highway garage that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By constructing a modern, resilient highway garage designed to withstand local hazard risks, the municipality will ensure that these assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Town's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Highway Department's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Action 2026-ThompsonT-06. Wastewater System Infrastructure

Lead Agency:	Wastewater System Managers/Owners	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has five wastewater treatment plants that have aging infrastructure and new development that can put a strain on the current system. Some of these are decentralized plants that are not set up for year-round use, which is a monitoring and accessing issue. The Town experiences infiltration in the wastewater system during intense precipitation events. Many projects have been undertaken to mitigate this persistent issue, but only about one-third of the system has been mitigated. Infiltration causes dilution in sanitary sewers which decreases the efficiency of treatment and causes sewage volumes to exceed the design capacity. The result is damage to the sewer treatment infrastructure and potential for environmental catastrophe.	
Description of the Solution:	The Town will consult with an engineer to reduce long-term risk from flooding to existing and future development by upgrading wastewater infrastructure to reduce infiltration which causes damage to the sewer infrastructure and results in potential for environmental catastrophe. The engineer will evaluate upgrading the wastewater treatment plans to increased the design capacity.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	WIIA, HMGP, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action aims to reduce infiltration in the Town wastewater system to ensure that the treatment plant can remain efficient and not exceed the design capacity. This further protects waterways in the Town and reduces contamination concerns.	
Impact on At Risk Populations:	This action aims to keep the Town waterways clean and not impacted by the wastewater system to protect the drinking water in the Town.	
Impact on Future Development:	This action would account for additional new development and would make sure that the wastewater treatment plant is sizeable enough to handle any new expected development.	
Impact on Critical Facilities/Lifelines:	The wastewater system is a critical facility that needs to remain operable during hazard events, including high precipitation events that may contribute to flooding related issues.	
Impact on Capabilities:	This action aims to reduce infiltration in the Town wastewater system to ensure that the treatment plant can remain efficient and not exceed the design capacity. This further protects waterways in the Town and reduces contamination concerns.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rebuild entire wastewater system	Not cost effective
	Build a second wastewater treatment system	Not cost effective

Action 2026-ThompsonT-07. Neversink Riverbank Stabilization

Lead Agency:	Town Highway Department	
Supporting Agencies:	NYSDEC, Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☒Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The bank of Neversink River has been damaged by recent flooding events and would cause flooding if it fails. The Neversink River does have a flood monitoring device, but there are other vulnerabilities and concerns. The endured erosion of the bank has weakened the stability of surrounding soils which can lead to a higher risk of flooding out of the bank, or cause debris build-up within the body of water, forcing the water over the bank.	
Description of the Solution:	The Town will consult with engineering to identify cost-effective projects to replace and augment susceptible structures and portions of stream bank will be implemented. NYSDEC will be notified before any work near Neversink River is done to protect the natural environment.	
Estimated Cost:	TBD based on mitigation measure	
Potential Funding Sources:	HMGP, FMA, NYSDEC, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will prevent erosion along the Neversink River, protecting property and infrastructure from further impact.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding from the Neversink River. Furthermore, this action will assist in keeping roadways clear of flood waters for the populations which may need to attend medical appointments or require medical attention from first responders.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action would assist in the reduction of roadway flooding from the Neversink River, permitting first responders to traverse the roadways safely.	
Impact on Capabilities:	Identifying areas of flood vulnerability helps the Town to be able to mitigate these locations to reduce impacts.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☒Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Remove properties impacted by stream overflow	Costly
	Construct floodwall to prevent flooding	Cost prohibitive and could ruin natural floodplain function

Action 2026-ThompsonT-08. Salt Shed Improvements

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town does not currently have a covered salt pile which impacts the Town's salt supply and makes them vulnerable in severe winter storm events. This also may impact emergency responses in the Town.	
Description of the Solution:	The Town will evaluate the capacity needed at the Town salt shed site and will then work to acquire the funding for the purchase and installation of an upsized salt shed, or a cover for the current shed.	
Estimated Cost:	TBD	
Potential Funding Sources:	WQIP, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	Salt sheds provide essential protection for bulk salt storage, ensuring its effectiveness, reducing environmental impact, and offering cost-effective, durable solutions for the Town.	
Impact on At Risk Populations:	The upsized and covered salt sheds aim to account for the needs of the Town to keep roadways clear and accessible by emergency responders and protects individuals that have to travel during winter weather conditions.	
Impact on Future Development:	Future development will benefit from an efficient Highway Department with an adequate supply of salt.	
Impact on Critical Facilities/Lifelines:	This action ensures the transportation lifeline remains open, which allows for critical facilities to remain open.	
Impact on Capabilities:	This action ensures winter weather preparation capabilities are enhanced. This action also supports the Town's transportation lifeline by supporting treatment of roadways prior to a severe winter storm.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipality	May not be cost effective due to the distance of the salt shed
	Relocate salt shed	Does not fix issues

Action 2026-ThompsonT-09. Backup Power at Critical Facilities

Lead Agency:	Town Administration	
Supporting Agencies:	Town Highway Department, Water/Sewer Managers, Fire Departments, Park Managers	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town Hall, Highway Department, Water and Sewer system are without power and are vulnerable during power outages, as continuity of operations will not be maintained. It is also unknown if the Fire Departments that service the Town have backup power. With sufficient backup power, the Town can use the Town Hall or Highway Department as an emergency heating/cooling station during power outages or during a Code Red/Blue event.	
Description of the Solution:	The Town will conduct a generator study to determine the size generator that is needed for the Town Hall, Highway Department, Water and Sewer system to be able to perform continuity of operations, including the potential of the Town Hall or Highway Department being used as an emergency heating/cooling shelter. The Town will also evaluate if any of the Fire Departments that service the Town are in need of backup power. Once the size is determined, the Town will acquire the funding for the purchase and installation of the generators, and the Highway Department will conduct routine maintenance on the generator.	
Estimated Cost:	TBD after Study	
Potential Funding Sources:	HMGP, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of a critical facility that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-ThompsonT-10. DEC Dam Owner Communication

Lead Agency:	Town Administration	
Supporting Agencies:	NYSDEC, Private Property Owners	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has numerous dams that are located within the Town limits. Rubin Lake Dam has the wrong owner identified in the NYSDEC dam data list and the Town now currently owns the Adams Pond Dam (163-0204) as has created a park in the area and the wrong owner is identified in the NYSDEC list. It is important for NYSDEC to have the correct information on file in case of emergencies or dam interruptions.	
Description of the Solution:	The Town will work with private property owners to ensure that the NYSDEC data is reflective of the current information that the Town has including Owners and any concerns or problems in relation to structural integrity of the dams.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget, Property Owners	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 5, 6	
Benefits:	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 At Risk Populations:	This action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to at risk populations exists.	
Impact on Future Development:	This action accounts for future development that may be impacted by the inundation area of the dams in the Town.	
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.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory
	Rely on Private Property owners	Private property owners may be unsure of who to contact

Table 21-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-ThompsonT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-ThompsonT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-ThompsonT-03	Lake Louise Marie Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-ThompsonT-04	Wanaksink Lake Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High
2026-ThompsonT-05	Highway Garage	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-ThompsonT-06	Wastewater System Infrastructure	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-ThompsonT-07	Neversink Riverbank Stabilization	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-ThompsonT-08	Salt Shed Improvements	1	0	1	1	1	0	1	1	1	1	1	1	1	1	12	High
2026-ThompsonT-09	Backup Power at Critical Facilities	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-ThompsonT-10	DEC Dam Owner Communication	0	1	1	1	1	0	0	1	0	1	1	1	1	0	10	Medium

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

22. TOWN OF TUSTEN

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Tusten 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 Tusten, describes who participated in the planning process, assesses Tusten's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

22.1 HAZARD MITIGATION PLANNING TEAM

The Town of Tusten identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments.

Table 22-1 summarizes the Town officials who participated in the development of the annex. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 22-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ben Johnson, Town Supervisor Address: 210 Bridge St, Narrowsburg, NY 12764 Phone Number: (845) 252-7146, ext. 2 Email: supervisor@tusten.org	Name/Title: Donald Neiger, Highway Superintendent Address: 210 Bridge St, Narrowsburg, NY 12764 Phone Number: (845) 252-7146, ext. 8 Email: tustenhighway@tusten.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Jim Crowley, Code Enforcement Address: 210 Bridge Street, Narrowsburg, NY 12764 Phone Number: (845) 252-7146 ext. 1002 Email: codeenforce@tusten.org	

22.2 COMMUNITY PROFILE

22.2.1 Community Classifications

Table 22-2 summarizes classifications for community programs available to Tusten.

Table 22-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	Yes	Bronze	February 12, 2012

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	Yes	Designated	October 28, 2022
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

22.2.2 Community Profile

Geographical Description

Situated in the center of the Upper Delaware River corridor, the Town of Tusten, as well as Narrowsburg, is surrounded by the Catskill and Pocono Mountains and known for its river valleys and forested hills (Town of Tusten 2025).

Government Type and Description

The Town is governed by a Town Board, comprised of the Town Supervisor (two-year term), Deputy Supervisor (one-year term), and four council members (four-year staggering terms) (Town of Tusten 2025).

Table 22-3 through Table 22-6 note land area, population, and building stock information for the Town of Tusten.

Table 22-3. Total Land Area in the Town of Tusten

Jurisdiction	Total Land Area	
	Acres	Square Miles
Tusten (T)	30,527.0	47.7

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 22-4. Population Estimates in the Town of Tusten

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
1,405	1.8%	1,528	1.9%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 22-5. At Risk Populations in the Town of Tusten

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
293	19.2%	31	2.0%	0	0.0%	231	15.1%	134	8.8%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 22-6. General Building Stock in the Town of Tusten

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
1,254	$908,701,677	1,085	$528,438,717	117	$187,590,573	18	$68,824,797	34	$123,847,590

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

22.3 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 Tusten's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

22.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Tusten are shown in Figure 22-1 and Figure 22-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Tusten has significant exposure.

Figure 22-1. Tusten Flood, Wildfire and Dam Inundation Area Map

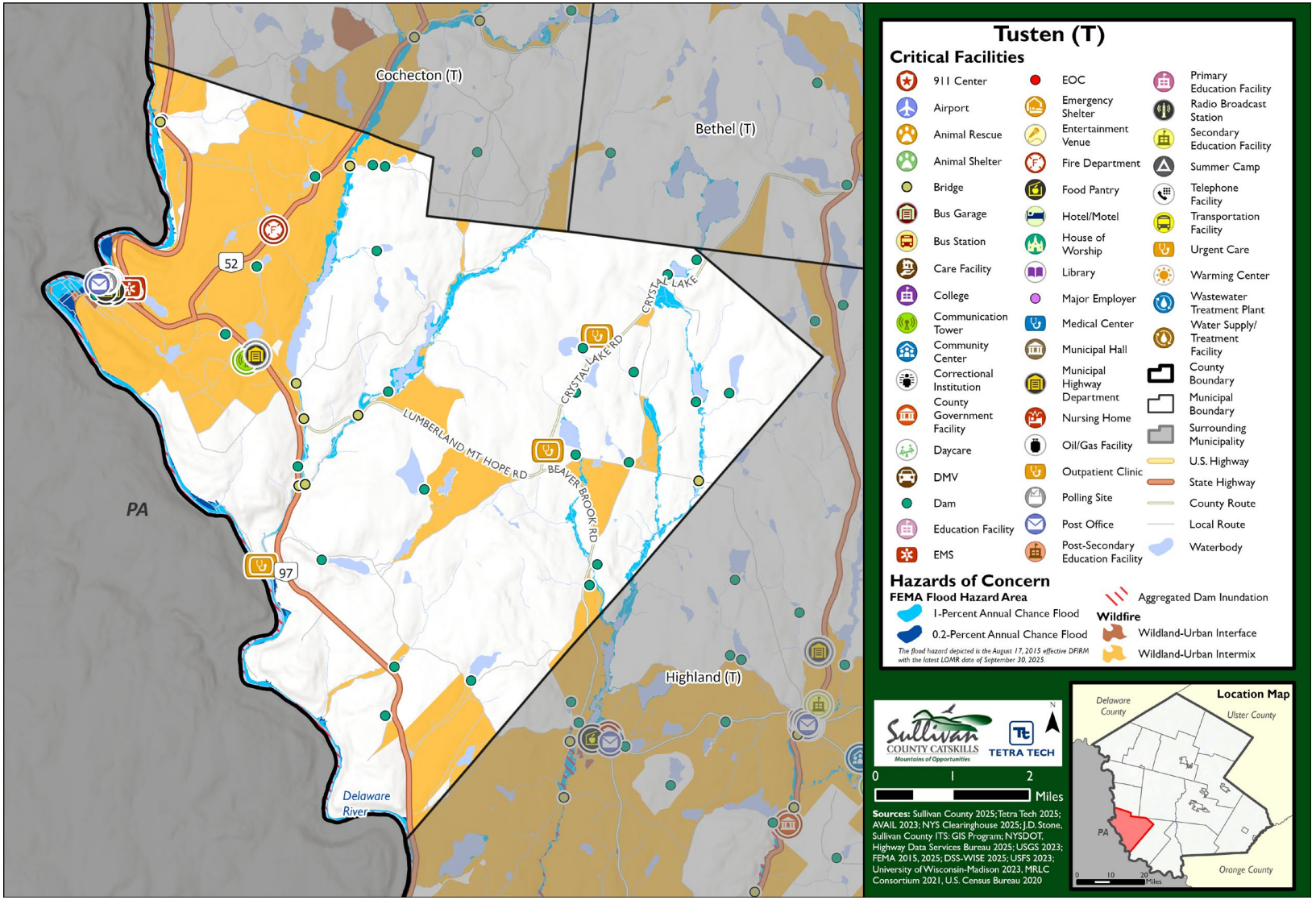
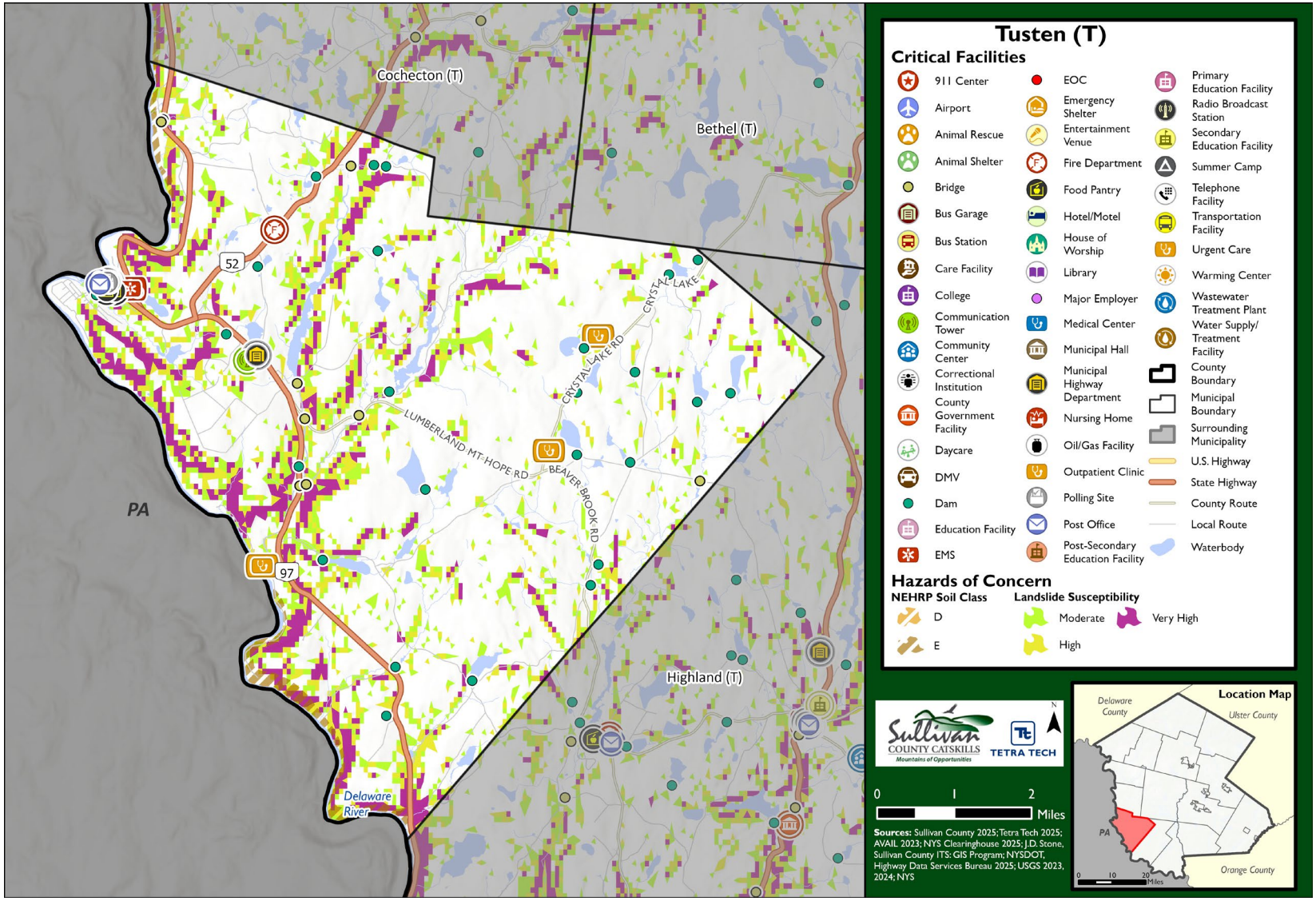


Figure 22-2. Tusten NEHRP Soil and Landslide Area Map



22.3.2 Previous Event History

The history of natural and non-natural hazard events in Tusten is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 22-7 and Table 22-8 provide details on the loss and damage in Tusten during hazard events since the last hazard mitigation plan update.

