



9.20 VILLAGE OF SAUGERTIES

This section presents the jurisdictional annex for the Village of Saugerties that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village participated in the planning process, an assessment of the Village of Saugerties’s risk and vulnerability, the different capabilities used in the Village, and an action plan that will be implemented to achieve a more resilient community.

9.20.1 Hazard Mitigation Planning Team

The Village of Saugerties identified the hazard mitigation plan (HMP) primary and alternate points of contact and developed this plan over the course of several months with input from many Village departments, including the Floodplain Administrator. The Code Enforcement Officer represented the community on the Ulster County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.20-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eyal Saad, Code Enforcement Officer Address: 43 Partition Street, Saugerties, NY 12477 Phone Number: 845-246-2321 ext. 303 Email: esaad@villageofsaugerties.org	Name/Title: William Murphy, Mayor Address: 43 Partition Street, Saugerties, NY 12477 Phone Number: 845-246-2321 ext. 1 Email: bmurphy@villageofsaugerties.org
NFIP Floodplain Administrator	
Name/Title: Eyal Saad, Local Floodplain Administrator Address: 43 Partition Street, Saugerties, NY 12477 Phone Number: 845-246-2321 ext. 303 Email: esaad@villageofsaugerties.org	
Additional Contributors	
No Additional Contributors	

9.20.2 Municipal Profile

The Village of Saugerties is in the northeastern portion of Ulster County. The Village consists of 2.3 square miles, 1.8 of which are land and 0.5 of which are water. Located at the mouth of the Espous Creek where it meets the Hudson River, the history of the Village is closely tied to sawmills, gristmills, and ferries. Saugerties is home to the Main–Partition Streets Historic District. This neighborhood encompasses the Village’s business district, including the historic P.C. Smith and Son Hardware Store (Village of Saugerties, 2022).



According to the U.S. Census, the 2020 population for the Village of Saugerties was 3,899, a 2.4 percent decrease from the 2010 Census (3,996). Data from the 2020 American Community Survey 5-year Estimates indicate that 5.4 percent of the population is 5 years of age or younger, 25.7 percent is 65 years of age or older, 15.6 percent have disabilities, and 7.1 percent are below the poverty threshold. 1.3 percent of households are non-English speaking. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.20.3 Jurisdictional Capability Assessment and Integration

The Village of Saugerties performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 6 (Mitigation Strategy) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment includes the following types of municipal capabilities:

- Planning, legal, 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 the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The updated mitigation strategy provided an opportunity for the Village of Saugerties to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

Planning and regulatory capabilities are plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. The table below summarizes the regulatory tools that are available to the Village of Saugerties. The comment field provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.20-2. Planning, Legal, and Regulatory Capability and Integration

	Is this plan/policy in place? (Yes/No)	Citation and Effective Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	New York State Uniform Fire Prevention and Building Code	Local	Building Department
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The Village of Saugerties adopted the New York State Uniform Fire Prevention and Building Code in 2007.				
Zoning/Land Use Code	Yes	Chapter 210, Adopted July 15, 1985	Local	Zoning Board
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				



	Is this plan/policy in place? (Yes/No)	Citation and Effective Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
This chapter is created in accordance with, and as a means of effectuating a comprehensive plan for protecting and promoting public health, safety, comfort, convenience, economy, and general welfare.				
Subdivision Ordinance	Yes	Chapter 168, Adopted October 5, 1992	Local	Planning Board
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> It is declared to be the policy of the Planning Board to consider land subdivisions as part of a plan for the orderly, efficient and economical development of the Village. Land should be subdivided to promote health and try to limit buildings that parish from fire, flood, or other hazards.				
Site Plan Ordinance	Yes	Chapter 210-59, Adopted July 15, 1985	Local and County	Planning Board
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> Objectives of site plan review. In reviewing site plans, consideration shall be given to the public health, safety, and welfare; the comfort and convenience of the public in general, or the residents or users of the proposed development and of the immediate neighborhood in particular.				
Stormwater Management Ordinance	Yes	Chapter 167, Adopted September 17, 2007	Local	Building Department
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> In addition to facing potential liability for failing to disclose under the exceptions to “caveat emptor,” a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.				
Growth Management	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Environmental Protection Ordinances	Yes	Chapter 182, Adopted October 19, 2009	Local	Tree commission
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The Village of Saugerties Shade Tree Ordinance was adopted to promote and protect citizens health, safety and welfare with the recognition that trees play a role in the Village ecosystem and the contributions to the quality of air, reduction of noise and visual pollution and to help moderate climatic extremes and conserve energy.				
Flood Damage Prevention Ordinance	Yes	Chapter 103, Adopted May 4, 2009	Federal, State, County and Local	Building Dept
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> 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: <ul style="list-style-type: none"> 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. 				



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	Is this plan/policy in place? (Yes/No)	Citation and Effective Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Wellhead Protection or Water Restrictions	Yes	Chapter 196, Adopted June 18, 2012	Local	Water Department
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> Water Restrictions are laid out by stages of emergency restrictions based on how severe a drought hazard is. The chapter also expressed importance of taking care of pipes and water utility.				
Emergency Management Ordinance	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Other	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Planning Documents				
Comprehensive / Master Plan	Yes	Town and Village of Saugerties Comprehensive Plan -2021	Local	Village Board
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The Town and Village joint Comprehensive Plan was adopted to monitor and maintain future growth responsibility, while maintaining the positive combination of historic, suburban, and rural village character.				
Capital Improvement Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Disaster Debris Management Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Floodplain Management or Watershed Plan	Yes	Water Department Regulations	Local	Water Dept.
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> Protects Town and Village water source which is vital in emergencies.				
Stormwater Management Plan	Yes	Stormwater Management Plan, 2020	Local	Building Dept
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The plan regulates stormwater to limit flooding issues in the Village.				
Open Space Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Urban Water Management Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				
Community Wildfire Protection Plan	No	-	-	-
<i>How has or will this be integrated with the HMP and how does this reduce risk?</i>				