Table 22-7. Presidential Disaster Declarations History in Tusten

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Tusten
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Town abided by work from home orders, masking mandates and social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Town reported spotty trees and wires downed in some areas.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Town reported spotty trees and wires downed in some areas.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 22-8. Hazard Event History in Tusten

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Tusten
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Town reported spotty trees and wires downed in some areas.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Town reported spotty trees and wires downed in some areas.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Town reported spotty trees and wires downed in some areas.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Town reported spotty trees and wires downed in some areas.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Town reported spotty trees and wires downed in some areas.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Town reported spotty trees and wires downed in some areas.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Tusten
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Town reported spotty trees and wires downed in some areas.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Town reported spotty trees and wires downed in some areas.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Town reported spotty trees and wires downed in some areas.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

22.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 22-9 includes an inventory of critical facilities and infrastructure for the Town of Tusten.

Table 22-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Outpatient Clinic	Outpatient Clinic	N	Y	2026-TustenT-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: Nine bridges and four dams were identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

22.3.4 Local Hazard Impacts Assessment

Representatives from the Town of Tusten Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 22-10.

Table 22-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	County Road 22 has been impacted by Beaver Dams. There is also a Beaver Dam located on Brook Road that occasionally pops up.
Drought	The Town residents use a combination of well water and a municipal water system. The Town is in process of upgrading (7-million-dollar upgrade) the water system. The Water District ran into an issue with an earthquake that occurred in New Jersey which resulted in a pinched line and reduced water flow. Engineers are working on mitigating the flow, but there are no water shortage issues. There are also no concerns with dry wells to Town's knowledge.
Earthquake	Water District has run into an issue with earthquake in NJ which pinched a line and reduced the flow.
Flood	The Town reported flooding along the Delaware River, the Flatts, Hankens Road, Brook Road, 10 Mile 'A' Road, and Smith Hughes Road tend to be flood prone.
Landslide	If a slide were to occur, Brook Road would most likely be impacted.
Pandemic	The Town learned from COVID-19.
Severe Storm	In the event of a power outage the Town would send residents to the Town Hall for temporary sheltering which has backup power. The Town also has private churches that would be available. Power outages in the Hamlet are prioritized because of the Sewer/Water District, while other areas are sometime without power for numerous days.
Severe Winter Storm	The Town Highway Department, County and State entities are effective at clearing roadways.
Wildfire	The Town reported that some smaller fires occur many are caused by downed wires.

22.3.5 Vulnerable Community Assets

Representatives from the Town of Tusten Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 22-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 22-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	Ryer Road culvert needs to be upsized for improved drainage. There is a single lane wooden bridge on Hoffman Road (County owns it) that has limited weight capacity. County Route 111 is flood prone due to water that comes out of the Lovelace Dam and overtops the roadway.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Municipal Buildings	The Town need backup power for two of the three wells. The Town is in progress in getting one for the sewer department.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	The Town has an undersized Highway Garage and the current one needs structural work done and a pole building for equipment not used in the winter. During the winter the highway department has no place to work. The Town has an undersized salt shed because the Town takes care of more roads than they did before (used to be dirt roads/seasonal roads and are now paved).
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	Not applicable
Elder-care Facilities	Not applicable	**Utilities**	There are issues with lack of maintenance from utility companies.
Fire/Police Stations	The Fire Departments have backup power (two).	**Wastewater Treatment Plants**	During storm events there is potential for the sewer system to flood.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	The Town is in process of upgrading (7-million-dollar upgrade) the water system. The Water District ran into an issue with an earthquake that occurred in New Jersey which resulted in a pinched line and reduced water flow. Engineers are working on mitigating the flow, but there are no water shortage issues.
Hospitals	Not applicable	**Other**	No known impacts

22.3.6 Dams

Table 22-12 includes all dams in the Town of Tusten. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.

- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 22-12. Dams Located in Tusten

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
134-4507	Rock Lake Dam	TR-Tenmile River	Boy Scouts of America Greater NY Councils	Private	Recreation	Intermediate Hazard Dam
148-6059	Davis Pond Dam	TR-Tenmile River	Boy Scouts of America Greater NY Councils	Private	Recreation	Intermediate Hazard Dam
148-5773	Silver Lake Dam	Trib - Swale Brook	Lake Conference Center	Private	Recreation	Intermediate Hazard Dam
148-3193	Lake La Barr Dam	Narrow Falls Brook	Beaver Brook Rod & Gun Club INC.	Private	Recreation	Intermediate Hazard Dam
134-1353	Silver Spring Manor Lake Dam	TR-Delaware River	Betty Giglio	Private	Recreation	Low Hazard Dam
148-4495	Balsam Pond Dam	Balsam Brook	Beaver Brook Hunting and Fishing Club, INC.	Private	Recreation	Low Hazard Dam
134-5073	Lovelace Dam	Perry Pond Brook	Thomas Lovelace & Star Hesse	Private	Other	Low Hazard Dam
134-0222	Tusten Light & Power Dam	Tenmile River	Dorothy T. Sillivan Living Trust	Private	Hydroelectric	Low Hazard Dam
148-3679	Evers Recreational Pond Dam	TR-Tenmile River	Jane Rose Sloyer	Private	Recreation	Low Hazard Dam
148-5749	PERKOVIC DAM	Trib - Swale Brook	Frank Perkovic	Private	Recreation	Low Hazard Dam
148-5724	BEAVERBROOK ROAD DAM	Trib - Dunn Brook	Paul Schierwagen	Private	Recreation	Low Hazard Dam
148-4505	WEIDEN LAKE DAM	East Branch Tenmile River	Weiden Lake Property	Private	Recreation	Low Hazard Dam

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
			Owners Association, INC.			
148-4595	Bodine Lake Dam	TR-TOASPERNS POND	Albert Piatkowski	Private	Other	Low Hazard Dam
148-4496	Welmet Lake Dam	Beaver Brook	Camps Mogen, Auraham,Sterneers, Spatt, INC	Private	Recreation	Low Hazard Dam
148-4494	Crystal Lake Dam	Beaver Brook	Boy Scouts of America	Private	Recreation	Low Hazard Dam
148-4596	Halfmoon Lake Dam	Dunn Brook	Boy Scouts of America Greater NY Councils	Private	Recreation	Low Hazard Dam
148-4499	Turnpike Pond Dam	Dunn Brook	Boy Scouts of America	Private	Recreation	Low Hazard Dam
148-4506	Fox Lake Dam	Dunn Brook	Boy Scouts of America Greater NY Councils	Private	Recreation	Low Hazard Dam
148-3386	Evers Lake Dam	TR-Ten-mile River	Liu, Allan, & Others	Private	Recreation	Low Hazard Dam
148-4419	Hankins Pond Dam	Grassy Swamp Brook	Walter & Bertha S Hawkins	Private	Recreation	Low Hazard Dam
148-5355	Roland Flora Dam	-	Roland Flora	Private	Fish and Wildlife Pond	Low Hazard Dam
148-4904	John Ouwerkerk Jr Dam	-	John Ouwerkwek	Private	Recreation	Low Hazard Dam
148-4933	Buck Ridge Rod & Gun Club Dam	TR-Tenmile River	Buck Ridge Rod & Gun Club INC	Private	Fire Protection, Stock, Or Small Farm Pond, Recreation	Low Hazard Dam
134-4149	Fred Meyer Dam And Dike	Deep Hollow Creek	Fred Meyer	Private	Recreation	Low Hazard Dam
134-4604	Feagles Lake Dam	TR-Delaware River	Donald W & Vivian A Cromer	Private	Recreation	Low Hazard Dam
134-4786	Little Lake Erie Dam	Little Lake Erie Outlet	Town of Tusten	Local Government	Recreation	Low Hazard Dam
148-4832	Ten Mile River Boy Scout Camp Dam	Beaver Brook	Boy Scouts of America	Private	Recreation	Hazard Classification Not Assigned

Notable comments regarding dams in the jurisdiction:

The Silver Lake Dam created some downstream flooding in the past few years due to a breech. There also are issues with beaver dams in the area also impact this.

22.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 22-13 identifies the preliminary hazard ranking for Tusten, whether the Town agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 22-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Disagree	Medium	Town/DEC has some concerns with dams and has a significant amount of dams.	Medium
Drought	Medium	Disagree	Low	Town is not impacted by drought events and has little impacts to agriculture.	Low
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Disagree	High	Storms heavily impact the Town and contribute to floods and severe wind impacts utility infrastructure.	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

22.4 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 22-14 through Table 22-17.

22.4.1 Development and Permitting

Table 22-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	The Town issues permits
What is your process for tracking building permits?	IPS Program
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes, the floodplain is tracked
Does your community have a buildable land inventory? If yes, please describe.	Yes, there are some large parcels that the Town has that could be subject to subdivisions

Table 22-15. 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
2020				
Total Permits	8	0	0	8
Permits within SFHA	0	0	0	0
2021				
Total Permits	19	0	0	19
Permits within SFHA	0	0	0	0
2022				
Total Permits	9	0	0	9
Permits within SFHA	0	0	0	0
2023				
Total Permits	12	0	1	13
Permits within SFHA	0	0	0	0
2024				
Total Permits	10	0	0	10
Permits within SFHA	0	0	0	0
2025				
Total Permits	11	0	0	11
Permits within SFHA	0	0	0	0

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

Table 22-16. Recent Major Development and Infrastructure from 2020 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
None Identified					

Table 22-17. 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
Novominsk	Seasonal Educational	-	Silver Lake Dam area	Dam Inundation	In discussion with the Planning Board

22.5 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 Table 22-1 is responsible for maintaining this information.

22.5.1 NFIP Statistics

Table 22-18 summarizes the NFIP policy and claim statistics for the Town of Tusten.

Table 22-18. Tusten NFIP Summary of Policy and Claim Statistics

NFIP Community Number	360831#
# Policies	1
# Claims (Losses)	21
Total Loss Payments	$778,739.75
# Repetitive Loss Properties	8
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

22.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 22-19.

Table 22-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	Along Delaware River, the Flatts and Hankens Road, Brook Road tend to be flood prone. 10 Mile River ‘A’ Road. Smith Hughes Road.

NFIP Topic	Comments
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Jim Crowley, Code Enforcement Officer / Building Inspector
What local department is responsible for floodplain management?	The Town of Tusten Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #2 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 19, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	The Town performs permit review, inspections and GIS capabilities.
What are the barriers to running an effective NFIP program in your community, if any?	Limits in staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None since flood of 2006
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	No, but Town would be able to calculate it
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unsure
Does the community maintain elevation records? If yes, please describe.	Yes
Describe any areas of flood risk with limited NFIP policy coverage.	Unsure

NFIP Topic	Comments
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Interested property owners express interest to banks and insurance companies
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	County has flood map overlays and flood zone maps
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, site plan review, flood area overlays. The planning board or zoning board consider efforts to reduce flood risk.

22.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Tusten 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 Tusten to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

22.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 22-20 and Table 22-21 detail the available planning and regulatory capabilities of the Town.

Regulatory Capabilities

Table 22-20. Regulatory Capabilities in Tusten

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in the Town of Tusten. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions this chapter.	Chapter 126, 2007	Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	Yes	The Town of Tusten shall fully undertake and exercise its regulatory authority with regard to activities subject to regulation in freshwater wetlands, and in all areas adjacent to any such freshwater wetland up to 100 feet from the boundary of such wetland.	Chapter 158, 1976	Planning Board
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and	Chapter 152 (Local Law #2), 2011	Code Enforcement Officer

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
		F. Qualify for and maintain participation in the National Flood Insurance Program.		
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	Site Plan review shall be required for all special uses and such other uses. The Town of Tusten Planning Board is authorized to review and approve, approve with modifications, or disapprove site plans as submitted to the Town.	Chapter 300 Article VIII, 2011	Planning Board
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	This chapter is adopted for the following purposes: A. Promoting the orderly growth and development of the Town in accordance with the Town of Tusten Comprehensive Plan. B. Affording adequate facilities for the housing, transportation, distribution, comfort, convenience, health and safety of Town residents. C. Minimizing foreseeable maintenance and improvement problems as well as economic burdens associated with development of land. D. Conserving the Town's natural resources and protecting its attractive environment so as to maintain property values and otherwise provide for the general welfare of residents of the Town of Tusten.	Chapter 241, 2017	Planning Board
Wellhead Protection	No	-	-	-

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Zoning/Land Use Code	Yes	The purposes of this chapter, its regulations and its zoning and overlay districts are to promote the health, safety and general welfare of the present and future inhabitants of the Town; guard against loss of life and damage to property due to flooding through protection of natural drainage features; preserve features of historical significance; encourage the most appropriate development of the Town in accordance with the Town of Tusten Comprehensive Plan; preserve open space, encourage the preservation of the scenic and natural assets of the Town, and of the rural residential character of the Town, and to discourage commercial or industrial development that is inconsistent with such preservation; protect property values; regulate location and use of buildings and the uses of land within each district with regard to residential, commercial, light industrial, and other purposes; lessen congestion in streets; secure safety from fire, flood, panic, and other dangers; provide adequate light and air and acceptable noise levels; prevent overcrowding of land and avoid undue concentration of population; facilitate the adequate provision of transportation, water, sewage disposal, parks and other public requirements; and establish districts in which regulations concerning the size of buildings and other structures, the percentage of lots that may be covered, the size of yards, and the use of buildings, structures and land for trade, commerce, residence, and other purposes are restricted and regulated as hereinafter provided.	Chapter 300, 2011	Code Enforcement

Planning Capabilities

Table 22-21. Planning Capabilities in Tusten

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Comprehensive Plan	Yes	The comprehensive plan serves as a strategic framework for guiding the long-term growth and development of the community, ensuring that land use, resources, and public policies align with the Town's vision and goals.	Town of Tusten Comprehensive Plan, 2023	Planning and Zoning
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	This plan results from the recognition on the part of local government and state officials that a comprehensive plan is needed to enhance the Town's ability to manage emergency/disaster situations. It was prepared by Town officials working as a team in a planning process recommended by the New York State Office of Emergency Management. This plan constitutes an integral part of a statewide emergency management program and contributes to its effectiveness. Authority to undertake this effort is provided by both Article 2-B of State Executive Law and New York State Defense Emergency Act.	Comprehensive Emergency Management Plan, 2014	Supervisors Office
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The Town of Tusten's Emergency Operations Plan (EOP) is a comprehensive document that outlines the procedures and strategies for managing emergencies effectively.	2015	Town Administration
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	Yes	The Open Space and Recreation Plan establishes a vision for a townwide network of open spaces, public recreation and natural habitats. The plan creates a roadmap to ensure an appropriate balance of open space, public access, natural resources, and public recreational opportunities. The plan enables	Open Space Plan, 2025	Conservation Advisory Council

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		the Town to identify priorities for open space protection.		
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Mid-Hudson Regional Community Health Assessment Sullivan County Community Health Assessment Community Health Improvement Plan	Mid-Hudson Region LHDs Sullivan County Department of Public Health, Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	Yes	The River Management Plan UDSRR serves as a guiding document for the management of the Upper Delaware Scenic and Recreational River. It outlines the agreement between all levels of government to protect the river's values, including its natural, cultural, and recreational resources. The plan is designed to balance conservation, recreation, and local interests, ensuring that the river's unique characteristics are preserved for future generations. It also provides a framework for cooperative stewardship and local land use, guiding the management of land use, water resources, fisheries and wildlife, and cultural resources.	River Management Plan	Upper Delaware Council

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Other	No	-	-	-

22.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 22-22 details the available administrative and technical capabilities of the Town.

Table 22-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality	Comments
Civil Engineer	Yes	Contracted
Construction/Building/Code Enforcement Department	Yes	The Building Inspector issues building permits for any construction which is structural in nature in the Town of Tusten. Examples would be new homes, sheds over 144 square feet, garages, pole buildings, additions, alterations, decks, electrical, pools, screen porches, re-roofing, generators, septic, wells, and solar, etc.
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	Narrowsburg Fire District, Tusten Volunteer Ambulance Service
Environmental Commission/Specialist	Yes	Contracted
Grant Writer	Yes	Contracted and on Staff
Maintenance Programs to Reduce Risk	Yes	The Highway Department is responsible for maintenance of equipment, road maintenance and improvements, and snow and ice removal.
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Emergency Response
Open Space Board/Committee	Yes	Conservation Advisory Council
Personnel skilled or trained in website development	Yes	Contracted
Planning Board	Yes	The Planning Board makes decisions on subdivision and special use permit applications. This is a seven-member volunteer board.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land	Yes	Contract

Capability Type	In Place in Municipality	Comments
development and land management practices		
Planners or engineers with an understanding of natural hazards	Yes	Contract
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	On Staff
Professionals trained in conducting damage assessments	Yes	On Staff
Public Works/Highway Department	Yes	There are over 76 miles of town owned roadway in Tusten. The Highway Superintendent also formulates the budget for this Department. Applies for CHIPS (Capital Highway Improvement Program) Program funding from New York State. As necessary applies for FEMA and SEMO funding after road emergencies.
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	The Zoning Board of Appeals makes decisions on variance applications. This is a five-member volunteer board.
Other	Yes	Water and Sewer - The Narrowsburg Water and Sewer Department operates and maintains the Narrowsburg Water System & Waste Water Treatment Plant.

22.6.3 Fiscal Capability

Table 22-23 summarizes financial resources available to Tusten.

Table 22-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	No
Capital improvement project funding	Yes, Water District
Authority to levy taxes for specific purposes	Yes, Water District construction
User fees for water, sewer, gas, or electric service	Yes, Water, Sewer and Lighting
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes, Water and Sewer

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	Yes, CHIPS and SRFW
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, Fish and Wildlife for Open Space Plan

22.6.4 Education and Outreach Capability

Table 22-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 22-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, Town does a once a quarter mailing to update Town residents
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Departments
Hazard mitigation information available on your website	Yes, SMS messages are sent to those signed up relating to Town alerts
Local News	Yes, if there was something notable and long term
Natural disaster/safety programs in place for schools	Not applicable
Organizations that conduct outreach to at risk populations and underserved populations	Yes, County and Community Churches have foodbanks and lunches
Public information officer or communications office	Yes, Town Administration
Social media for hazard mitigation education and outreach	Yes, Town Facebook Page
Warning systems for hazard events	Yes, Code Red Alert System

22.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 22-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*

- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 22-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

22.7 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.

22.7.1 Past Mitigation Action Status

The tables below indicate progress on the Town's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Tusten-1—Tusten - 10 Mile Area Flooding LFA	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Sullivan County Soil & Water
Supporting Agency / Department	-
Action Location	-
Summary of Original Problem	The 10 Mile Area, located at the confluence of Delaware River and Ten Mile River, experiences significant flooding above freeboard, particulary in the homes on Crawford Road during the 1996 and 2004 floods.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water, conduct a local flood assessment (LFA) to accurately identify causes of flooding in the 10 Mile Area where flooding have occurred above freeboard.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	The last wind event that came through undid the work done here. There are some trees that are creating additional flooding and issues in this area. Brook needs to be dredged.
If discontinue, explain why	-

T. Tusten-2—Tusten - Narrowsburg Flats Flooding LFA	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Sullivan County Soil & Water
Supporting Agency / Department	Sullivan County Planning
Action Location	Narrowsburg Flats
Summary of Original Problem	During the 2006 flood, the river went straight through the Narrowsburg Flats area across 2nd, 3rd, 4th Streets and Delaware. In addition, 5th Street gets cut off as well by six (6) or seven (7) feet of water.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water, conduct a local flood assessment (LFA) to accurately identify causes of flooding in the Narrowsburg Flatts Area.
Action Category	Risk/Vulnerability Assessment
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Cuts people off on the river side in terms of evacuation. When it floods, the river does not move around the bend anymore and cuts straight through which contributes to flooding. Flood Study to figure out how to mitigate issue.
If discontinue, explain why	-

T. Tusten-3—Tusten - Replace/Rehab/Maintain Stone Arch Bridge	
Hazards Addressed	Flooding, Hurricane
Lead Agency / Department	Tusten DPW/Highway
Supporting Agency / Department	-
Action Location	Stone Arch Bridge
Summary of Original Problem	Stone Arch Bridge is undersized due to the structure's bottleneck feature that catches flood debris and sediment, contributing to concerns of flood risk and bridge failure.
Summary of Solution (Project)	Reduce long-term risk to flooding and potential failure of a Historic asset by providing a diversion channel around the Stone Arch bridge to allow for excess water flow, based on engineering studies with consideration for site conditions and historical context.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Same brook that needs to be dredged. High water brings trees down and debris and blocks up bridge and leads to additional flooding.
If discontinue, explain why	-

22.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Town of Tusten identified the following mitigation efforts completed since the last HMP:

- The Town upsizes culverts and clears downed trees on a routine basis.

22.7.3 Identified Issues

The Town of Tusten has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has eight repetitive loss properties, but other properties may be impacted by flooding as well.
- The Outpatient Clinic is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.
- The Town has a drastically undersized salt storage shed which impacts the Town's salt supply and makes them vulnerable in severe winter storm events. The Town takes care of more roads than they did before,

because some of the roads used to be dirt and seasonal roads. This also may impact emergency responses in the Town.

- The Town has two well sites that are without power and are vulnerable during power outages, as continuity of operations will not be maintained.
- The status of the Town's bridges and causeway in relation to ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access. The Stone Arch Bridge is historic and undersized due to the structure's bottleneck feature that catches flood debris and sediment, contributing to concerns of flood risk and bridge failure. The bridge on Hoffman Road is a single lane wooden bridge that has limited weight capacity and the County owns it.
- Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. Ryer Road experiences some flooding in relation to an undersized culvert which is inundated during severe storm events and snow melt from severe winter storm.
- The Town experiences flooding issues above freeboard in the 10 Mile Area, located at the confluence of Delaware River and Ten Mile River, particularly in the homes on Crawford Road. The Town has also experienced flooding issues in the Narrowsburg Flats area across 2nd, 3rd, 4th Streets and Delaware. In addition, 5th Street gets cut off as well by six or seven feet of water. The flooding is worsened because of severe storms that result in fallen trees that create additional flooding issues in this area.
- There are flood-prone roadways in the Town. The Lovelace Dam, a privately owned, low hazard dam tends to overflow and overtops County Route 111 which negatively impacts the roadway during severe storm and winter storm events.

22.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Tusten participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Tusten 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.

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 22-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-TustenT-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has eight repetitive loss properties, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Town will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Town will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Town Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Town's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-TustenT-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Town Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Outpatient Clinic is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Town will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Town.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low
Alternative	**Action**	**Evaluation**
	No action	Current problem persists
	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 2026-TustenT-03. Highway Garage

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Highway Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Town's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Town's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.	
Description of the Solution:	The Town will consult with an engineer to retrofit the current highway garage to an upgraded and weather-proofed highway garage facility that has the capacity to store all the vehicles and equipment that should be kept inside to protect their functionality and useful life. Additionally, the Town will explore the feasibility of installing a Pole Barn for additional equipment sheltering. The new facility will be retrofitted to withstand intense precipitation and strong winds. The Town will be responsible for ensuring routine maintenance is performed in the garage. The Town will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on Engineer	
Potential Funding Sources:	HMGP, Town Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	The Town will have a proper-sized highway garage that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By constructing a modern, resilient highway garage designed to withstand local hazard risks, the municipality will ensure that these assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Town's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Highway Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Highway Department's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Action 2026-TustenT-04. Salt Shed Improvements

Lead Agency:	Town Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☐Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Town has a drastically undersized salt storage shed which impacts the Town's salt supply and makes them vulnerable in severe winter storm events. The Town takes care of more roads than they did before, because some of the roads used to be dirt and seasonal roads. This also may impact emergency responses in the Town.	
Description of the Solution:	The Town will evaluate the capacity needed at the Town salt shed site and will then work to acquire the funding for the purchase and installation of an upsized salt shed to fit the needs of the Town currently.	
Estimated Cost:	TBD	
Potential Funding Sources:	WQIP, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 5	
Benefits:	Salt sheds provide essential protection for bulk salt storage, ensuring its effectiveness, reducing environmental impact, and offering cost-effective, durable solutions for the Town.	
Impact on At Risk Populations:	The upsized and covered salt sheds aim to account for the needs of the Town to keep roadways clear and accessible by emergency responders and protects individuals that have to travel during winter weather conditions.	
Impact on Future Development:	Future development will benefit from an efficient Highway Department with an adequate supply of salt.	
Impact on Critical Facilities/Lifelines:	This action ensures the transportation lifeline remains open, which allows for critical facilities to remain open.	
Impact on Capabilities:	This action ensures winter weather preparation capabilities are enhanced. This action also supports the Town's transportation lifeline by supporting treatment of roadways prior to a severe winter storm.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipality	May not be cost effective due to the distance of the salt shed
	Relocate salt shed	Does not fix issues

Action 2026-TustenT-05. Backup Power at Critical Facilities

Lead Agency:	Town Administration		
Supporting Agencies:	Town Highway Department, Water Managers		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire	
Description of the Problem:	The Town has two well sites that are without power and are vulnerable during power outages, as continuity of operations will not be maintained.		
Description of the Solution:	The Town will conduct a generator study to determine the size generator that is needed for the two well sites to be able to perform continuity of operations. Once the size is determined, the Town will acquire the funding for the purchase and installation of the generators, and the Highway Department will conduct routine maintenance on the generator.		
Estimated Cost:	TBD after Study		
Potential Funding Sources:	HMGP, Town Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	2, 4, 5		
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.		
Impact on Future Development:	This action results in protection of a critical facility that could support future development.		
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-TustenT-06. Bridge Mitigation

Lead Agency:	Highway Department	
Supporting Agencies:	Town Administration, County DPW	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The status of the Town's bridges and causeway in relation to ability to withstand hazard events is unknown. Failure of bridges or causeways could result in loss to life and limitations to emergency access. The Stone Arch Bridge is historic and undersized due to the structure's bottleneck feature that catches flood debris and sediment, contributing to concerns of flood risk and bridge failure. The bridge on Hoffman Road is a single lane wooden bridge that has limited weight capacity and the County owns it.	
Description of the Solution:	The Town will work with an Engineer to identify inadequate or vulnerable bridges and causeways within the Town and replace or retrofit the identified bridges and causeways. The Town will also work with an engineer to provide a diversion channel around the Stone Arch bridge to allow for excess water flow, based on engineering studies, with consideration for site conditions and historical context. The Town will also work with the County to upsize the bridge on Hoffman Road to ensure useability.	
Estimated Cost:	TBD based on mitigation measures	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget, County Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	• Infrastructure will be protected from future hazard damages. • Ensures at least a single transportation route remains accessible to the community.	
Impact on At Risk Populations:	This action ensures that the transportation corridor will remain accessible to emergency responders.	
Impact on Future Development:	This action ensures future development will have a reliable transportation system to keep accessibility open to new development.	
Impact on Critical Facilities/Lifelines:	• Ensures transportation routes remain open and accessible to the public for daily use and evacuation needs. • Provides a point of access for first responders into communities that may have faced damage from a hazard event on either side of the bridge.	
Impact on Capabilities:	Increases community resiliency to flooding events in vulnerable areas that would normally be vulnerable to prolonged isolation after high-water events.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove Bridge	Not feasible
	Rebuild entire bridge	Not cost effective

Action 2026-TustenT-07. Ryer Road

Lead Agency:	Highway Department	
Supporting Agencies:	Town Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Recent storm events have resulted in severe rainfall which have overwhelmed culverts and caused flooding. It is assumed that some culverts may be undersized and contribute to flooding. Ryer Road experiences some flooding in relation to an undersized culvert which is inundated during severe storm events and snow melt from severe winter storm.	
Description of the Solution:	The Town will work with an engineer to complete a survey of culverts on Ryer Road that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town will acquire the funding for the purchase and installation of the upsized culverts. The Town Highway Department will complete the necessary upsizing for those culverts noted to be undersized.	
Estimated Cost:	TBD based on mitigation measures	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	This action ensures future development will have a reliable transportation system to keep accessibility open to new development.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-TustenT-08. Flood Study

Lead Agency:	Highway Department		
Supporting Agencies:	Town Administration, Sullivan County Soil & Water, NYSDEC		
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire	
Description of the Problem:	The Town experiences flooding issues above freeboard in the 10 Mile Area, located at the confluence of Delaware River and Ten Mile River, particularly in the homes on Crawford Road. The Town has also experienced flooding issues in the Narrowsburg Flats area across 2nd, 3rd, 4th Streets and Delaware. In addition, 5th Street gets cut off as well by six or seven feet of water. The flooding is worsened because of severe storms that result in fallen trees that create additional flooding issues in this area.		
Description of the Solution:	The Town will work with an engineer to reduce long-term risk to flooding for existing assets and future development, in collaboration with Sullivan County Soil & Water and will conduct a local flood assessment (LFA) to accurately identify causes of flooding in the 10 Mile Area where flooding has occurred above freeboard as well as in the Narrowsburg Flatts Area. The Town will also evaluate the feasibility of dredging and extensive debris removal in surrounding bodies of water that contribute to flooding.		
Estimated Cost:	TBD based on mitigation measures		
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	2, 4, 5		
Benefits:	• Flood risk will be reduced in hazard prone areas. • Vulnerable communities will be identified ahead of a flood event, which will allow first responders to plan and stage resources in those areas. • Future mitigation projects may be identified that will further increase overall community resiliency to flooding and other hazard events.		
Impact on At Risk Populations:	• Areas vulnerable to flooding will be made aware to Town leadership and first responders which can place an emphasis on controlled future development. • If cost-effective mitigation actions are identified, they may be implemented in flood prone areas that could reduce their overall risk to loss of life and property.		
Impact on Future Development:	Flood insurance costs may decrease.		
Impact on Critical Facilities/Lifelines:	• Transportation routes will be more likely to remain open if flooding is mitigated along them. • Hydration systems may remain potable for community usage if projects are identified to protect the existing infrastructure from flooding.		
Impact on Capabilities:	This study will identify opportunities for mitigation funding to be spent in the areas in which it is most needed to increase resiliency and decrease damage from flood events.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternative	**Action**	**Evaluation**	
	No action	Current problem persists	
	Remove flood prone infrastructure	Not cost effective and may not be feasible	

	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-TustenT-09. County Route 111 and Lovelace Dam

Lead Agency:	Dam Owner	
Supporting Agencies:	Town Administration, NYSDEC, County DPW	
Hazards of Concern:	☒Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	There are flood-prone roadways in the Town. The Lovelace Dam, a privately owned, low hazard dam tends to overflow and overtops County Route 111 which negatively impacts the roadway during severe storm and winter storm events.	
Description of the Solution:	The Town will work with the County and dam owner to develop specific mitigation solutions for County Route 111 to ensure the road remains accessible during high precipitation events.	
Estimated Cost:	TBD based on mitigation measures	
Potential Funding Sources:	HMGP, FMA, CHIPS, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	This action ensures future development will have a reliable transportation system to keep accessibility open to new development.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Table 22-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-TustenT-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-TustenT-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-TustenT-03	Highway Garage	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-TustenT-04	Salt Shed Improvements	1	0	1	1	1	0	1	1	1	1	1	1	1	1	12	High
2026-TustenT-05	Backup Power at Critical Facilities	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-TustenT-06	Bridge Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-TustenT-07	Ryer Road	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-TustenT-08	Flood Study	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-TustenT-09	County Route 111 and Lovelace Dam	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

23. VILLAGE OF WOODRIDGE

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Woodridge 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 Woodridge, describes who participated in the planning process, assesses Woodridge's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

23.1 HAZARD MITIGATION PLANNING TEAM

The Village of Woodridge identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 23-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 23-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: David Schlesinger, Village Mayor Address: 2 Dairyland Rd, Woodridge, NY 12789 Phone Number: (845) 434-7447 Email: mayor@woodridgeny.org	Name/Title: Gloria Sanders, Village Clerk Address: 2 Dairyland Rd, Woodridge, NY 12789 Phone Number: (845) 434-7447 Email: villageclerk@woodridgeny.org
National Flood Insurance Program Floodplain Administrator	
Name/Title: Alfred A. Fusco, Code Enforcement (Fusco Engineering) Address: 233 E Main St Middletown, New York 10940 Phone Number: (845) 344-5863 Email: aafjr@fuscoengineering.com	
Additional Contributors	
Name/Title: Thomas Decker, Working Supervisor Method of Participation: Provided pertinent information for the development of this annex.	