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	Is this plan/policy in place? (Yes/No)	Citation and Effective Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Community Forest Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Transportation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Agriculture Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Action/ Resiliency/ Sustainability Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Tourism Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other (for example NYRCR, etc.)	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Response/Recovery Planning				
Comprehensive Emergency Management / Emergency Operations Plan	Yes	Ulster County Comprehensive Emergency Management Plan (June 17, 2014)	County	Ulster County Division of Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk? The CEMP covers short term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards.				
Continuity of Operations Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Substantial Damage Response Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Post-Disaster Recovery Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Public Health Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				



	Is this plan/policy in place? (Yes/No)	Citation and Effective Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
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Development and Permitting Capability

The table below summarizes the capabilities of the Village of Saugerties to oversee and track development.

Table 9.20-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> If you issue development permits, what department is responsible? If you do not issue development permits, what is your process for tracking new development? 	Yes	Building Department issues permits in the Village. Only one permit has been issued since 2000.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? <ul style="list-style-type: none"> If you have a buildable land inventory, please describe 	No	-
Describe the level of build-out in your jurisdiction.	N/A	Most available building lots are in use. 96% of the Village has been built-out.

Administrative and Technical Capability

Administrative and technical capabilities include boards, commissions, departments, staff, and consulting services, along with the related skills and tools, that can be used for mitigation planning and the implementation of specific mitigation actions. The table below summarizes potential staff and personnel resources available to the Village of Saugerties and their current responsibilities that contribute to hazard mitigation.

Table 9.20-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, how its related to hazard mitigation)
Administrative Capability		
Planning Board	Yes	To review and approve site development plans to ensure any proposed development is in compliance with Village Zoning Code and is in accordance with goals outlined in the Saugerties Comprehensive Plan. To review and submit advisory opinions concerning applications for variances and amendments to the zoning regulations.
Zoning Board of Adjustment	Yes	In strict accordance with the Village's Zoning Law, the ZBA hears and decides any question brought before it is involving the interpretation of zoning law; hears and decides appeals from any decisions or determinations of zoning enforcement officer (building inspector); and grants variances to provisions of zoning law.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, how its related to hazard mitigation)
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	Plants trees and helps maintain emergency exit routes.
Construction/Building/Code Enforcement Department	Yes	Requires Compliance with building safety and environmental codes
Emergency Management/Public Safety Department	Yes	Building Inspector is emergency manager.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Department of Public works (DPW)
Mutual aid agreements	Yes	Work with the Town of Saugerties to ensure needs are met
Other	Yes	Historic Review Board: The purpose of the Historic Review Board is to oversee all the properties in 2 historic districts and to address the protection, enhancement, and preservation of buildings of historic, architectural, and cultural value, in order to promote the economic, cultural, educational and general welfare of the public.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	This is outsourced by needs
Engineers or professionals trained in building or infrastructure construction practices	Yes	This is outsourced by needs
Planners or engineers with an understanding of natural hazards	Yes	This is outsourced by needs
Staff with expertise or training in benefit/cost analysis	Yes	This is outsourced by needs
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Grant writer(s)	Yes	The grant writer has experience with other Federal non-FEMA grant applications used for mitigation purposes.
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Floodplain Manager
Administrative/Technical Capability Self-Assessment		
<p>Consider the following:</p> <ul style="list-style-type: none"> Describe how your administrative/technical capabilities contribute to integration with the HMP and risk reduction in your community. <ul style="list-style-type: none"> The Building Inspector has many technical skills, and the Village is very small. Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? <ul style="list-style-type: none"> There are job descriptions that include identifying and implementing mitigation projects to reduce natural hazard risk. 		

Fiscal Capability

Fiscal capabilities include access to or eligibility to use funding resources for hazard mitigation. The table below summarizes financial resources available to the Village of Saugerties.



Table 9.20-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)	Comments (relation to hazard mitigation)
Community development Block Grants (CDBG, CDBG-DR)	No	-
Capital improvements project funding	Yes	Improve economics of business district
Authority to levy taxes for specific purposes	Yes	Help provide upgrades to water and sewer plants
User fees for water, sewer, gas or electric service	Yes	Provide maintenance for Water and sewer plants
Impact fees for homebuyers or developers of new development/homes	No	-
Stormwater utility fee	No	-
Incur debt through general obligation bonds	Yes	Providing funding for major upgrades to water and sewer facilities.
Incur debt through special tax bonds	No	-
Incur debt through private activity bonds	No	-
Withhold public expenditures in hazard-prone areas	No	-
Other federal or state Funding Programs	Yes	NYS Water sewer funding
Open Space Acquisition funding programs	No	No desirable open spaces to be acquired
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes	Provided water storage tank to provide excess capacity in d turbulent conditions
Fiscal Capability Self-Assessment		
Consider the following:		
<ul style="list-style-type: none"> Have you used any of these programs to mitigate, protect, or recover from hazards in your community? If so, please explain. <ul style="list-style-type: none"> No 		

Education and Outreach Capability

Education and outreach capabilities include programs and methods already in place that could be used to support implementation of mitigation actions and communicate hazard-related information.

Table 9.20-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	No	-
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Water Department mass notification system
Personnel skilled or trained in website development	Yes	Village and town have a well-maintained website.
Hazard mitigation information available on your website	No	Working to include this
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Natural disaster/safety programs in place for schools	Yes	School drills
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?	Yes	Fire Department goes door to door to evacuate flooded areas.



Outreach Resources	Available? (Yes/No)	Comment
<ul style="list-style-type: none"> If yes, please describe. 		

Community Classifications

The table below summarizes classifications for community programs available to the Village of Saugerties.