23.2 COMMUNITY PROFILE

23.2.1 Community Classifications

Table 23-2 summarizes classifications for community programs available to Woodridge.

Table 23-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

23.2.2 Community Profile

Geographical Description

Located within the Town of Thompson, the Village of Woodbridge is a small village surrounded by forested, hilly terrain.

Government Type and Description

The Village is governed by a Village Board, consisting of a Mayor, Deputy Mayor, and three trustees (The Village of Woodbridge 2025).

Table 23-3 through Table 23-6 note land area, population, and building stock information for the Village of Woodridge.

Table 23-3. Total Land Area in the Village of Woodridge

Jurisdiction	Total Land Area	
	Acres	Square Miles
Woodridge (T)	1,148.0	1.8

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 23-4. Population Estimates in the Village of Woodridge

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
747	1.0%	954	1.2%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 23-5. At Risk Populations in the Village of Woodridge

At Risk Populations - American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
165	17.3%	55	5.8%	37	3.9%	190	19.9%	182	19.1%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 23-6. General Building Stock in the Village of Woodridge

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
601	$624,670,518	540	$400,599,965	46	$120,288,383	8	$86,177,850	7	$17,604,320

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

23.3 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 Woodridge's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

23.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Village are shown in Figure 23-1 and Figure 23-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Woodridge has significant exposure.

Figure 23-1. Woodridge Flood, Wildfire and Dam Inundation Area Map

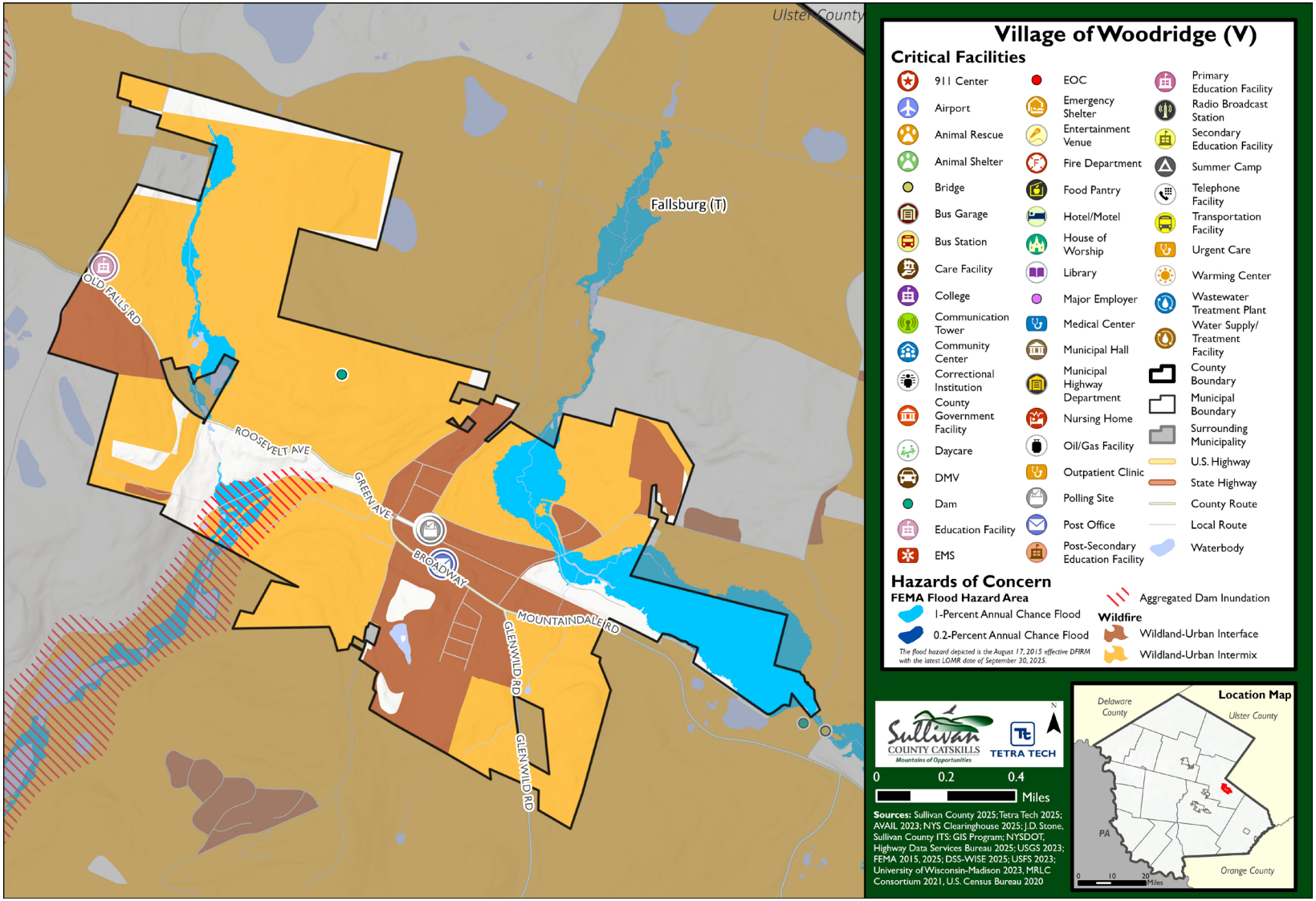
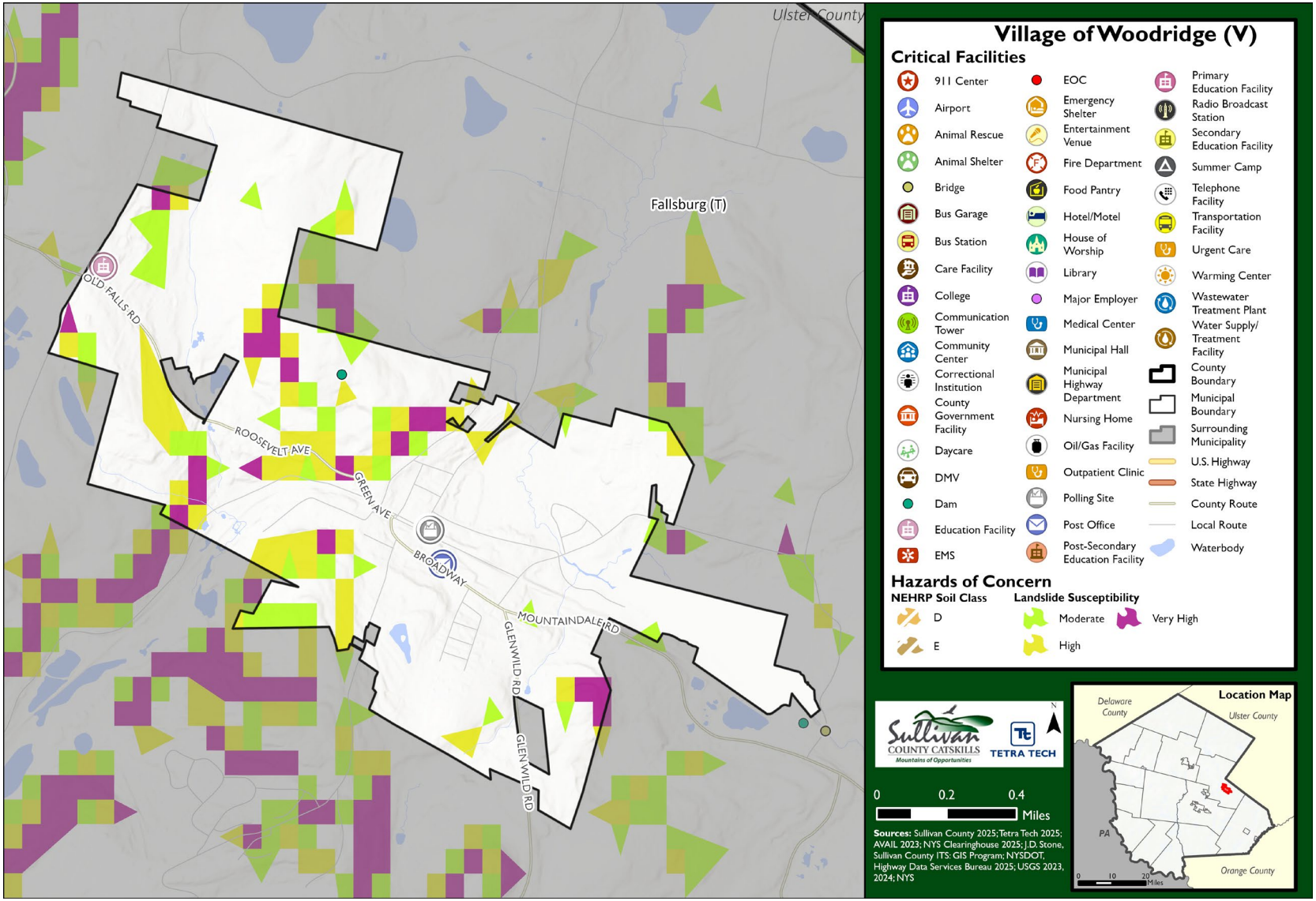


Figure 23-2. Woodridge NEHRP Soil and Landslide Area Map



23.3.2 Previous Event History

The history of natural and non-natural hazard events in Woodridge is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 23-7 and Table 23-8 provide details on the loss and damage in Woodridge during hazard events since the last hazard mitigation plan update.

Table 23-7. Presidential Disaster Declarations History in Woodridge

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Woodridge
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Village abided by masking mandates, work from home orders and social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Village did not incur any documented damage or losses.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	The Village did not incur any documented damage or losses.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 23-8. Hazard Event History in Woodridge

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Woodridge
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Village did not incur any documented damage or losses.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Village did not incur any documented damage or losses.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Village did not incur any documented damage or losses.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Village did not incur any documented damage or losses.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Village did not incur any documented damage or losses.
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Village did not incur any documented damage or losses.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Woodridge
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Village did not incur any documented damage or losses.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Village did not incur any documented damage or losses.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Village did not incur any documented damage or losses.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

23.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 23-9 includes an inventory of critical facilities and infrastructure for the Village of Woodridge.

Table 23-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
None Identified					

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025

23.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Woodridge Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 23-10.

Table 23-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Village does have beavers that make dams above Silver Lake. Recently, Beaver dams in this area are currently flooding properties and dams are worsening. Village does their best to remove dams and they are put back up quickly.
Drought	Village residents are on both well water and municipal water system. There are no issues with water main breaks recently and no concerns with the municipal water system other than backup power. The Village has not had to issue conserve water warnings.
Earthquake	No known impacts
Flood	The Village incurs flooding at Silver Lake. Kreiger Park area is heavily impacted. Greenfield Road tends to have some flooding before the intersection.
Landslide	No known impacts
Pandemic	No known impacts
Severe Storm	When power is out, it is restored within hours.
Severe Winter Storm	Village DPW is efficient and effective at clearing roadways. There are no concerns with County/State entities clearing their applicable roadways.
Wildfire	No known impacts

23.3.5 Vulnerable Community Assets

Representatives from the Village of Woodridge Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 23-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 23-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	Newburg Egg has a big operation here and there are water contamination concerns.
Area: Concentration of Residences	No known impacts	**Local Roads, Highways, Culverts, Bridges**	Greenfield Road tends to have some flooding before the intersection. There is a bridge here that is of concern as well. Mountaindale Road – Bridge (goes from Village to County owned road after the bridge). Culvert system needs to be upsized Lew Street – Town of Fallsburg side has a rocky area that floods road out at Village entrance. Broadway Street – would need to be upgraded to handle Lew Street upgrades Roosevelt/Old Falls Road- culvert upgrade into the stream. Diane Boulevard – Beaver issues and flooding issues. Culvert upsize.

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
			Village Line of Glenwild Road – County has a culvert that goes across road here. Water flow issue and culvert is creating sinkholes in the road because it is deteriorating. (County as primary) Bridge on Silver Lake Road by Silver Lake Dam is impacted but is located in the Town of Fallsburg.
Municipal Buildings	The Highway Garage has a manual generator that is undersized and not automatic. The Village Hall is a heating/cooling center and needs an upsized generator to handle heating/cooling capacity. This is also used for seniors and Meals on Wheels has been done there before.	**Medical Centers (non-hospital)**	No known impacts
College/University	Not applicable	**Place of Worship**	Ohave Shalom – 14 Maurice Rose Street is an identified emergency shelter with no generator.
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	Kreiger Park has experienced wash outs that impact the baseball fields and identified landing location for emergency medical helicopters. Silver Lake is also in this area, and heavy storms overflow the lake which floods the park.	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	Undersized DPW storage. Equipment has to sit outside and it becomes weathered. Need upsized salt storage. Not enough storage for salt and salt has washed into the Lake and has contributed to some contamination concerns.
Cultural/Historic Buildings/Sites	Kreiger Park has historic Navy Plane (WW2). The Village has an older building that is deemed historical, and facility is falling apart due to increasing storm intensity.	**Schools (K-12)**	No known impacts
Elder-care Facilities	Not applicable	**Utilities**	No known impacts
Fire/Police Stations	Fire has backup power Police facility is in Village building which needs a lot of updating. Improved communications and equipment are needed, including a rescue truck for flooding and potential dam failure.	**Wastewater Treatment Plants**	The Village is expanding the sewer plant, and an upsized generator is needed. The current facility is very old and undersized and has issues with lighting and heating/cooling (Village has more than double the population in the Summer which strains the system).

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
	The Police Department does not have a separate generator, and the Village needs a generator		
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	The Well houses need generators, and an upsized generator is needed at the water plant.
Hospitals	Not applicable	**Other**	No known impacts

23.3.6 Dams

Table 23-12 includes all dams in the Village of Woodridge. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** - Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** - Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** - Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** - Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 23-12. Dams Located in Woodridge

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
163-0259	Simpson Dam	TR-Silver Lake	Emma Simpson	Private	Recreation	Low Hazard Dam

Notable comments regarding dams in the jurisdiction:

No known concerns with manmade dam.

23.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 23-13 identifies the preliminary hazard ranking for Woodridge, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 23-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Agree	-	-	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Agree	-	-	Low
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Disagree	High	Concerns relating to DPW storage and salt availability.	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

23.4 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 23-14 through Table 23-17.

23.4.1 Development and Permitting

Table 23-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Village issues permits
What is your process for tracking building permits?	Permits are tracked by Village system
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes
Does your community have a buildable land inventory? If yes, please describe.	No

Table 23-15. 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
2020				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2021				
Total Permits	0	0	1	1
Permits within SFHA	0	0	0	0
2022				
Total Permits	3	0	1	4
Permits within SFHA	0	0	0	0
2023				
Total Permits	2	0	3	5
Permits within SFHA	0	0	0	0
2024				
Total Permits	1	0	5	6
Permits within SFHA	0	0	0	0
2025				
Total Permits	1	5	2	8
Permits within SFHA	0	0	0	0

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

Table 23-16. Recent Major Development and Infrastructure from 2020 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
The Village did not identify any recent major development and infrastructure from 2020 to Present					

Table 23-17. 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
Glenwild Homes	Cluster	80	104A-1-1	N/A	Not started
Cherry Hill	Cluster	70	111-1-3-11	N/A	Not started
Woodfall Estates	Cluster	141	102-2-20.1, 103-2-7, 103-2-30, 103-2-31	N/A	Not started

23.5 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 Table 23-1 is responsible for maintaining this information.

23.5.1 NFIP Statistics

Table 23-18 summarizes the NFIP policy and claim statistics for the Village of Woodridge.

Table 23-18. Woodridge NFIP Summary of Policy and Claim Statistics

NFIP Community Number	361475#
# Policies	11
# Claims (Losses)	-
Total Loss Payments	-
# Repetitive Loss Properties	-
# Severe Repetitive Loss Properties	-

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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

- = Data is Not Available

Source: FEMA 2025

23.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 23-19.

Table 23-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	The Village incurs flooding at Silver Lake. Kreiger Park area is heavily impacted. Greenfield Road tends to have some flooding before the intersection.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	Fusco Engineering
What local department is responsible for floodplain management?	The Village Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions.
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #5 of 2010
What is the date that your flood damage prevention ordinance was last amended?	October 29, 2010
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Engineering
What are the barriers to running an effective NFIP program in your community, if any?	Lack of staffing, funding and training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	More localized training
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent 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
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	Permitting tracks this
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unknown

NFIP Topic	Comments
Does the community maintain elevation records? If yes, please describe.	Done through engineering and County
Describe any areas of flood risk with limited NFIP policy coverage.	Unknown at this time
How does the community teach property owners or other stakeholders about the importance of flood insurance?	Property owners would seek information out as interested
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	FEMA Mapping
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, they consider flood risk and height restrictions

23.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Woodridge 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 Woodridge to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

23.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 23-20 and Table 23-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 23-20. Regulatory Capabilities in Woodridge

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Village. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.	Chapter 400: Zoning, Article VIII	Planning Board and Codes Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	Yes	The purpose is to minimize disasters or potential disasters and their effects, provide for effective local responses when disasters occur and facilitate local recovery.	Chapter 35 Emergency Management	Mayor
Environmental Protection Ordinance	No	-	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain for participation, in the National Flood Insurance Program.	Local Law #5 of 2010	Code Enforcement Officer

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Growth Management	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	No	-	-	-
Site Plan Code	Yes	Site plan review shall consider factors reasonably related to the health, safety and general welfare of the community.	Chapter 400: Zoning, Article VII	Planning Board and Codes Enforcement
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	These regulations are adopted for the following purposes: A. Promoting the orderly growth and development of the Village and affording adequate facilities for the housing, transportation, distribution, comfort, safety, convenience, health and welfare of its population. B. Protection and promotion of safety, health, welfare, convenience, economy and preservation of the environment. C. Reduction of foreseeable maintenance and improvement problems as well as economic burdens associated with development of land.	Chapter 350 Subdivision of Land	Planning Board and Codes Enforcement
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	It is the legislative intent of this chapter to provide for the orderly and desirable development and use of land within the Village of Woodridge. This chapter incorporates the Comprehensive Plan for the Village of Woodridge and is expected to evolve over time to meet other changing needs. Regular reviews and updates are anticipated.	Chapter 400 Zoning	Planning Board and Codes Enforcement

Planning Capabilities

Table 23-21. Planning Capabilities in Woodridge

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown Revitalization / Development Plan	No	-	-	-
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	A comprehensive plan serves as a long-term blueprint guiding a community's growth, land use, infrastructure, and development while balancing social, economic, and environmental needs.	Village of Woodridge Comprehensive Plan	Woodridge Planning Board and Codes Enforcement
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The purpose of this plan is to minimize disasters or potential disasters and their effects, provide for effective local responses when disasters occur and facilitate local recovery.	Emergency Management Plan, 1995	Emergency manager
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	Yes	The purpose of this plan is to minimize disasters or potential disasters and their effects, provide for effective local responses when disasters occur and facilitate local recovery.	Emergency Operations Plan	Police Department and Mayor
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	No	-	-	-
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

23.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 23-22 details the available administrative and technical capabilities of the Village.

Table 23-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality	Comments
Civil Engineer	Yes	Contract
Communication Officer	Yes	Mayor
Construction/Building/Code Enforcement Department	Yes	Code Enforcement
Economic Development Commission/Committee	Yes	Contract
Emergency Management/Public Safety Department	Yes	Woodridge Police
Environmental Commission/Specialist	Yes	Contract
Grant Writer	No	-

Capability Type	In Place in Municipality	Comments
Health Officer	No	-
Maintenance Programs to Reduce Risk	Yes	DPW
Mitigation Planning Committee	No	Village will look into creating
Mutual Aid Agreements	Yes	Emergency Services/Engineering
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	Village is in process of new website and will get training.
Planning Board	Yes	The duty of the Board is to act upon but not limited to lot line changes, site plans, change of use, special use permits and sign structures as well as the planning, growth and development of the community. The board also reviews and approves or disapproves subdivisions.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	Yes	Village Engineer
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Village Engineer
Professionals trained in conducting damage assessments	Yes	Village Engineer
Public Works/Highway Department	Yes	DPW
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	No	-
Surveyor(s)	Yes	Contracted
Transportation Officer	No	-
Zoning Board of Appeals	Yes	The duty of the Board is to act upon but not limited Use and Area Variances.
Other	Yes	Water and Sewer Department

23.6.3 Fiscal Capability

Table 23-23 summarizes financial resources available to Woodridge.

Table 23-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes, Playground and Beautification
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes, Water and Sewer
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes, Water/Sewer Treatment Plant upgrades
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	Yes, EFC
FEMA funding programs	No
Other State funding programs	Yes, CHIPS and AIM
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

23.6.4 Education and Outreach Capability

Table 23-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 23-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	No
Hazard awareness campaigns, such as school and community programs and events	Yes, Fire Department and Police Department
Hazard mitigation information available on your website	No, but the Village is building a new site
Local News	Yes, Spectrum Six News and the Democrat
Natural disaster/safety programs in place for schools	Not applicable

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Organizations that conduct outreach to at risk populations and underserved populations	Yes, Village Administration
Public information officer or communications office	Yes
Social media for hazard mitigation education and outreach	Yes, Facebook and Instagram
Warning systems for hazard events	Yes, New website will prompt residents to sign up for warning system

23.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 23-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 23-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate

23.7 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.

23.7.1 Past Mitigation Action Status

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Woodridge-1—Woodridge - Acquire New Generator for Village Hall	
Hazards Addressed	Avalanche, Coastal Hazards, Coldwave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Flooding, Tornado, Tsunami/Seiche, Volcano, Wildfire, Wind, Snow Storm
Lead Agency / Department	Village of Woodridge Mayor's Office
Supporting Agency / Department	-
Action Location	Village Hall
Summary of Original Problem	During all hazards, particularly wind storms, the Village Offices, designated as a shelter/cooling station, experience power outages and uses an unreliable, aging generator with a manual start.
Summary of Solution (Project)	Reduce long-term risk of all hazards, particularly wind, that impact power transmission to the Village Offices, as a designated shelter/cooling station, by acquiring and installing an emergency generator for the Village Hall.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Complete
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Not applicable

T. Woodridge-2— Woodridge - Upsize Greenfield Rd Bridge	
Hazards Addressed	Flooding
Lead Agency / Department	Village of Woodridge Mayor's Office
Supporting Agency / Department	Highway Department / DPW
Action Location	Greenfield Rd Bridge
Summary of Original Problem	Greenfield Road experiences flooding caused by the undersized bridge at Novogradsky Road and Silver Lake Road.
Summary of Solution (Project)	Reduce long-term risk of property damage from flooding by upsizing the bridge structure on Greenfield Rd. to improve drainage, reduce roadway flooding, and maintain continuity of operations and access for emergency response activities.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Proposed - Not Started
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Add County as supporting agency.
If discontinue, explain why	Not applicable

23.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Village of Woodridge identified the following mitigation efforts completed since the last HMP:

- The Village has been working on a new website which will have an area dedicated warning residents about incoming hazards.

23.7.3 Identified Issues

The Village of Woodridge has identified the following vulnerabilities within their community for mitigation strategy development:

- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded roadways may be caused by debris in culverts from severe storms and severe winter storms. Greenfield Road, Lew Street, and Broadway Street may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Mountaindale Road, Roosevelt/Old Falls Road, Diane Boulevard, and Glen Wild Road are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.
- Critical facilities require backup power to ensure continuity of operations. The Public Works Garage, Sewer Plant, Police Department, and several well houses, do not have adequate back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Flood risk in the Village is primarily around Silver Lake. Floods from the lake may stem from heavy rains or snowmelt. Kreiger Park, which borders Silver Lake, has experienced wash outs that impact the baseball fields and an identified landing location for emergency medical helicopters. The Public Works Department is also located in the vicinity of Silver Lake, across from the baseball fields.
- The Public Works Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Village's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Village's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.
- Salt and sand exposed to the open-air leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow. The Village salt sand shed does not have adequate capacity to store the needed materials,

leading to exposure and the washing of the exposed materials into Silver Lake, which has contributed to some contamination concerns.

- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.

23.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Woodridge participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Woodridge 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 Village priorities.

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 23-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-WoodridgeV-01. Floodprone Roads

Lead Agency:	Engineer	
Supporting Agencies:	Public Works Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded roadways may be caused by debris in culverts from severe storms and severe winter storms. Greenfield Road, Lew Street, and Broadway Street may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding.	
Description of the Solution:	The Village will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Village Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Village's reliability in terms of transportation.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-WoodridgeV-02. Undersized Culverts

Lead Agency:	Engineer	
Supporting Agencies:	Public Works Department, NYS DOT	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. The culverts on Mountaindale Road, Roosevelt/Old Falls Road, Diane Boulevard, and Glen Wild Road are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters.	
Description of the Solution:	In addition to the culverts on Mountaindale Road, Roosevelt/Old Falls Road, Diane Boulevard, and Glen Wild Road, the Engineer will complete an engineering survey of the culverts in the Village that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Public Works Department will complete the necessary upsizing for the culverts on Village roads.	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Village Budget, NYS DOT	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2026-WoodridgeV-03. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Village Administration, Public Works Department, Water and Sewer Department, Police Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☐Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Public Works Garage, Sewer Plant, Police Department, and several well houses, do not have adequate back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Ground-shaking from earthquakes can knock down utility lines or damage buried utility lines, causing outages. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Engineer will conduct a study to determine the required generator capacity to support the critical facilities. The Village will then purchase and install the generators and all necessary electrical hookup components in conjunction with facility managers. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Village Budget, User Fees	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2026-WoodridgeV-04. Silver Lake Flood Mitigation

Lead Agency:	Engineering	
Supporting Agencies:	Public Works Department	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Flood risk in the Village is primarily around Silver Lake. Floods from the lake may stem from heavy rains or snowmelt. Kreiger Park, which borders Silver Lake, has experienced wash outs that impact the baseball fields and an identified landing location for emergency medical helicopters. The Public Works Department is also located in the vicinity of Silver Lake, across from the baseball fields.	
Description of the Solution:	The Engineer will assess the feasibility and cost-effectiveness of various stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements to prevent future flooding surrounding Silver Lake. The Village may also choose to look into acquiring property for open space to reduce flood risk.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, Village Budget, NYS DEC	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.	
Impact on At Risk Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development surrounding the water ways will have its risk of flood impacts reduced.	
Impact on Critical Facilities/Lifelines:	The stabilization measures will permit roads to remain open as a transportation route.	
Impact on Capabilities:	Not applicable	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☒Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Elevate nearby roads	Cost prohibitive
	Acquire all properties which flood	Cost prohibitive

Action 2026-WoodridgeV-05. Public Works Garage

Lead Agency:	Public Works Department	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Public Works Garage is severely undersized and numerous pieces of equipment used to prepare for and respond to hazard events are currently sitting outside. This impacts the day-to-day functionality and lifespan of the equipment and hinders the Village's ability to perform continuity of operations procedures necessary to sustain vital services for the community. Loss or impairment of this equipment would severely limit the Village's ability to clear roads, maintain access for emergency responders, and provide essential services during and after disasters.	
Description of the Solution:	The Village will consult with an engineer to retrofit the current highway garage to an upgraded and weather-proofed public works garage facility that has the capacity to store all the vehicles and equipment that should be kept inside to protect their functionality and useful life. The new facility will be retrofitted to withstand intense precipitation and strong winds. The Village will be responsible for ensuring routine maintenance is performed in the garage. The Village will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on Engineer	
Potential Funding Sources:	FEMA HMA, Village Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 4, 5	
Benefits:	The Village will have a proper-sized public works garage that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By constructing a modern, resilient public works garage designed to withstand local hazard risks, the municipality will ensure that these assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Village's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Public Works Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Public Works Department with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Public Works Department's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Action 2026-WoodridgeV-06. Salt and Sand Storage Shed

Lead Agency:	Public Works Department	
Supporting Agencies:	Village Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Salt and sand exposed to the open-air leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow. The Village salt sand shed does not have adequate capacity to store the needed materials, leading to exposure and the washing of the exposed materials into Silver Lake, which has contributed to some contamination concerns.	
Description of the Solution:	Evaluate the cost effectiveness and feasibility of constructing a new salt and sand storage shed or expanding the existing shed. The safe storage of these materials ensures the reduction of material loss to erosion and leaching from rain and snow melt and ensure that there are enough critical materials for roadway treatment during storms.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Village Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	2, 4, 5	
Benefits:	This action will support the continuity of operations for the critical services within the Village, including the Public Works Department and first responders. The Public Works Department will maintain its capability to provide road treatments in time of need, ensuring roads are accessible for first responders and regular travelers.	
Impact on At Risk Populations:	At risk populations will have access to maintained roads, ensuring safe travel,	
Impact on Future Development:	Individuals living within future development in the Village will have access to safe, treated roadways.	
Impact on Critical Facilities/Lifelines:	The construction of this structure will enhance the transportation lifeline by ensuring roads are safe to traverse during severe winter storms. Furthermore, it will create an additional critical facility.	
Impact on Capabilities:	This action will ensure the Public Works Department is able to maintain its capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Install underground salt and sand facility	Not feasible
	Share a facility with another municipality	Administratively burdensome

Action 2026-WoodridgeV-07. Floodplain Management Training

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is needed for all municipal officials and for code enforcement officials in charge of municipalities.	
Description of the Solution:	Where feasible, the Village will have staff attend floodplain management trainings offered by FEMA and NYS DEC and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on At Risk Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where at risk populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways to prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Table 23-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-WoodridgeV-01	Floodprone Roads	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2026-WoodridgeV-02	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2026-WoodridgeV-03	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2026-WoodridgeV-04	Silver Lake Flood Mitigation	1	1	1	1	0	0	1	1	1	1	1	1	0	1	11	High
2026-WoodridgeV-05	Public Works Garage	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-WoodridgeV-06	Salt and Sand Storage Shed	0	0	1	1	1	0	1	1	1	1	1	1	1	0	10	Medium
2026-WoodridgeV-07	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)

24. VILLAGE OF WURTSBORO

This jurisdictional annex to the Sullivan County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Wurtsboro 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 Wurtsboro, describes who participated in the planning process, assesses Wurtsboro's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

24.1 HAZARD MITIGATION PLANNING TEAM

The Village of Wurtsboro identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments.

Table 24-1 summarizes the Village officials who participated in the development of the annex. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 24-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Gina Langowsky, Village Clerk Address: 7 Pennsylvania Avenue, Wurtsboro, NY 12790 Phone Number: (845) 888-2522 Email: clerk@villageofwurtsboro.com	Name/Title: Frank Sisco, Village Mayor Address: 7 Pennsylvania Avenue, Wurtsboro, NY 12790 Phone Number: (845) 888-2820 Email: mayor@villageofwurtsboro.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Mark Brennan, Building Inspector Address: 7 Pennsylvania Avenue, Wurtsboro, NY 12790 Phone Number: (845) 888-2819 Email: building villageofwurtsboro.com	

24.2 COMMUNITY PROFILE

24.2.1 Community Classifications

Table 24-2 summarizes classifications for community programs available to Wurtsboro.

Table 24-2. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Community Rating System (CRS)	No	-	-
Firewise Communities classification	No	-	-
National Weather Service StormReady Certification	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Communities	No	-	-

Program	Participating? (Yes/No)	Classification	Date Classified
NYSERDA Clean Energy Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

24.2.2 Community Profile

Geographical Description

The Village of Wurtsboro is located at the eastern edge of Sullivan County, featuring rolling hills and proximity to the Shawangunk Ridge.

Government Type and Description

The Village is governed by a Village Board, comprised of a Mayor and two trustees (Village of Wurtsburo New York 2025).

Table 24-3 through Table 24-6 note land area, population, and building stock information for the Village of Wurtsboro.