Table 9.20-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
New York State Department of Environmental Conservation (NYSDEC) Climate Smart Community	No	-	-
StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
Other	No	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). 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 table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

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

Table 9.20-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam Failure	Moderate
Drought	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Strong
Severe Winter Storm	Strong
Utility Failure	Moderate
Wildfire	Moderate

9.20.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP. The Floodplain Administrator is responsible for maintaining this information and is listed in the Hazard Mitigation Planning Team table at the beginning of this annex.



NFIP Statistics

The following table summarizes the NFIP statistics for the Village.

Table 9.20-9. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties (FMA definition)	# RL Properties (NFIP definition)	# SRL Properties
Village of Saugerties	20	50	\$1,652,519.03	2	15	2

Source: FEMA 2023

Notes:

RL Repetitive Loss

SRL Severe Repetitive Loss

- *RL FMA Definition - Any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.*
- *RL NFIP Definition - Any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978.*

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in the Village of Saugerties.

Table 9.20-10. NFIP Compliance in the Jurisdiction

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? 	(Lighthouse Drive, Ferry St., lower partition (near the beach area) No specific list. Most have minor damage. One building was totaled and demolished.
Do you maintain a list of property owners interested in flood mitigation? <ul style="list-style-type: none"> How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? 	No list is maintained
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. 	No
How do you make Substantial Damage determinations? <ul style="list-style-type: none"> How many were declared for recent flood events in your jurisdiction? 	An inspection is conducted with written report. Two declarations were made for recent flood events in the Village.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigation properties, how were the projects funded? 	Three properties have been elevated. One of them is an entire replacement structure which was funded by FEMA insurance.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Building Department
Are any certified floodplain managers on staff in your jurisdiction?	No



NFIP Topic	Comments
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	Yes, training
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, Inspections
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	FEMA P-758 Desk Reference
What are the barriers to running an effective NFIP program in the community, if any?	Manpower
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
What is the local law number or municipal code of your flood damage prevention ordinance? <ul style="list-style-type: none"> What is the date that your flood damage prevention ordinance was last amended? 	Chapter 103 May 4, 2009
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Yes, it meets the minimum requirements
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Planning board site plan review, stormwater (MS-4) permitting process
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Yes

9.20.5 Growth and 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. Table 9.20-11 and Table 9.20-12 summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.20-11. Building Permits Issued for New Construction, 2017 to 2022

Type of Development	2017		2018		2019		2020		2021		2022	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	4	1	4	0	3	0	0	0	1	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0



Type of Development	2017		2018		2019		2020		2021		2022	
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total New Construction Permits Issued	4	1	4	0	3	0	0	0	1	0	2	0

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

Table 9.20-12. Recent and Expected Future Development

Property or Development Name	Type	Location (address and/or block and lot)	Known Hazard Area(s)	Description/ Status of Development
Recent Major Development and Infrastructure from 2017 to Present				
None Identified				
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years				
None Identified				

9.20.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 5 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 5.1 (Methodology and Tools) and Section 5.3 (Hazard Ranking) provide detailed summaries for the Village of Saugerties' risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Only maps for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Saugerties has significant exposure are provided. The maps show the location of potential new development, where available.



Figure 9.20-1. Village of Saugerties Dam Inundation and Flood Hazard Area Extent and Location Map