Table 24-3. Total Land Area in the Village of Wurtsboro

Jurisdiction	Total Land Area	
	Acres	Square Miles
Wurtsboro (V)	781.4	1.2

Source: NYS GIS Clearinghouse 2025; J.D. Stone, Sullivan County ITS: GIS Program

Table 24-4. Population Estimates in the Village of Wurtsboro

U.S. Census Bureau 2020 Decennial		2023 ACS 5-Year Estimates	
Total Population	% of County Total	Total Population	% of County Total
1,124	1.4%	1,181	1.5%

Source: Sullivan County Planning Department 2025; U.S. Census Bureau 2020 Decennial Total Population

Table 24-5. At Risk Populations in the Village of Wurtsboro

At Risk Populations – American Community Survey 5-Year Population Estimates (2023)									
Population Over 65		Population Under 5		Non-English Speaking Population		Population with Disability		Population Below Poverty Level	
Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total	Total	% of Jurisdiction Total
260	22.0%	42	3.6%	32	2.7%	148	12.5%	125	10.6%

Source: U.S. Census Bureau 2023 ACS Vulnerable Population

Table 24-6. General Building Stock in the Village of Wurtsboro

General Building Stock									
All Buildings		Residential		Commercial		Industrial		Other	
Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value	Building Count	Replacement Cost Value
517	$414,341,458	433	$209,110,112	63	$156,694,840	5	$17,756,805	16	$30,779,701

Source: Sullivan County 2024; Sullivan County Real Property 2025; U.S. Army Corps of Engineers, NSI 2022; RS Means 2024
Notes:
Other = Government, Religion, Agricultural, and Education

24.3 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 Wurtsboro's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Each jurisdiction has unique assets, vulnerabilities and overall risk. A multi-jurisdictional plan needs to identify every hazard (from the whole planning area). In hazard mitigation planning, risk is the potential for damage or loss when natural hazards interact with people or assets. These assets may be buildings, infrastructure or natural and cultural resources. A risk assessment is a robust, data-driven analysis. It explains what might happen. It also finds where the local jurisdiction is vulnerable to hazards. Risk is the relationship, or overlap, between hazards and community assets; the smaller the overlap, the lower the risk.

Each community must describe how the selected hazards affect its jurisdiction. Some hazards will have similar effects across the area: extreme temperatures, windstorms, winter weather, drought, heavy rain, etc. Some have a smaller location and will vary based on geography. Multi-jurisdictional plans must explain these differences.

24.3.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Wurtsboro are shown in Figure 24-1 and Figure 24-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Wurtsboro has significant exposure.

Figure 24-1. Wurtsboro Flood, Wildfire and Dam Inundation Area Map

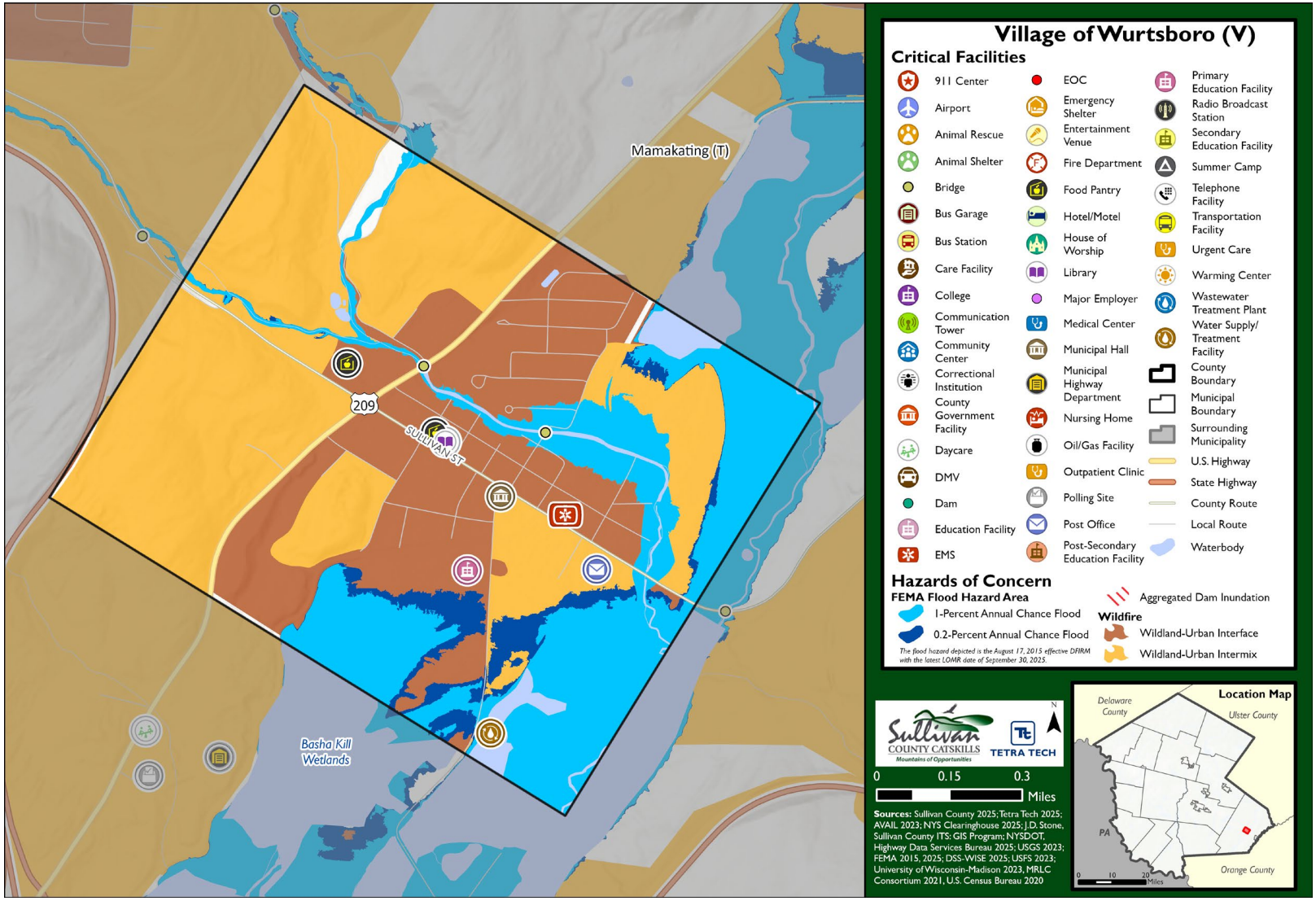
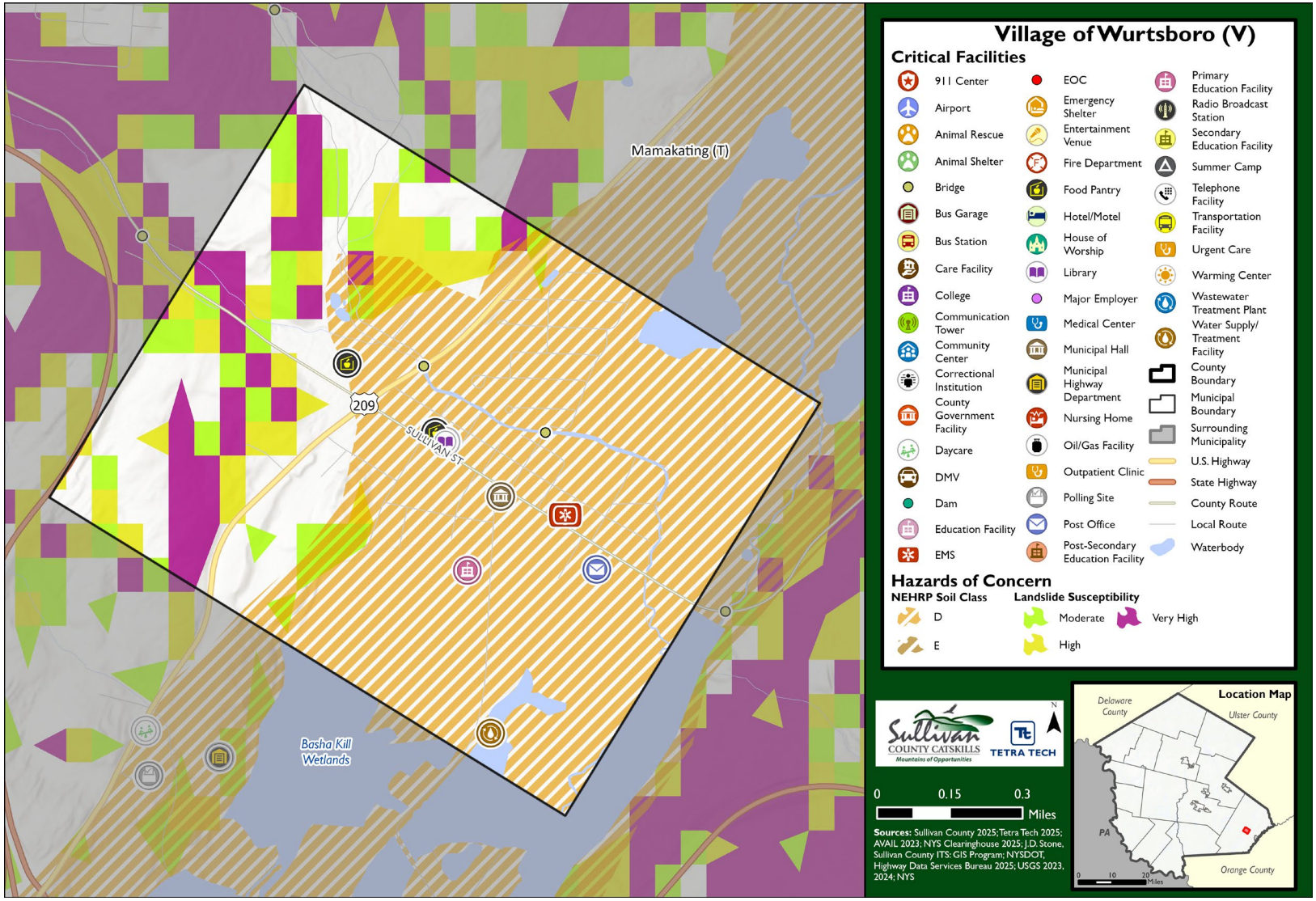


Figure 24-2. Wurtsboro NEHRP Soil and Landslide Area Map



24.3.2 Previous Event History

The history of natural and non-natural hazard events in Wurtsboro is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 24-7 and Table 24-8 provide details on the loss and damage in Wurtsboro during hazard events since the last hazard mitigation plan update.

Table 24-7. Presidential Disaster Declarations History in Wurtsboro

Event Date	Declaration Number	Summary of Event	Summary of Damage and Losses in Wurtsboro
January 20, 2020-May 11, 2023	EM-3434-NY DR-4480-NY	COVID-19 Pandemic	The Village abided by masking mandates, work from home orders, and social distancing.
August 21-24, 2021	EM-3565-NY	Hurricane Henri	The Village did not incur any documented damages other than spotty power outages.
September 1-3, 2021	EM-3572-NY DR-4615-NY	Remnants of Hurricane Ida	There is a flat roof on the Village building and the tiles for the ceiling were on the floor and rain was pouring in. The Village needed a new roof and used the federal money.

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)

Table 24-8. Hazard Event History in Wurtsboro

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Wurtsboro
July 20, 2019	$30,000	A very unstable air mass sparked a round of severe thunderstorms across portions of Central New York and the Western Catskills which led to trees and wires being downed.	The Village reported spotty power outages and trees were reported downed as well.
August 7, 2019	$55,000	An upper-level wave sparked severe thunderstorms in the County that produced downed trees and wires. Some structural building damages were also reported.	The Village reported spotty power outages and trees were reported downed as well.
August 17-18, 2019	$80,000	An upper-level wave moved through Central New York which sparked severe thunderstorms across the area. Wires and trees were also reported down on numerous roadways.	The Village reported spotty power outages and trees were reported downed as well.
July 6, 2020	$40,000	Thunderstorms developed during the heat of the summer. Some of these storms became severe and produced mainly tree and wire damage and some large hail which damaged roofs and vehicles.	The Village reported spotty power outages and trees were reported downed as well.
August 27, 2020	$55,000	Numerous severe thunderstorms were produced which led to trees and wires being downed.	The Village reported spotty power outages and trees were reported downed as well.

Event Date	Estimated Property Damages	Summary of Event	Summary of Damage and Losses in Wurtsboro
July 6-7, 2021	$63,000	Scattered thunderstorms became severe with damaging winds. Tree and powerline damage was observed, one resulting in a small fire.	The Village reported spotty power outages and trees were reported downed as well.
October 26, 2021	$51,000	A severe storm led to areas of moderate heavy rainfall totaling between 3 to 5 inches of rain. This rainfall led to widespread flash flooding which led to roadways being blocked off and closed. Moderate flooding occurred on the Delaware River which crested at 13.68 feet. Flood stage is 12 feet at this location. At 13 feet, flooding reached the parking lot of the bank and a gas station parking lot.	The Village reported spotty power outages and trees were reported downed as well.
April 22, 2023	$207,000	A line of thunderstorms with strong wind gusts and some large hail produced strong winds, including a tornado. There were some reports of downed trees and power lines. An NWS survey rated the tornado an EF-2. Surveyed areas included multiple downed trees and structures that sustained damage including a couple of old barns that were destroyed.	The Village reported spotty power outages and trees were reported downed as well.
June 30, 2024	$32,500	Scattered thunderstorms developed and produced damaging wind gusts that mainly knocked down trees and wires.	The Village reported spotty power outages and trees were reported downed as well.

Note: All events reported resulted in property damages incurred of $25,000 or more at the County level.

24.3.3 Critical Facilities and Exposure to Hazards

Critical facilities and infrastructure are services and facilities that are essential to a society's basic operations, and their continuous operation is necessary for the health, welfare and economic viability of communities. These include water treatment, energy, communication systems, hospitals and health care systems, police and fire services and stations, schools, and shelters. The continued operations of critical facilities and infrastructure during and following a disaster are key factors in the severity of impacts and the speed of recovery. Table 24-9 includes an inventory of critical facilities and infrastructure for the Village of Wurtsboro.

Table 24-9. Critical Facilities Flood Vulnerabilities

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Water Supply or Treatment Facility	Water Supply/Treatment Facility	Y	Y	2026-WurtsboroV-02	-

Source: Sullivan County 2025; AVAIL 2023; NYS GIS Clearinghouse 2023, 2025; Tetra Tech 2025; FEMA 2015, 2025
Note: One bridge was identified to be located in the flood hazard areas. All bridges and dams, as applicable, within the Town were constructed to required standards, protecting the structure(s) to the required flood level(s).

24.3.4 Local Hazard Impacts Assessment

Representatives from the Village of Wurtsboro Hazard Mitigation Planning Team assessed impacts of hazards on buildings, structures, facilities, infrastructure, community assets and systems, people and the local economy, shown in Table 24-10.

Table 24-10. Local Hazard Impacts Assessment

Hazard Name	Local Impacts: People, Community Services, Local Economy
Dam Failure	The Village well house has been impacted by Beaver Dams along the Wilsey Brook, and there is a privately owned roadway that is flooded by the Beavers. The Town received a nuisance permit to remove beavers around the Well 5 property, but the land is heavily inundated, which makes it difficult to remove them.
Drought	The Village has a municipal water system and there are two well houses that are ground influenced and dry periods impact water availability. Water limitations have been issued by the Village, but no one listens. The water system is dated and has been fixed numerous times. Water main breaks have occurred, but not in recent years. Orange/Rockland Utility Company came in and put underground conduit and built a concreate casing on top of the water mains and the Village is not allowed to touch it even if there is a main break.
Earthquake	No known impacts
Flood	The Village is located in the valley and any runoff from the mountain will flood the Village, and during spring thaw, a decent number of houses will incur some sort of basement flooding.
Landslide	Sullivan Street is inundated with large rain events and the intersection with US Route 209 is where it is most noticeable. The Village had a new water main and storage tank put in going to Sullivan Street.
Pandemic	No known impacts
Severe Storm	The Village can be without power for hours to days but has gotten better. There are emergency contacts to call during a power outage, and they still do not prioritize the Village which is an issue with a water system because only one well has a generator, but the pumps and lights are not hooked up. The Village needs back up power everywhere in the well house and for the water system because currently the Village works manually to try and get the wells back on.
Severe Winter Storm	The DPW is a two-person team with two trucks, and the Village has one person that plows at night. The Town has helped the Village out from time to time, but there are concerns about efficiently clearing roadways.
Wildfire	There is a volunteer fire department that is in the Village, but is Town owned.

24.3.5 Vulnerable Community Assets

Representatives from the Village of Wurtsboro Hazard Mitigation Planning team assessed specific impacts to the assets included in Table 24-11. If a community asset is not present in the municipality the Planning Team stated, 'Not Applicable.'