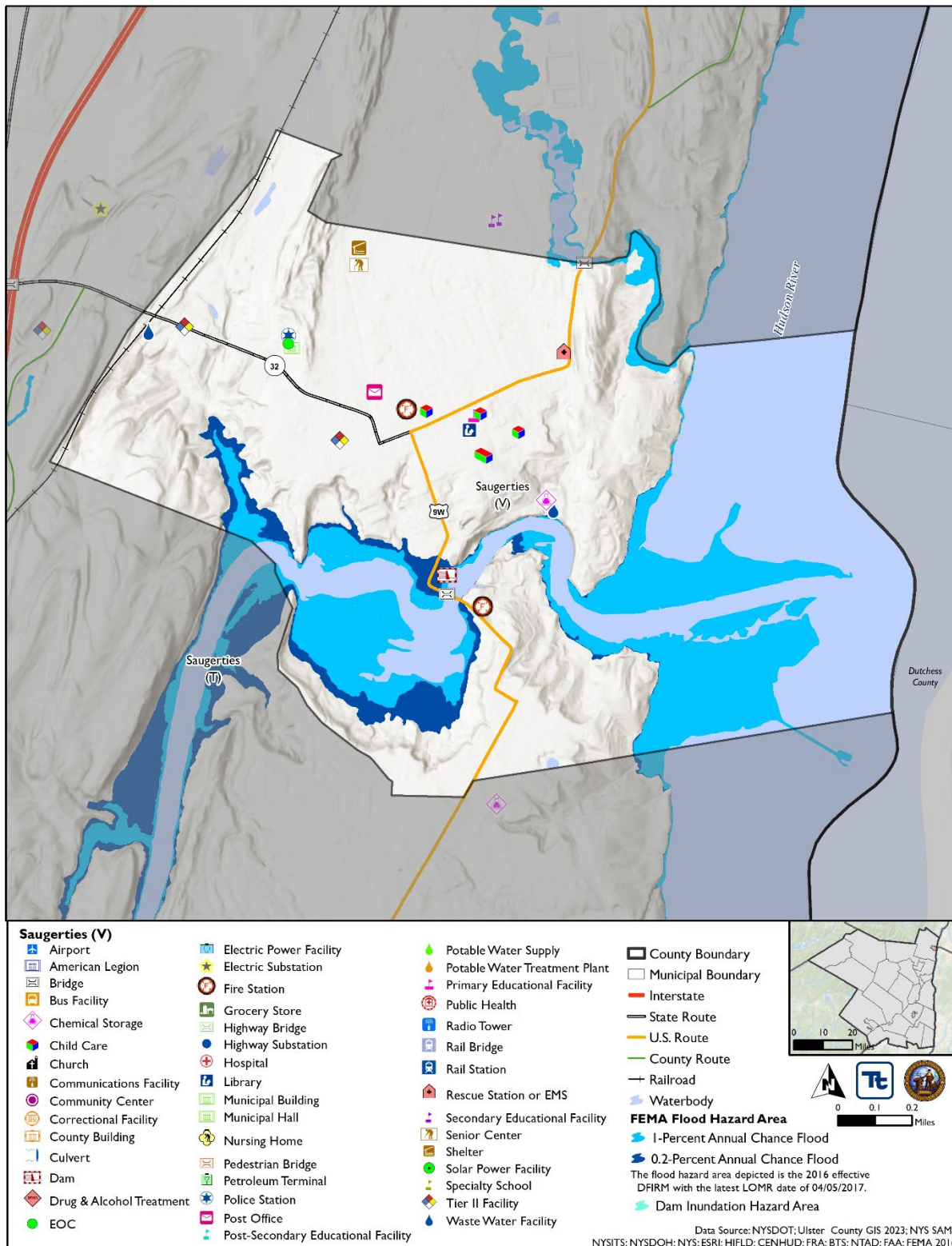




Figure 9.20-2. Village of Saugerties Hazardous Materials Hazard Area Extent and Location Map

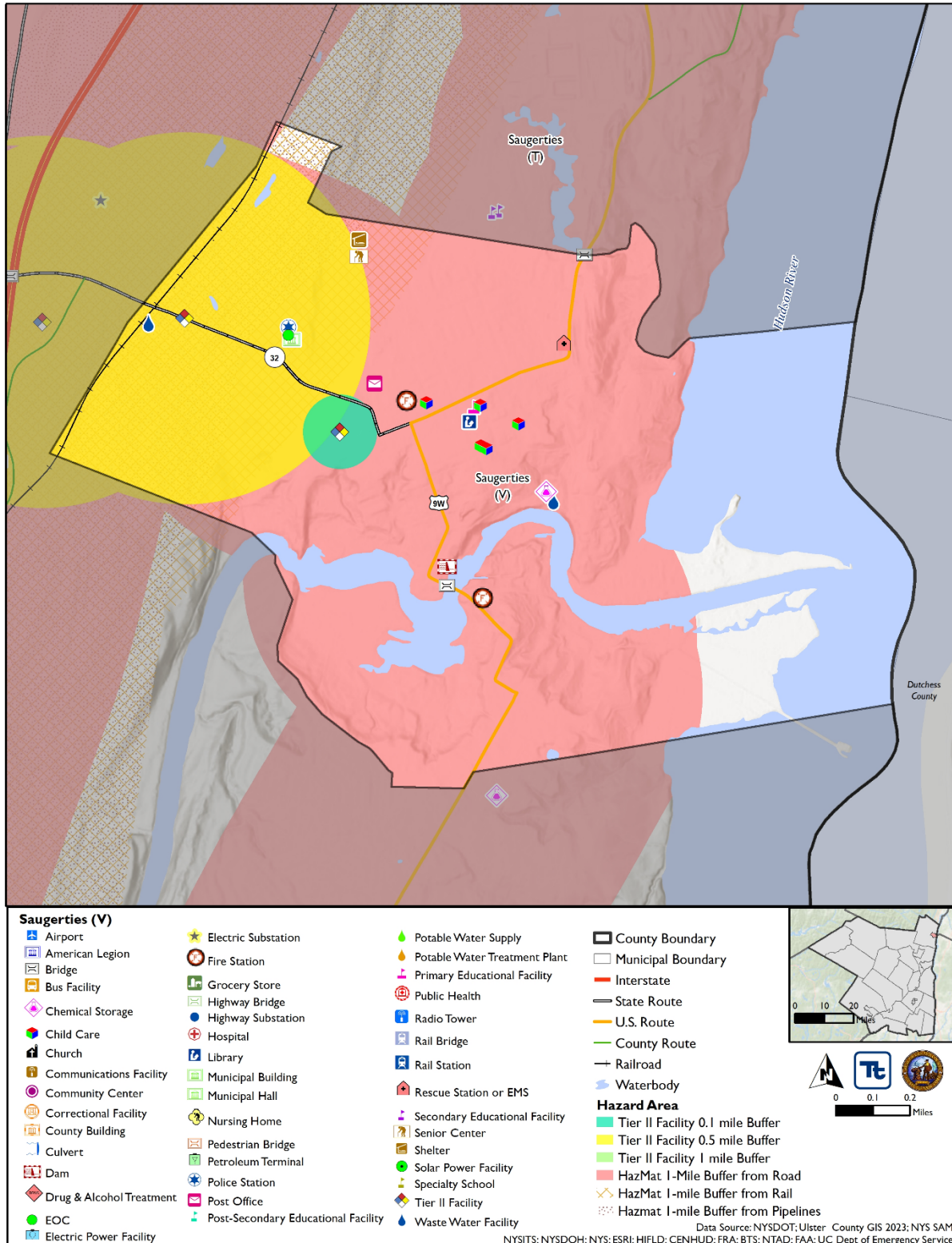




Figure 9.20-3. Village of Saugerties Surges and Sea Level Rise Hazard Area Extent and Location Map