Table 24-11. Vulnerable Community Assets

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Agriculture (Crops, Livestock, related products)	No known impacts	**Area: Concentration of Local Businesses, Major Employers**	No known impacts

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
Area: Concentration of Residences	US Route 209 has sporadic homes that will experience basement flooding during snow melt.	**Local Roads, Highways, Culverts, Bridges**	Sullivan Street is inundated with large rain events and the intersection with US Route 209 is where it is most noticeable. The Village had a new water main and storage tank put in going to Sullivan Street. The Village is unaware about stability and sizing of culverts. US Route 209 was paved to the Town lines and skipped the Village, and there are drainage concerns. The Village is towards end of County.
Municipal Buildings	The Village Building has a generator and one well house has a generator, and the other well house needs one.	**Medical Centers (non-hospital)**	Not applicable
College/University	Not applicable	**Place of Worship**	No known impacts
Community Centers, Parks, Recreational Sites and Local Events (economic drivers such as fairs, beaches, skiing, farming, fishing, etc.)	No known impacts	**Public Transportation including fleets, transportation infrastructure (i.e., railroads, signals, bus/train stops etc.), mobile asset and equipment storage, critical public transit routes, Airport(s)**	There is a garage that sits on the well property, and the Village cannot use it for the highway garage because of oil concerns unless the Village obtains barriers to put there per DOH. The Town is paid to house some Village equipment. DOH said no to a salt shed on a well property and said that sand could be stored there.
Cultural/Historic Buildings/Sites	No known impacts	**Schools (K-12)**	No known impacts
Elder-care Facilities	No known impacts.	**Utilities**	No known impacts
Fire/Police Stations	The Fire Department is Town owned and is located in the Village and covers the Village.	**Wastewater Treatment Plants**	The Village is on private septic systems. Some systems are dated which have led to issues.
Gas Stations, Grocery Stores, Supermarkets	No known impacts	**Water: Drinking Water Resources**	The Village has a municipal water system and there are two well houses that are ground influenced and dry periods impact water availability. Water limitations have been issued by the Village, but no one listens. The water system is dated and has been fixed numerous times. Water

Community Asset	Hazard Impacts and Asset Vulnerabilities	Community Asset	Hazard Impacts and Asset Vulnerabilities
			main breaks have occurred, but not in recent years.
Hospitals	Not applicable	**Other**	No known impacts

24.3.6 Dams

Table 24-12 includes all dams in the Village of Wurtsboro. This dam data is sourced from NYSDEC's inventory of dams and lists selected attributes of each dam. The dam classification (high, medium or low) corresponds to dam hazard classifications:

- **Class A: Low Hazard** – Dam failure may cause relatively minor economic or environmental damage.
- **Class B: Intermediate Hazard** – Dam failure may cause significant economic or environmental damage, but loss of life is not expected. There are about 570 Intermediate Hazard dams in New York.
- **Class C: High Hazard** – Dam failure may cause loss of life or other severe consequences. There are about 427 High Hazard dams in New York.
- **Class D: No Hazard** – Dams which have failed or have been removed and no longer present a risk.

In 2019, the Federal Emergency Management Agency (FEMA) announced the High Hazard Potential Dam (HHPD) Rehabilitation Grant Program, which has the potential to enhance New York's Dam Safety Program by providing technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible High Hazard Potential Dams (Class C dams).

Class C, or High Hazard Potential dams, are attributed to any dam whose failure or mis-operation will cause loss of human life and significant property damage. However, dams with other classifications may still present real and present risks to people and property.

Table 24-12. Dams Located in Wurtsboro

State ID	Name	River Name	Owners	Owner Type	Purposes	Classification
None Identified						

Notable comments regarding dams in the jurisdiction:

The Village has no known impacts from dams.

24.3.7 Hazard Risk 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 probability of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; spatial extent of the impacts from the hazard; level of warning time; and duration of the event. Impacts from a particular hazard may have decreased due to an implemented

project or relocation of an asset that was previously at risk. Alternatively, risk may have increased because population has increased in a hazard prone area.

Table 24-13 identifies the preliminary hazard ranking for Wurtsboro, whether the Village agrees or disagrees with the preliminary ranking, the desired ranking, and the justification or supporting information for the change in hazard ranking.

Table 24-13. Hazard Ranking

Hazard Name	Preliminary Ranking	Agree or Disagree with Ranking	If Disagree, Identify New Ranking	Justification for Change of Ranking	Final Hazard Ranking
Dam Failure	Low	Agree	-	-	Low
Drought	Medium	Disagree	High	Water system concerns and reliant on precipitation	Medium
Earthquake	Low	Agree	-	-	Low
Flood	High	Agree	-	-	High
Landslide	Low	Disagree	Medium	Village is in a Valley; people have to go through the Mountain to get to the Village.	Medium
Pandemic	Medium	Agree	-	-	Medium
Severe Storm	Medium	Disagree	High	See water concerns	High
Severe Winter Storm	High	Agree	-	-	High
Wildfire	Medium	Agree	-	-	Medium

24.4 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 24-14 through Table 24-17.

24.4.1 Development and Permitting

Table 24-14. Development and Permitting Capability

Topic	Comment
Does your municipality or the county issue building permits for development in your community?	Village building inspector
What is your process for tracking building permits?	Yes, pen and paper and computer
Are permits tracked by hazard area? (For example, floodplain development permits.)	No

Topic	Comment
Does your community have a buildable land inventory? If yes, please describe.	Village is fully built out

Table 24-15. 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
2020				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2021				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2022				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2023				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
2024				
Total Permits	1	0	0	0
Permits within SFHA	0	0	0	0
2025				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

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

Table 24-16. Recent Major Development and Infrastructure from 2020 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
None Identified					

Table 24-17. 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					

24.5 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 Table 24-1 is responsible for maintaining this information.

24.5.1 NFIP Statistics

Table 24-18 summarizes the NFIP policy and claim statistics for the Village of Wurtsboro.

Table 24-18. Wurtsboro NFIP Summary of Policy and Claim Statistics

NFIP Community Number	361476#
# Policies	0
# Claims (Losses)	2
Total Loss Payments	$5,156.00
# Repetitive Loss Properties	1
# 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.

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.

FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update.

Source: FEMA 2025

24.5.2 National Flood Insurance Program (NFIP) Flood Vulnerability Summary

The HMP Team provided information on participation in and continued compliance with the NFIP in Table 24-19.

Table 24-19. NFIP Summary

NFIP Topic	Comments
Describe areas prone to flooding in your jurisdiction.	The Village is located in the Valley and any runoff from the mountain will flood the Village, and come spring thaw, a decent amount of houses will incur some sort of basement flooding. Anything located along the Brook has potential to flood.
Who is the Community Floodplain Administrator (FPA)? Do they serve any roles other than FPA? Do they have adequate training and capacity for this role?	The Building Inspect/Code Enforcement Officer and they have no training.
What local department is responsible for floodplain management?	The Building Inspect/Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this Chapter by granting or denying floodplain development permits in accordance

NFIP Topic	Comments
	with its provisions. The Board of Trustees shall have the authority to designate, by resolution, other or additional Local Administrator(s).
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1 of 2011
What is the date that your flood damage prevention ordinance was last amended?	January 25, 2011
When was the latest effective Flood Insurance Rate Map (FIRM) adopted, if applicable?	February 18, 2011
Explain NFIP administration services (e.g., permit review, inspections, engineering capability, GIS, etc.)	Building Inspector performs permit reviews and inspections
What are the barriers to running an effective NFIP program in your community, if any?	Funding, Staffing and Training
Does your floodplain management staff need any assistance or training to support its floodplain management program? If yes, what type of assistance/training is needed?	Yes, training on how to get updated FEMA FIRM due to incorrect elevation used meaning some property owners need flood insurance who should not technically
How do you make Substantial Damage determinations? What is the process to make sure these structures are brought into compliance?	Substantial Damage - damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial Improvement - any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. Substantial improvement also means "Cumulative substantial improvement." The term includes structures which have incurred "substantial damage," regardless of the actual repair work performed
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
Does the community track the number of buildings in the floodplain? If so, how many structures are in special flood hazard area (SFHA)?	No
How many structures (residential and non-residential) are exposed to flood risk within the community outside of the regulatory maps?	Unsure
Does the community maintain elevation records? If yes, please describe.	No
Describe any areas of flood risk with limited NFIP policy coverage.	None

NFIP Topic	Comments
How does the community teach property owners or other stakeholders about the importance of flood insurance?	The Village instructs them to go to the bank or contact insurance for this information
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does your community use?	No
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?	Zoning and Planning are one board and they have height requirements in their code. Study may be required via building in the floodplain

24.6 JURISDICTIONAL CAPABILITY INVENTORY AND ASSESSMENT

Wurtsboro 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 Wurtsboro to identify opportunities for integrating mitigation concepts into ongoing Village procedures.

24.6.1 Planning and Regulatory Capability and Integration

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 24-20 and Table 24-21 detail the available planning and regulatory capabilities of the Village.

Regulatory Capabilities

Table 24-20. Regulatory Capabilities in Wurtsboro

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Building Codes	Yes	This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code) in this Town. This chapter is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law or other section of this chapter, all buildings, structures and premises, regardless of use or occupancy, are subject to the provisions this chapter.	NYS Uniform Construction Code	Village Code Enforcement
Climate Change Ordinance	No	-	-	-
Emergency Management Ordinance	No	-	-	-
Environmental Protection Ordinance	No	Part of SEQR process	-	-
Flood Damage Prevention Ordinance	Yes	It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program.	Local Law #1 of 2011	Village Code Enforcement
Growth Management	No	-	-	-

Capability Type	In Place in Municipality	Comments	Ordinance Name or Chapter and Year	Responsible Department / Agency / Organization
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	No	-	-	-
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
Real Estate Disclosure Requirements	Yes	In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.	Property Condition Disclosure Act, NY Code - Article 14 §460-467	NYS Department of State, Real Estate Agent
Site Plan Code	Yes	As used in this chapter, the term "site plan" shall mean a rendering, drawing, or sketch prepared to specifications and containing necessary elements, as set forth herein, which shows the arrangement, layout and design of the proposed use of a single parcel of land as shown on said plan.	-	Zoning Board of Appeals
Stormwater Management Code	No	-	-	-
Subdivision Code	Yes	-	-	-
Wellhead Protection	No	-	-	-
Zoning/Land Use Code	Yes	Zoning aims to protect the public health and safety and ensure that development aligns with the Village’s goals.	Local Law 4 of 2019	Zoning Board of Appeals

Planning Capabilities

Table 24-21. Planning Capabilities in Wurtsboro

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Agriculture Plan	No	-	-	-
Business / Downtown	No	-	-	-

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
Revitalization / Development Plan				
Climate Adaptation / Resilience Plan	No	-	-	-
Comprehensive Plan	Yes	The Comprehensive Plan aims to establish the objectives that the community wants to achieve, and will guide future sustainable growth within the municipality, enhance the local cultural identity, and protect natural and cultural local resources. Plan is currently being updated.	Village of Wurtsboro Comprehensive Plan, 2018	Village Administration
Continuity of Operations Plan	No	-	-	-
Capital Improvement Plan	No	-	-	-
Community Wildfire Protection Plan	No	-	-	-
Comprehensive Emergency Management Plan (CEMP)	Yes	The purpose of this plan is to cite the authority, formulate procedures and provide guidance for coordinated action in rendering assistance to the citizens in the event of an emergency of disaster.	-	Village Administration
Disaster Debris Management Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Emergency Operations Plan	No	-	-	-
Floodplain Management or Watershed Plan	No	-	-	-
Habitat Conservation / Wildlife Management Plan	No	-	-	-
Local Waterfront Revitalization Plan	No	-	-	-
Open Space Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Public Health Plan	Yes	The CHA is the foundation of the essential services of local public health departments to assess and monitor population health status, factors that influence health, and community needs and assets. This document is the basis for public health planning, program development, policy change, coordination of	Mid-Hudson Regional Community Health Assessment	Mid-Hudson Region LHDs Sullivan County Department of Public Health,

Capability Type	In Place in Municipality	Comments	Plan Name and Year	Responsible Department / Agency / Organization
		community resources, funding applications, and new ways to collaboratively use community assets. A community Health Improvement Plan (CHIP) is a long-term effort to address public health problems based on a CHA. CHIPs are strategic plans that set priorities and measurable objectives to address the needs of a community.	Sullivan County Community Health Assessment Community Health Improvement Plan	Garnet Health-Catskills Sullivan County Regional Health Department
Sheltering Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Substantial Damage Response Plan	No	-	-	-
Threat and Hazard Identification and Risk Assessment (THIRA)	No	-	-	-
Transportation Plan	No	-	-	-
Watershed Management of Protection Plan	No	-	-	-
Other	No	-	-	-

24.6.2 Administrative and Technical Capability

Administrative and technical capabilities include the available staffing and subject matter experts available to prevent and reduce the impacts of hazards. Table 24-22 details the available administrative and technical capabilities of the Village.

Table 24-22. Administrative and Technical Capabilities

Capability Type	In Place in Municipality	Comments
Civil Engineer	No	Contracted on an as needed basis
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Officer
Economic Development Commission/Committee	No	-
Emergency Management/Public Safety Department	Yes	County

Capability Type	In Place in Municipality	Comments
Environmental Commission/Specialist	No	-
Grant Writer	No	-
Maintenance Programs to Reduce Risk	No	-
Mitigation Planning Committee	No	-
Mutual Aid Agreements	Yes	Fire Department and Ambulance
Open Space Board/Committee	No	-
Personnel skilled or trained in website development	Yes	-
Planning Board	Yes	Planning and Zoning are joint boards. Prior to submitting an application to the Zoning Board of Appeals all applicants must contact the Village office/Building Inspector and let them know of their intended plans. The Building Inspector will then refer the applicant to the appropriate application form.
Planning Department	No	-
Personnel skilled or trained in GIS and/or HAZUS-MH applications	No	-
Planner or Engineer with knowledge of land development and land management practices	No	Contracted on an as needed basis
Planners or engineers with an understanding of natural hazards	No	Contracted on an as needed basis
Professionals or Engineers trained in construction practices related to buildings and/or infrastructure	Yes	Building Inspector and Contractor
Professionals trained in conducting damage assessments	No	Contracted on an as needed basis
Public Works/Highway Department	Yes	The DPW is a two-person team with two trucks
Resilience Officer	No	-
Staff with expertise/training in benefit/cost analysis	Yes	-
Surveyor(s)	No	-
Zoning Board of Appeals	Yes	Planning and Zoning are joint boards. Prior to submitting an application to the Zoning Board of Appeals all applicants must contact the Village office/Building Inspector and let them know of their intended plans. The Building Inspector will then refer the applicant to the appropriate application form.
Other	Yes	Water Department manages water reports and monitors water treatment plant.

24.6.3 Fiscal Capability

Table 24-23 summarizes financial resources available to Wurtsboro.

Table 24-23. Fiscal Capabilities

Capability Type	Has this funding capability been used since the last plan? If yes, please describe.
Community Development Block Grants (CDBG, CDBG-DR)	Yes, Water Project
Capital improvement project funding	Yes, Water Project
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal (non-FEMA) funding programs	No
FEMA funding programs	No
Other State funding programs	Yes, CHIPS
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes, WIIA

24.6.4 Education and Outreach Capability

Table 24-24 includes education and outreach programs and methods already in place that could be used to carry out mitigation activities and communicate information about hazards.

Table 24-24. Education and Outreach Capabilities

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Community Newsletter	Yes, the Town distributes information to Village residents
Hazard awareness campaigns, such as school and community programs and events	No
Hazard mitigation information available on your website	Yes, the Village would update website
Local News	No
Natural disaster/safety programs in place for schools	Yes, the Fire Department and Evacuation Drills

Capability Type	Is this education and outreach capability currently in use in the Municipality? If yes, please describe.
Organizations that conduct outreach to at risk populations and underserved populations	No
Public information officer or communications office	Yes
Social media for hazard mitigation education and outreach	No
Warning systems for hazard events	Yes, email and text updates are sent to residents upon updates

24.6.5 Hazard Capability Assessment

Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The HMP Team ranked the local government's capability to address risks and impacts of each hazard based on the risk and capability assessments performed above. Table 24-25 shows the ranking.

- ***Strong:*** *Above average capability exists and effectively manages the impacts of this hazard.*
- ***Moderate:*** *Average capability exists but needs some improvement.*
- ***Weak:*** *Below average capability exists and needs substantial improvement.*
- ***None:*** *Capacity does not exist.*
- ***N/A:*** *This hazard is not a risk to the community.*

Table 24-25. Adaptive Capacity

Hazard	Strong, Moderate, Weak, None, N/A
Dam Failure	Moderate
Drought	Strong
Earthquake	Weak
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Weak

24.7 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.

24.7.1 Past Mitigation Action Status

The tables below indicate progress on the Village's mitigation strategy identified in the 2021 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.