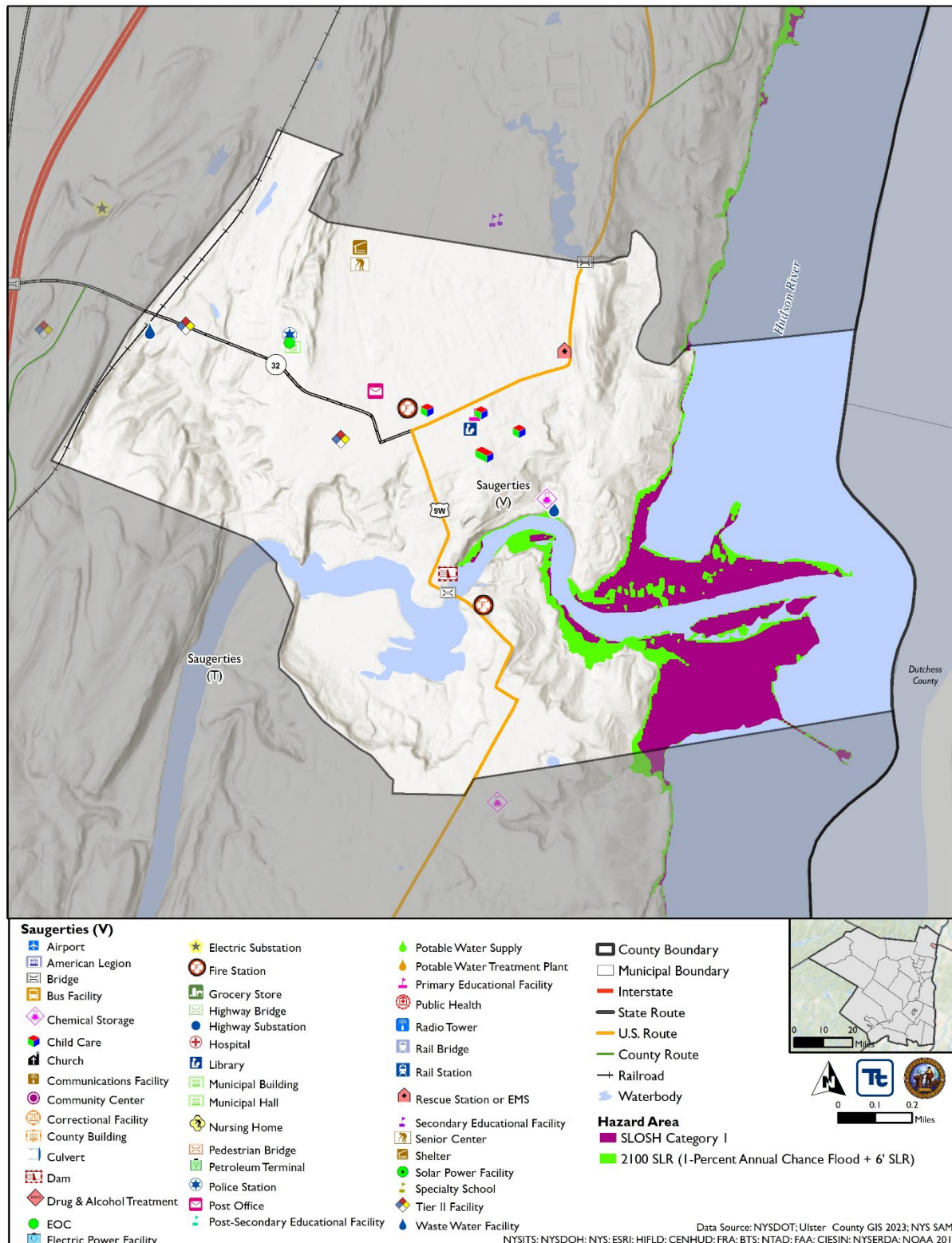
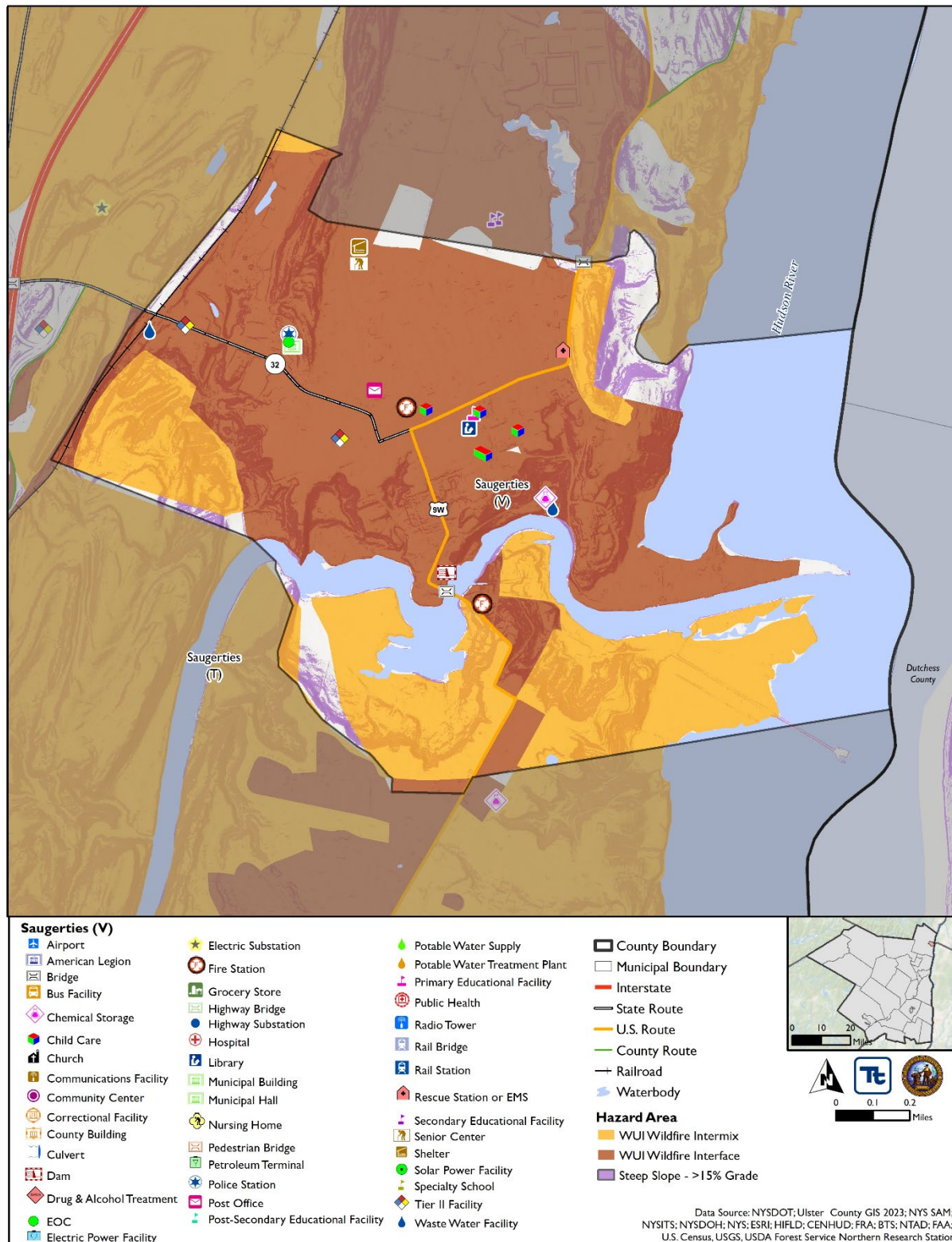




Figure 9.20-4. Village of Saugerties Steep Slope and Wildfire Hazard Area Extent and Location Map





Hazard Event History

Ulster County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 5 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Village of Saugerties' history of federally declared (as presented by FEMA) and significant hazard events [as presented in NOAA-National Centers for Environmental Information (NCEI)] is consistent with that of the County. Table 9.20-13 provides details regarding municipal-specific loss and damages the Village experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources. Refer to Section 5.4 (Hazard Profiles) for details on hazard events.

Table 9.20-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 10, 2017	Strong Wind	No	A cold front moved through Ulster County bringing strong, gusty winds to the area. Wind speeds ranged from 40 to 60 mph.	The Village did not experience additional documented damages and losses.
March 14-16, 2017	Severe Winter Storm (DR-4322)	Yes	A coastal storm impacted the region from March 14 th through the 16 th , bringing heavy snowfall and blizzard conditions. A state of emergency was declared for New York State and truck bans were implemented for area interstates.	The Village did not experience additional documented damages and losses.
August 18, 2018	Flash Flood	No	A line of showers and thunderstorms brought heavy rainfall and led to flash flooding in Ulster County. Damages included flooded roadways, downed trees, and utility line damages.	The Village did not experience additional documented damages and losses.
January 20, 2020 – Present	Covid-19 Pandemic (DR-4480) (EM-3434)	Yes	Between March 1, 2020 and February 3, 2023, Ulster County reported 54,783 confirmed cases of COVID-19, and 414 total fatalities.	Loss of manpower Sterilization of buildings
December 24-25, 2020	Flood	No	Heavy rain fell over the area during Christmas, causing flooding across Ulster County.	The Village did not experience additional documented damages and losses.
March 12-13, 2021	Strong Winds	No	Strong winds impacted Ulster County, with gusts of up to 55 mph. This led to downed trees and power lines, damaging vehicles and trees.	The Village did not experience additional documented damages and losses.
June 8, 2021	Lightning	No	Showers and thunderstorms impacted Ulster County, bringing between 1.5 and 2.5 inches of rain. Lightning struck a home in Ulster County, causing a fire.	The Village did not experience additional documented damages and losses.
September 1-3, 2021	Hurricane Ida (EM-3572) (DR-4615)	Yes	Hurricane Ida made its way up the east coast, through New York City and up through Ulster County. The county experienced heavy rainfall which left many streets, fields and farms flooded.	The Village did not experience additional documented damages and losses.
April 7-8, 2022	Flood	No	Heavy rain and widespread flooding hit eastern New York State, bringing	The Village did not experience additional



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			rainfall totals of up to 4.5 inches. This heavy rainfall led to over a dozen rivers to exceed minor flood stage with a few rivers reaching moderate flood stage. Numerous roads were closed throughout Ulster County, some of which occurred in Marletown, Kingston, Saugerties, Stone Ridge, Rosendale, Gardiner, Wawarsing and New Paltz. Basement flooding was also reported in Stone Ridge. Property damage totaled \$50,000.	documented damages and losses.
July 13, 2022	Tornado	No	A supercell thunderstorm resulted in multiple severe wind damage reports over Ulster and Dutchess Counties during the evening of Wednesday July 13, 2022. Additionally, the supercell resulted in a tornado and macroburst in Ulster County near Kingston, NY. In Ulster County, the tornado moved southeast to just west of the NY State Thruway crossing a subdivision where it uprooted and snapped trees, displaced a car canopy, and removed some shingles from a house. Many homes were damaged by fallen trees. Aerial photos showed a swath of downed trees from a second vortex which moved along the northeast edge of the subdivision. Property damage totaled \$28,000.	The Village did not experience additional documented damages and losses.

Notes:

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

Hazard Ranking and Vulnerabilities

The hazard profiles in Volume 1, Section 5 (Risk Assessment) have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Village of Saugerties' risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 5 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; and community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.