Status of Previous Mitigation Actions

T. Wurtsboro-1—Improve Stormwater Drainage System	
Hazards Addressed	Flood
Lead Agency / Department	Village DPW/Highway
Supporting Agency / Department	Village Planning
Action Location	-
Summary of Original Problem	Canal Street sees consistent, impactful flooding along the road.
Summary of Solution (Project)	Reduce long-term risk to flooding for existing assets and future development by improving the stormwater drainage system by installing extra storm drains to divert water from Canal Street, based on required engineering studies to appropriately address site conditions.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Completed
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Sullivan Street sees flooding, not Canal Street.
If discontinue, explain why	Project Completed

T. Wurtsboro-2—Implement Maintenance Program for Debris Removal	
Hazards Addressed	Flooding, Ice Storm, Landslide
Lead Agency / Department	Village DPW/Highway
Supporting Agency / Department	-
Action Location	Wilsey Brook
Summary of Original Problem	In the Wilsey Brook area experiences flooding near the storm drains due to the accumulation of debris
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by implementing a site-specific, debris management plan and monitoring system for removing debris from storm drains.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	Discontinued – Ongoing Capability
Next Steps	
Include in the 2026 HMP or Discontinue?	Discontinue
If include, revise/reword as appropriate:	Not applicable
If discontinue, explain why	Ongoing Capability

T. Wurtsboro-3—Installation of new storm drains	
Hazards Addressed	Flood
Lead Agency / Department	Wurtsboro Mayor's Office
Supporting Agency / Department	DPW
Action Location	-
Summary of Original Problem	Local streets have significant, and wide-spread drainage issues, due to long overdue stormwater drainage improvements.
Summary of Solution (Project)	Reduce long-term risk of flooding for existing assets and future development by installing extra storm drains to divert water from the main streets.
Action Category	Prevention/Mitigation Projects
Current Status – Please select one:	In-Progress – Project Underway
Next Steps	
Include in the 2026 HMP or Discontinue?	Include
If include, revise/reword as appropriate:	Culvert wide issue in the Village. Upsizing drainage throughout is needed.
If discontinue, explain why	Not applicable

24.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed above, the Village of Wurtsboro identified the following mitigation efforts completed since the last HMP:

- Village replaced a bridge culvert in 2016/2017.

24.7.3 Identified Issues

The Village of Wurtsboro has identified the following vulnerabilities within their community for mitigation strategy development:

- Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well.
- The Water Supply or Treatment Facility is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- Most local streets in the Village have significant and wide-spread drainage issues due to long overdue stormwater drainage improvements due to increasing precipitation events. There is an undersized culvert issue that is Village-wide.
- Sullivan Street becomes inundated heavily during large rain events, and the intersection at US Route 209 is where the biggest issue is. Sporadic homes will experience basement flooding during the spring snow melt, off US Route 209. The street has a concreate base and when the pavement cracks, water is running through and further deteriorating the street. There is no longer a swale due to the nature of the flooding. The Village had a new water main and storage tank put in going to Sullivan Street.
- Beaver dams in New York can cause significant issues such as flooding, tree damage, and water contamination that impact Village owned property and private properties that are downstream from Beaver Dams. The Village well house has been impacted by Beaver Dams along the Wilsey Brook, and there is a

privately owned roadway that is also repetitively flooded by dam breaks. The Town received a nuisance permit to remove beavers around the Well 5 property, but the land is heavily inundated, which makes it difficult to remove them.

- The Orange and Rockland Utility Company (O&R) put in underground conduit and built a concreate casing on top of the water mains under roads in the Village and the Village is not allowed to make any repairs or upgrades, even if there is a water main break. This would impact reliable access to the Village's water source and would negatively affect impacted property owners that rely on this water source in the impacted areas.
- The Village experiences routine power outages as a result from stronger storm events. There are emergency contacts for the Village to call during a power outage because of the lack of backup power, and they do not prioritize the Village. This is an ongoing issue because in the water system, only one well has a generator, but the pumps and lights are not hooked up. The Village still needs back up power everywhere in the well house and for the water system because currently the Village works manually to try and get the wells back on.
- The Village has a garage that sits on one of the well properties and cannot be used as the DPW garage because of the contamination concerns with oil. New York State Department of Health (NYSDOH) advised the Village to obtain and install approved barriers so that the Village can use this to store equipment, which is currently stored by the Town.

24.7.4 Proposed Hazard Mitigation Actions for the HMP Update

Wurtsboro participated in the mitigation strategy workshop and identified hazard mitigation actions to reduce the risks and impacts of hazards the community ranked as high-risk. Hazard risk ranking was specific to each community in the County and was based on quantitative (i.e., analysis of the best available data) and qualitative risk assessment processes (i.e., evaluation of previous occurrences, likelihood of future occurrences and vulnerabilities to people and community services; buildings and critical infrastructure; the natural environment and other local priorities).

The action worksheets included at the end of this annex list the mitigation actions that Wurtsboro 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 Village priorities.

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 24-26 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Action 2026-WurtsboroV-01. Repetitive Loss Properties

Lead Agency:	Code Enforcement	
Supporting Agencies:	Village Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	Frequent flooding events have resulted in damage to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Village has one repetitive loss property, but other properties may be impacted by flooding as well.	
Description of the Solution:	The Village will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the Village will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA FMA, FMA SWIFT, Village Budget, County Budget, Property Owners	
Implementation Timeline:	3 Years	
Goals Met:	2, 3	
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.	
Impact on At Risk Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. At risk populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Village's current NFIP capabilities.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

Action 2026-WurtsboroV-02. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers	
Supporting Agencies:	Village Board	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☐Severe Storm ☐Severe Winter Storm ☐Wildfire
Description of the Problem:	The Water Supply or Treatment Facility is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.	
Description of the Solution:	The Village will encourage the facility manager to conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facility to protect it to the 500-year flood level. Facility managers will be informed of potential mitigation measures. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Facility will carry out the option.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program	
Implementation Timeline:	Within 5 Years	
Goals Met:	2, 5	
Benefits:	Ensures continuity of operations of several critical facilities in the Village.	
Impact on At Risk Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that at risk 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 for both current and future development in the service area.	
Impact on Critical Facilities/Lifelines:	This action will protect 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.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	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 2026-WurtsboroV-03. Village Culvert Inventory

Lead Agency:	Village DPW	
Supporting Agencies:	Village Administration	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Most local streets in the Village have significant and wide-spread drainage issues due to long overdue stormwater drainage improvements due to increasing precipitation events. There is an undersized culvert issue that is Village-wide.	
Description of the Solution:	The Village will consult and engineer to inventory the culverts on roadways in the Village and will create a priority list of roadways that should be prioritized and the Village will apply for necessary grant funding to acquire the funding for the purchase and installation of upsized culvert issues. The Village DPW will be responsible for routine maintenance.	
Estimated Cost:	TBD based on culvert	
Potential Funding Sources:	HMGP, FMA, CHIPS, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-WurtsboroV-04. Sullivan Street and US Route 209

Lead Agency:	Village DPW	
Supporting Agencies:	Village Administration, NYSDOT, USDOT	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Sullivan Street becomes inundated heavily during large rain events, and the intersection at US Route 209 is where the biggest issue is. Sporadic homes will experience basement flooding during the spring snow melt, off of US Route 209. The street has a concreate base and when the pavement cracks, water is running through and further deteriorating the street. There is no longer a swale due to the nature of the flooding. The Village had a new water main and storage tank put in going to Sullivan Street.	
Description of the Solution:	The Village will consult and engineer develop specific mitigation solutions for Sullivan Street, most likely resulting in the reconstruction of the street and addition or upsizing of drainage in the area. The Village will ensure new water lines are put in as the street is redone to ensure cost effectiveness of both projects.	
Estimated Cost:	TBD based on culvert	
Potential Funding Sources:	HMGP, FMA, CHIPS, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 4, 5	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on At Risk Populations:	This action will assist at risk populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded, and properties may remain more accessible.	
Impact on Critical Facilities/Lifelines:	• Transportation routes are more likely to remain open • Evacuation routes will remain intact. • Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	This action aims to improve the transportation lifeline by reducing flood vulnerabilities along well traveled roads that may be used by emergency responders or individuals traveling to a critical facility.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Relocate all flood-prone road system	Not feasible
	Raise all flood prone roads	Cost prohibitive

Action 2026-WurtsboroV-05. Beaver Dam Mitigation

Lead Agency:	Village Administration	
Supporting Agencies:	Village DPW, NYSDEC	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	Beaver dams in New York can cause significant issues such as flooding, tree damage, and water contamination that impact Village owned property and private properties that are downstream from Beaver Dams. The Village well house has been impacted by Beaver Dams along the Wilsey Brook, and there is a privately owned roadway that is also repetitively flooded by dam breaks. The Town received a nuisance permit to remove beavers around the Well 5 property, but the land is heavily inundated, which makes it difficult to remove them.	
Description of the Solution:	The Village will apply for special permits from the NYDEC to remove nuisance beavers and dams, including trapping and relocation, especially along the Wilsey Brook. The Village will also look into installed water level control devices to monitor when beaver activity may be taking place. The Village will also distribute information about NYDEC approved beaver and beaver dam removal methods to interested private property owners.	
Estimated Cost:	TBD based on selected mitigation measure	
Potential Funding Sources:	Village Budget	
Implementation Timeline:	Within 5 years and ongoing once established	
Goals Met:	2, 3, 4	
Benefits:	This action will remove beaver dams which are causing or contributing to roadway flooding in the Village. The reduction of flood risk to Village roads will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on At Risk Populations:	This action protects people that would be located downstream of potential Beaver Dam locations and may be impacted by the inundation of beaver dam breaks.	
Impact on Future Development:	Future development would be better protected from limited beaver activity and routine monitoring of potential beaver dams that may cause issues.	
Impact on Critical Facilities/Lifelines:	Critical facilities that may be impacted from a beaver dam break are better protected.	
Impact on Capabilities:	This lessens the Village's risk from flood events by streams and rivers that may be impacted by beaver dam breaks.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☒Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Remove dams without permit	Village will face fines from NYS DEC and potentially other entities
	Trap beaver and do not remove dams	Flooding may still occur; Village may incur fines from NYS DEC and other entities

Action 2026-WurtsboroV-06. Water Main Mitigation

Lead Agency:	Village Administration	
Supporting Agencies:	Village DPW, Orange and Rockland Utility Company, County Administration	
Hazards of Concern:	☐Dam Failure ☒Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Orange and Rockland Utility Company (O&R) put in underground conduit and built a concreate casing on top of the water mains under roads in the Village and the Village is not allowed to make any repairs or upgrades, even if there is a water main break. This would impact reliable access to the Village's water source and would negatively affect impacted property owners that rely on this water source in the impacted areas.	
Description of the Solution:	The Village will consult with an engineer and Orange and Rockland Utility Company to evaluate the feasibility of replacing the damaged sections of the water main and will relocate it to a depth or location that removes it from the power conduit area. If the relocation is not possible, the Village will evaluate the feasibility of installing a protective case or sleeve around the water pipe to isolate it from the concrete, reducing stress from the friction and load.	
Estimated Cost:	TBD based on selected mitigation measure	
Potential Funding Sources:	WIIA, WQIP, HMGP, Village Budget, O&R Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4, 5	
Benefits:	This action will prevent future ruptures and interruptions in the Village's water system, permitting the critical infrastructure to operate as needed and support the residents, visitors, and emergency personnel in the Village.	
Impact on At Risk Populations:	Populations living near water mains will benefit from this action, as removing the risk for ruptures and interruptions will keep roadways and sidewalks functional, permitting populations to travel as needed and for first responders to reach dispatched locations.	
Impact on Future Development:	Future development will be supported by stronger, more resilient, infrastructure.	
Impact on Critical Facilities/Lifelines:	This action will improve the Village's water system's lifeline by strengthening its infrastructure to remove the risk of ruptures or interruptions from periods of heavy rain, severe storms, severe winter storms, and flexing of pavement during periods of extreme temperature.	
Impact on Capabilities:	This action will prevent future ruptures and interruptions in the Village's water system, permitting the critical infrastructure to operate as needed and support the residents, visitors, and emergency personnel in the Village.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Replace entire water system	Cost prohibitive
	Replace only the water mains in this area	Would not completely resolve the problem

Action 2026-WurtsboroV-07. Water System Backup Power

Lead Agency:	Village Administration	
Supporting Agencies:	Village DPW, County Administration	
Hazards of Concern:	☐Dam Failure ☒Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village experiences routine power outages as a result from stronger storm events. There are emergency contacts for the Village to call during a power outage because of the lack of backup power, and they do not prioritize the Village. This is an ongoing issue because in the water system, only one well has a generator, but the pumps and lights are not hooked up. The Village still needs back up power everywhere in the well house and for the water system because currently the Village works manually to try and get the wells back on.	
Description of the Solution:	The Village will consult with an engineer to conduct a generator study to determine the size of the generators needed at the Village water system to ensure the system can be fully operable during a power outage without having Village staff have to manually try and get power reinstated. Village DPW will oversee the installation of the generator and the Village will work to acquire the necessary funds for the generators deemed necessary.	
Estimated Cost:	TBD based on selected mitigation measure	
Potential Funding Sources:	WIIA, WQIP, HMGP, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4, 5	
Benefits:	This action will ensure the reliability of the Village's water system, permitting the critical infrastructure to operate as needed and support the residents, visitors, and emergency personnel in the Village during a power outage.	
Impact on At Risk Populations:	Populations relying on the Village water system will benefit from this action, as limiting interruptions will keep the system functional, keeping water available during power outages.	
Impact on Future Development:	Future development will be supported by stronger, more resilient, infrastructure.	
Impact on Critical Facilities/Lifelines:	This action will improve the Village's water system's lifeline by strengthening its infrastructure to remove the risk of interruptions from periods of heavy rain, severe storms, severe winter storms, and flexing of pavement during periods of extreme temperature.	
Impact on Capabilities:	This action will ensure the reliability of the Village's water system, permitting the critical infrastructure to operate as needed and support the residents, visitors, and emergency personnel in the Village during a power outage.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Replace entire water system	Cost prohibitive
	Replace only the water mains in this area	Would not resolve the problem

Action 2026-WurtsboroV-08. Village Garage

Lead Agency:	Village Administration	
Supporting Agencies:	Village DPW, County Administration, NYSDOH	
Hazards of Concern:	☐Dam Failure ☐Drought ☐Earthquake ☒Flood ☐Landslide	☐Pandemic ☒Severe Storm ☒Severe Winter Storm ☐Wildfire
Description of the Problem:	The Village has a garage that sits on one of the well properties and cannot be used as the DPW garage because of the contamination concerns with oil. New York State Department of Health (NYSDOH) advised the Village to obtain and install approved barriers so that the Village can use this to store equipment, which is currently stored by the Town.	
Description of the Solution:	The Village will consult with an engineer and NYSDOH to determine the proper barriers needed at the DPW garage site to ensure that the Village will be able to house Village equipment in the jurisdiction as opposed to the neighboring jurisdiction. The Village will also ensure that the facility will be retrofitted to withstand intense precipitation and strong winds. The Village will be responsible for ensuring routine maintenance is performed in the garage. The Village will also ensure the new garage has a backup power source.	
Estimated Cost:	TBD based on barrier selected	
Potential Funding Sources:	WIIA, WQIP, HMGP, Village Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	2, 3, 4, 5	
Benefits:	The Village will have a proper-sized town barn that can store all of the tools that need to be kept in a more temperature-controlled setting.	
Impact on At Risk Populations:	By being able to use the DPW garage designed to withstand local hazard risks, the municipality will ensure that Village assets are safely secure, functional, and immediately available when needed most. This investment reduces long-term disaster recovery costs, safeguards critical infrastructure, and strengthens the Village's capacity to protect residents, businesses, and regional transportation corridors during emergencies.	
Impact on Future Development:	Any future development will have support from a fully prepared Village DPW with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Critical Facilities/Lifelines:	Any critical facilities will have support from fully prepared Village DPW with functioning equipment due to proper storage and maintenance of all equipment.	
Impact on Capabilities:	This action strengthens the Village DPW's functionality which allows for more efficient work to be performed.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☒Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternative	Action	Evaluation
	No action	Current problem persists
	Rely on neighboring municipalities for equipment	Does not fix current issue of leaks and damage in the facility
	Rely on neighboring County for equipment	Does not fix current issue of leaks and damage in the facility

Table 24-26. 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	Changing Conditions	Timeline	Community Lifelines	Other Local Objectives	**Total**	
2026-WurtsboroV-01	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	0	1	11	High
2026-WurtsboroV-02	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2026-WurtsboroV-03	Village Culvert Inventory	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2026-WurtsboroV-04	Sullivan Street and US Route 209	0	1	1	1	1	0	0	1	1	1	1	1	1	1	11	High
2026-WurtsboroV-05	Beaver Dam Mitigation	1	1	1	1	1	0	1	1	1	1	1	0	1	1	12	High
2026-WurtsboroV-06	Water Main Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-WurtsboroV-07	Water System Backup Power	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2026-WurtsboroV-08	Village Garage	1	1	1	1	1	0	-1	1	1	1	1	1	1	1	11	High

Note: Volume I, Chapter 17 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14)