As discussed in Volume 1, Section 5.3 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each jurisdiction ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Saugerties. The Village of Saugerties reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.20-14. Hazard Ranking Input

Hazard	Ranking
Dam Failure	Low
Drought	Medium
Extreme Temperature	Medium
Flood	High
Hazardous Materials	Low
Landslide	Low
Pandemic	Low
Severe Storm	High
Severe Winter Storm	High
Utility Failure	Low
Wildfire	Low

Note: The scale is based on the hazard rankings established in Volume 1, Section 5.3 (Hazard Ranking) and modified as appropriate during review by the jurisdiction

Critical Facilities

NYSDEC Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a SFHA unless constructed according to specific mitigation specifications, including being raised 2-feet above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, New York State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance flood event or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazus-MH estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.20-15. Potential Flood Losses to Critical Facilities

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

Source: Ulster County, GIS 2023



Identified Issues

After review of the Village of Saugerties' hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Village of Saugerties identified the following vulnerabilities within their community:

- Proposed new development throughout the Town and Village of Saugerties is pushing the water supply capabilities that are located within the Village which strains water supply during droughts and extreme temperature events.
- The Village experiences poor cell services in areas which makes it hard to communicate and receive emergency notifications when the power is out. This also inhibits communication between municipalities, the County and with residents.
- The Village experiences limited communication capabilities throughout the County which inhibits emergency response capabilities as well as communication between various departments in the Village and neighboring jurisdictions.
- The Village has 15 repetitive loss and two severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Progress has been made on elevating buildings and reconstructing new buildings that are more resistant to flooding.
- The Village does not have an Emergency Operations Plan that is conjoined with the Town.
- The Village experiences massive outfall and erosion along Esopus Creek which runs through private properties. The Wastewater system has started to become exposed.

9.20.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update and are included in the tables with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such and previously presented in the 'Capability Assessment' earlier in this annex.



Table 9.20-16. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		<ol style="list-style-type: none"> Next Steps Project to be included in 2024 HMP or Discontinue If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why.
1	Flooding on Lighthouse Drive and Ferry Street	Flood	Flooding occurs when storms coincide with high tides and illegal DEP discharges from Ashokan Reservoir	Village Police Department and Fire Department	Ongoing Capability	Cost	300 K	<ol style="list-style-type: none"> Discontinue Three buildings were elevated one of them is a replacement on an elevated section of bulkhead. cost:\$300K paid by flood insurance. one residential building at the US Coast Guard Station was removed due to flood damage. No damages in recent severe flooding.
						Level of Protection	Elevation	
						Damages Avoided; Evidence of Success	Flood	
2	Washout of bulkhead as Esopus Creek at Tina Chorvas Park	Flood, Erosion	Missing bulkhead is a hazard for seniors in house projects next door. Continued erosion is causing loss of park property into the Esopus	Floodplain Manager, Building Code Enforcement Officer, Parks & Grounds	Complete	Cost	248 K	<ol style="list-style-type: none"> Discontinue Approx \$284k New Bulkhead Part of CRZ Project No erosion at said location that is measurable.
						Level of Protection	No Erosion	
						Damages Avoided; Evidence of Success	Erosion	
3	Damaged ice breaker and bulkhead pilings at the Saugerties Lighthouse	Flood, Erosion	Missing ice breaker could cause washout of lighthouse foundation and damaged bulkhead could interfere with operation of the lighthouse	Lighthouse Keeper, Village Trustee	Complete	Cost	248 K	<ol style="list-style-type: none"> Discontinue Approx \$284k Bulkhead reconstruction and stabilization Part of CRZ Grant new bulkhead protects the lighthouse as well as providing above thread level entry to the building.
						Level of Protection	Full stabilization	
						Damages Avoided; Evidence of Success	Damaging Lighthouse	
4	Turbidity in Town and Village water supplyafter severe storm	Severe Storm, Flood	Avoiding health risks and boil water notices for 9,000 customers	Water Superintendent	Complete	Cost	800 K	<ol style="list-style-type: none"> Discontinue \$800k Ability to treat higher turbidity water Less amount of time that the plant was offline
						Level of Protection	N/A	
						Damages Avoided; Evidence of Success	Boil water	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		1. Next Steps Project to be included in 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
5	Village Beach	Flood, Erosion	Flooding occurs when storms coincide with high tides and illegal DEP discharges from Ashokan Reservoir	Parks & Grounds	Complete	Cost	300 K	1. Discontinue 2. \$300k Shoreline stabilization 3. Water levels and current have eroded the shoreline. Bulkhead or other means must be explored
						Level of Protection	Stabilization	
						Damages Avoided; Evidence of Success	Erosion	
6	Dredging at the reservoir	Increase water capacity with less turbidity	High flood water from local streams causing sand and silt deposits at the reservoir	Water Department	Complete	Cost	600 K	1. Discontinue 2. \$600k Added depth and reduced turbidity. 3. Too early to determine
						Level of Protection	N/A	
						Damages Avoided; Evidence of Success	N/A	
7	Secondary water source	Water shortage and health Department requirements	proposed Winston Farm project and housing developments in the town are pushing our water supply capability	Water Department	Ongoing Capability	Cost	400 K	1. Include in the 2024 HMP \$400k 2. On going exploration And lack of founding. 3. -
						Level of Protection	N/A	
						Damages Avoided; Evidence of Success	Strengthen water supply	



Additional Mitigation Efforts

In addition to the mitigation initiatives completed in Table 9.20-16, the Village of Saugerties identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Village of Saugerties has made significant mitigation progress in the following areas:

- Excessive dumping of millions of gallons of water into the Esopus Creek

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Saugerties participated in a mitigation action workshop in June 2023 comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

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

Table 9.20-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X	X	-	-	X	-	-	-	-	X
Drought	X	X	-	-	X	-	-	-	X	X
Extreme Temperature	X	X	-	-	X	-	-	-	X	X
Flood	X	X	-	-	X	-	-	-	X	X
Hazardous Materials	X	X	-	-	X	-	-	-	-	X
Landslide	X	X	-	-	X	-	-	-	-	X
Pandemic	X	X	-	-	X	-	-	-	-	X
Severe Storm	X	X	-	-	X	-	-	-	X	X
Severe Winter Storm	X	X	-	-	X	-	-	-	X	X
Utility Failure	X	X	-	-	X	-	-	-	-	X
Wildfire	X	X	-	-	X	-	-	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives Table (Table 9.20-18).

The table below summarizes the specific mitigation initiatives the Village of Saugerties would like to pursue in the future to reduce the effects of hazards. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.



Table 9.20-18. Proposed Hazard Mitigation Initiatives

Project Name	Project Title	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead and Support Agencies	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2024-Village of Saugerties -001	Secondary Water Source	1, 2	Drought, Extreme Temperature	<p>Problem: Proposed new development throughout the Town and Village of Saugerties is pushing the water supply capabilities that are located within the Village which strains water supply during droughts and extreme temperature events.</p> <p>Solution: The Village will evaluate implementing a secondary water source to support the Town and Village during drought and extreme temperature events.</p>	Yes	No	4 years	Water Department, Town of Saugerties, Public Works, Planning Board	TBD	The Village will have a backup water source.	HMGP, BRIC, Drinking Water Source Protection Program (DWSP2), Water Infrastructure Improvement Grant, Source Water Buffer Program	High	SIP	SP
2024-Village of Saugerties -002	Cell Tower Installation	2	Dam Failure, Drought, Extreme Temperature, Flood, Hazardous Materials, Landslide, Pandemic, Severe Storm, Severe Winter Storm, Utility Failure, Wildfire	<p>Problem: The Village experiences poor cell services in areas which makes it hard to communicate and receive emergency notifications when the power is out. This also inhibits communication between municipalities, the County and with residents.</p> <p>Solution: The Village will conduct a study to determine where additional communication towers need to be located in order for the Village to have cell service throughout the entirety of its boundaries. The Village will then acquire funding to purchase and install cell towers. Residents, the Village Administration and the County will have the ability to contact one another in emergency situations and power outages and will also be able to receive emergency notification warnings to their cell phones.</p>	Yes	No	Less than 5 years	Public Works, Engineer, County Emergency Manager	TBD after the study	The Village will be able to communicate with emergency responders and other municipalities.	HMGP, BRIC, NRCS Conservation Innovation Program	High	SIP	PR



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Project Name	Project Title	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead and Support Agencies	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2024-Village of Saugerties -003	Radio Towers	2	Dam Failure, Drought, Extreme Temperature, Flood, Hazardous Materials, Landslide, Pandemic, Severe Storm, Severe Winter Storm, Utility Failure, Wildfire	<p>Problem: The Village experiences limited communication capabilities throughout the County which inhibits emergency response capabilities as well as communication between various departments in the Village and neighboring jurisdictions.</p> <p>Solution: The Village will assist the County in a radio tower study to ensure that the entirety of the County has service with radio tower implementation. The Village will then acquire funding for any radio towers that are needed in the Village limits to ensure communication for emergency responders is available County wide.</p>	Yes	No	Less than 5 years	Engineer, Public Works, County Emergency Manager	TBD after study	Better communication for emergency responders.	HMGP, BRIC, NRCS Conservation Innovation Program	High	SIP	ES
2024-Village of Saugerties -004	Repetitive Loss Mitigation	2	Flood, Severe Storm, Severe Winter Storm	<p>Problem: The Village has 15 repetitive loss and two severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Progress has been made on elevating buildings and reconstructing new buildings that are more resistant to flooding.</p> <p>Solution: The Village will conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating</p>	No	No	Less than 5 Years for Outreach	Floodplain Administrator, Public Works, Engineering, Property Owners	TBD after mitigation measure is identified	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	HMGP and FMA, BRIC, local cost share by residents	High	SIP	SP



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Project Name	Project Title	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead and Support Agencies	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				g residential homes in the flood prone areas that experience frequent flooding (high risk areas).										
2024-Village of Saugerties -005	Create Emergency Operations Plan	1,2	Dam Failure, Drought, Extreme Temperature, Flood, Hazardous Materials, Landslide, Pandemic, Severe Storm, Severe Winter Storm, Utility Failure, Wildfire	Problem: The Village does not have an Emergency Operations Plan that is conjoined with the Town. Solution: The Village will develop an Emergency Operations Plan with the Village that integrates the HMP and the Comprehensive plan.	No	No	1 year	Planning Board, Town of Saugerties, County Emergency Manager	Staff Time	The Village will be better prepared during emergencies.	Village Budget	High	LP R	ES
2024-Village of Saugerties -006	Esopus Creek Study	1, 2	Flood, Severe Storm, Severe Winter Storm	Problem: The Village experiences massive outfall and erosion along Esopus Creek which runs through private properties. The Wastewater system has started to become exposed. Solution: The Village and Town of Saugerties will conduct an erosion and flood study along the creek to determine how to prevent the wastewater system from becoming exposed. Once easements are obtained, the Village will repair the exposed portions of the wastewater system after acquiring funding.	Yes	Yes	3 years	Floodplain Administrator, Town of Saugerties, Engineer	TBD after study	The Village will experience less outfall and erosion around Esopus Creek.	HMGP, BRIC, FMA, Local Waterfront Revitalization Program, Green Innovation Grant Program	High	SIP	SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:





CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
EHP	Environmental Planning and Historic Preservation
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
BRIC	Building Resilient Infrastructure and Communities Program

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

The prioritization criteria provided in Volume 1 Section 6 (Mitigation Strategy) identify 14 evaluation/prioritization criteria to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as ‘High’, ‘Medium’, or ‘Low.’ The table below provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.20-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2024-Village of Saugerties-001	Secondary Water Source	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2024- Village of Saugerties-002	Cell Tower Installation	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2024- Village of Saugerties-003	Radio Towers	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2024- Village of Saugerties-004	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2024- Village of Saugerties-005	Create Emergency Operations Plan	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High
2024- Village of Saugerties-006	Esopus Creek Study	1	1	1	1	1	1	0	1	1	1	1	1	0	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).